Built Environment

Design Review Insight Report

Design quality in the built environment

When we refer to design in the built environment we are not referring to a separate entity or theory of design. 'Design' in the built environment means exactly what 'design' in any other realm means. In its broadest sense then, design refers not only to aesthetics, style or engineering, but to a process, a mindset and a skillset. It starts with an understanding of user needs and makes a link between creativity and innovation to transform new ideas into scalable and usable products, services *and* places.

Arguably though, 'design quality' in the built environment has potentially higher stakes than in other realms, both at an individual level and societal level. For the individual, good design can encourage physical activity, increase security, create connections with the community and provide a sense of belonging. At Design Council we champion 'healthy placemaking' which recognises the importance of the built environment for health and wellbeing, as defined by Public Health England below:

"Placemaking that takes into consideration neighbourhood design (such as increasing walking and cycling), improved quality of housing, access to healthier food, conservation of, and access to natural and sustainable environments, and improved transport and connectivity"¹ **Public Health England**

Another important element in ensuring design quality for the individual is creating *inclusive* environments. Inclusive environments are those which have been the product of inclusive design processes which help to ensure that the diverse needs of today's population are integrated into development proposals from the outset.

At a societal level, design quality can create places which boost employment levels; reduce public health challenges (such as obesity and mental health issues) and contribute to a more sustainable nation.

¹ Spatial Planning for Health: An evidence resource for planning and designing healthier places. (Public Health England, 2017)



"We know the public health challenge is big... How we design our places and spaces can make us happier and help us to address these challenges.²" Kelly Hunstone, Social Change UK

However, the complexity of development schemes and the multiple factors which require consideration can make it a challenge to create quality design in the built environment.

Introduction to our work

Architecture & Built Environment at Design Council and Design Review:

Recognising this challenge, Design Council deliver design advice to professionals in the built environment; supporting them to balance the multiple factors at play and overcome complexities which prohibit design quality.

Design Council offer a comprehensive programme of support to help realise the commercial and social potential of places. One tool used to support the creation of better quality places is Design Review.

Design Review takes place before a development is built. It is a process for evaluating the quality of design for significant developments, new buildings, public spaces and major infrastructure. This is a method which can play an important role in creating better developments and improving people's quality of life.

The strength of a Design Review lies in its independent and impartial panels, made up of Built Environment Experts from a range of specialisms, providing multi-disciplinary support.

The Design Review panel assess the design quality of a proposal through constructive advice which identifies and communicates:

- The strengths and weaknesses of the design
- Opportunities for improvement of the design
- The next steps that should be taken to maximise the benefits that can be achieved through the design
- Strategic insight for the Local Authority or Infrastructure provider
- How the scheme complies with, and complements, policy

Drawing on the benefits of Design Review:

A research review on a broad spectrum of design review services (beyond Design Council's offer and including private sector organisations) was recently carried out by

² Healthy placemaking: Why do built environment practitioners create places that contribute to preventable disease and early death, despite evidence on healthy placemaking? (Design Council and Social Change UK, 2018)



Professor Matthew Carmona at Place Alliance. The research highlights the widespread agreement about a range of benefits a scheme stands to gain from carrying out a design review. The benefits identified reach not only the scheme developer, but the design team, local authority and wider society too.

"Put simply, design review promotes good quality developments that help create better places and avoids the cost of poor design"³ **Professor Matthew Carmona**

Whilst design review – widely – is accepted as a beneficial tool, for Design Council it is seen as only *one* tool in how you achieve good design quality.

Over 3,500 Design Reviews have been carried out by Design Council (including formerly as Cabe). This large repertoire of Design Reviews provides an opportunity to learn from and continually improve this, and other, support tools or services. Taking a big-picture approach then, Design Review can provide benefits at a much larger-scale, beyond those delivered to individual schemes.

Insights from Design Review – as a whole – can provide understanding of the key issues in the built environment; identify trends or common themes and provide an opportunity to support influence at an early stage of a scheme (for example, through informing approaches to strategies, local planning policy, masterplanning and brief-setting).

In short, Design Review is not just 'mechanistic' but is about shifting culture.

Scaling-up the insight: what we have learnt from Design Review

Data project context:

Design Council set up a data project to assess, categorise and analyse a sample of recent Design Review letters. The project provides understanding of the key issues in the built environment by identifying trends and common themes across Design Reviews.

The project included a total of 58 Design Review letters for schemes based across Greater London and South East England. Design Reviews were conducted by 7 panels.

Design Review letters were from a range of years, between 2015-2018. The majority of letters (78%) were dated 2017.

For each letter, issues raised were allocated a theme (referred to as themed issues) and given a level of importance dependant on how significant they were within the review. Secondary or associated themes were also recorded for each issue.

³ Reviewing design review in London (Professor Matthew Carmona. Commissioned by Urban Design London, the Greater London Authority and the Place Alliance, 2018)



Data project key insights:

- There are a diverse range of issues raised by Design Reviews
 - 139 different themed issues were raised across 58 Design Review letters; demonstrating design as a complex process
- The level of interconnectivity *between* issues raised in Design Reviews is high
 - The overlapping and interrelating nature of issues means we cannot be overly mechanistic about the application of Design Review and its advice, but should see design as a cohesive approach to a site, its context, and its users
- Within each scheme there is a careful balancing of multiple issues
 - In a typical Design Review letter, 25 issues are raised, each requiring careful consideration by developers, design teams and local authorities in achieving design quality
- Some issues raised are common across areas
 - Building design and landscape design are common issues identified by all 7 panels
- As well as common issues, areas face their own, unique issues
 - Issues such as height and movement are unique to certain areas, indicating the broader history, context and needs of an area as drivers for issues raised
- High occurrence of issues can give us greater focus on matters that may require more capacity, insight and skill
 - Building design, landscape design, height, context, movement and site layout were all frequently cited issues across or within certain areas. Such recurrent issues could benefit from the development of better policy or guidance. The responsibility of these issues sits with all those in the built environment though, and not just policy or Government. They may require more capacity, skills, focus, and attention on the value of design
- There is currently little direct comment on healthy placemaking and inclusive environments
 - Healthy placemaking and inclusive environments is not commonly talked about in Design Reviews, indicating this focus on outcomes for people rather than the built form is an emerging area which requires more direct attention

Data project detailed findings:

The data project exposes the complex nature of development schemes; identifying a total of 139 different themed issues across the 58 letters. On average, 25 issues were raised per letter, highlighting the sheer number of factors a typical scheme must balance.

58 Design Review letters

139 themed issues raised

25 issues per typical letter

Many of the issues identified are overlapping and interrelating. We cannot, therefore, easily separate issues or compartmentalise them; making change to one element of a scheme (such as the site layout) has a significant impact on the success of another part (such as the building uses). This is demonstrated in the table below which looks at some of the common themed issues, all of which have a high frequency of mentions *across* or *within* the letters analysed.

A closer look at some of the most frequently mentioned themed issues:		
1. Building Design:		
•	86% of letters mentioned building design as an issue Includes factors such as: site layout not maximising potential; location of cores; internal circulation spaces; better consideration of materials; colour schemes; size of units Some mention of internal layout, elevations and building typology as secondary issues associated with the issue of building design Building design is one of the most important issues within letters, rated as the primary or main issue in 62% of letters. (NOTE: loyal of importance	
•	the primary or main issue in 62% of letters. (NOTE: level of importance was non-exclusive i.e. more than one issue within a letter could be recorded with the highest level of importance) The fact that building design arises so frequently and is given a high level of importance is not surprising; it is defined broadly and therefore covers a lot of different issues	
2. Landscape design:		
•	83% of letters mentioned landscape design as an issue Includes factors such as: linkages to footpaths and open spaces; proximity and layout in relation to existing residential accommodation; maximising potential of landscaped/open spaces; consideration in terms of wider landscape strategy; incorporation of trees, plants and gardens; incorporating diversity in the typology Public realm is often raised as a secondary issue associated with landscape design, 38% of landscape design issues raised mention public realm. Namely: the scheme's relationship with the environment beyond the site boundaries needing consideration. There is also some mention of open space and site layout as related secondary issues Despite its high frequency of mention, the level of importance landscape	
	design has within letters is relatively low. Rated as the primary or main issue in 48% of letters	

3.	Height:		
	 67% of letters mentioned height as an issue Includes factors such as: taller buildings or elements being too high; setting an unacceptable precedent for the future; compromising the local 		
	area; appearing overly dense; need for varied heights; height obstructing views		
	 Massing, or the general shape and composition of the building, is highly associated with the issue of height, 69% of height issues raised also mention massing. Namely: the massing of buildings or elements of the proposed development being overbearing or out of scale with the surrounding context 		
	 Height is an important issue within letters, rated as the primary or main issue in 59% of letters 		
4.	4. Context:		
	 67% of letters mentioned context as an issue Includes factors such as: the proposed development not sitting well or fitting with the surrounding context; incorporating connections/relationship with existing and future surroundings; views from and to the development 		
	 There were no common secondary issues associated with context Context is one of the most important issues within letters, rated as the primary or main issue in 60% of letters 		
5. Movement:			
-	 There is a high frequency of mentions of movement overall. However, these only appear in 41% of letters 		
	 Includes factors such as: definition between zones for vehicles, cyclists and pedestrians; improved pedestrian connectivity/access; incorporation of or links to public transport routes; need for movement analysis/strategy 		
	 Access is highly associated with the issue of movement, 66% of movement issues raised also mention access. Namely: access on arrival; balance between pedestrian, cycling and vehicle access and access 		
	within a development		
	 Rated as the primary or main issue in only 24% of letters 		
6.	6. Site layout:		
	62% of letters mentioned site layout as an issue		
	 Includes factors such as: configuration of buildings, residential units, access routes and open space; maximising potential of space available; the need for a landscape-led or user-led approach; orientation of buildings in relation to views 		
	Some mention of building design as a secondary issue associated with site layout		
	 Despite its high prevalence across letters, the level of importance of site layout within letters is relatively low. Rated as the primary or main issue in 45% of letters 		

The high occurrence and interrelating nature of such issues raises some of the challenges inherent in trying to create clear and easy to follow design policies. However, this can give us greater focus on issues and areas that may require more capacity, insight and skill.



The new revised National Planning Policy Framework⁴ says that local planning authorities should ensure that they have access to, and make appropriate use of, tools and processes for assessing and improving the design of development, including design review. It also puts onus on local authorities to ensure that design is supported in policy and through the development management process. It's important, therefore, that planning officers have a sufficient understanding of design as a complex and interweaving notion – not a mechanistic one.

Aside from the diversity, frequency and interconnectivity of issues raised across all letters, the data project allows us to explore whether different *areas* face different issues. Continuing with the 6 most frequently mentioned themed issues – as an illustration – the chart below demonstrates that not all issues are raised with the same propensity by all panels (NOTE: panels have been anonymised to protect confidentiality):



The chart shows the issue of height is particularly polarising: it has a high frequency of mentions by 4 panels but scarcely any mentions by the remaining 3 panels. Likewise, the issue of movement is disproportionate across panels: a relatively high frequency of mentions by 3 panels, but for 2 panels mention rate is very low.

Such findings indicate that, as well as common issues, different areas face unique issues framed by the broader history, context and needs of the area. This is demonstrated in a summary of issues by panel in the table below.

⁴ National Planning Policy Framework (July 2018)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7 28643/Revised NPPF 2018.pdf



A summary of issues identified by each panel (categorised in terms of area context), and how these compare to other panels:		
Industrial outer London	Panel 1:	
	A range of issues are mentioned with relatively equal frequency; no one issue stands out. However, landscape design, building design and movement are slightly more frequently mentioned.	
	Panel 2:	
	High mention of building design and landscape design. Movement is less frequently mentioned in comparison to other panels.	
	Panel 3:	
	Height and building design are mentioned substantially more than any other issue and compared to other panels. There's also a high mention of landscape design and context in comparison to other panels.	
Surburban outer London	Panel 4:	
	High mention of building design and movement compared to other panels. Substantially more mentions of car parking than other panels.	
	Panel 5:	
	High frequency of building design mentions. Lowest frequency of movement compared to other panels.	
Semi-rural urban fringe	Panel 6:	
	Movement and urban design are mentioned substantially more frequently in comparison to other panels. Whilst building design and height are less of an issue.	
Constrained historic city	Panel 7:	
	Building design is most frequently mentioned. Height and movement are less of an issue in comparison to other panels.	

Whilst issues raised across Design Reviews are clearly diverse, when it comes to issues specific to healthy and inclusive placemaking, mentions are relatively infrequent. Namely: health and wellbeing, inclusivity, social infrastructure, placemaking and local employment.



Many of the most frequently cited issues are, undoubtedly, interlinked with creating healthier and more inclusive environments. For example, the issue of movement may include connectivity with more active modes of transport such as cycling or pedestrian routes. However, the absence of direct comment on these issues indicates this focus on outcomes for *people* rather than the built form is an emerging area which requires more direct attention to ensure that it's embedded in best practice for Design Review.

This is a challenge which Design Council are trying to unpick through their recent review of how built environment practitioners are currently contributing to healthy placemaking², as well as their online inclusive environments hub and the current development of a free, online training module introducing inclusive design to professionals in the built environment.

Case study: A House for Artists



Background to the scheme:

London Borough of Barking and Dagenham's (LBBD) House for Artists is a scheme which aims to address two pressing challenges faced by London. The first, a response to the impact of the housing crisis on artists; making it increasingly more difficult to live in London. The second, a response to the struggle common amongst Councils in building and managing community spaces.

In a scheme which hopes to be replicated as part of a wider programme for supporting creative industries, A House for Artists combines affordable living and workspace for artists with a new community event space.

A House for Artists will be located at the heart of Barking town centre. By placing artists directly into the community in this way, the scheme hopes to increase public engagement with art and creative activity. Indeed, it links into the Barking Artist Enterprise Zone as part of a wider network of cultural provision in the borough and will sit opposite the Barking Enterprise Centre (BEC).



A House for Artists will accommodate artists at all stages in their lives, including recent graduates, families and older artists. As part of their affordable rent tenure, residents will contribute to forming a programme of events to take place in the community space; providing arts, education and community activities with and for local people.



Nature of the proposals:

The scheme comprises 12 affordable apartments of varying sizes, a community event space, private and shared balcony space, a communal garden and a shared courtyard.

It aims to be a distinct and identifiable building, which prioritises high quality and robust design with low running costs.

Artists have historically occupied

light industrial units for living and working. The scheme, therefore, recognises this history and uses it to create a highly relevant and desirable space to artists.

Flexibility is a key characteristic incorporated into the design:

- Interiors are left 'unfinished' enabling residents to influence their own space
- One floor will be fitted with double doors between apartments, allowing optional cohousing (for one-off events or regular shared childminding arrangements, for example)
- There is a variety of workspaces both private and shared to meet different artist requirements

Summary of the key themes which arose during the review:

The Design Review panel were impressed with the scheme's ambition, commenting on its importance as "part of the London Borough of Barking and Dagenham's wider ambition to meet the acute London-wide need for artists' accommodation" and to set a precedent for similar projects across the borough.



The review complimented the architectural ideas as providing a robust shell, which has "urban presence" and the flexible internal spaces meeting the changing needs of residents.



However, it was felt the 'functional and practical requirements' of the building needed further consideration to create a sustainable scheme which can provide a high quality of life for residents both now and in the future. Below is a summary of the main issues raised:

- **Internal daylight** The external gallery (devised to allow greater flexibility to internal layout) and the location of the lift limits the levels of internal daylight
- External and amenity space The external gallery also constricts amenity space due to its use as a fire escape. Adequate amenity space across the *entire* scheme was identified as a concern
- **Building services** Further consideration needed for the range of building services required, such as drainage strategy, location of service core, parking, bins and bicycle storage. There was specific question over how services will be handled between the scheme and BEC
- **External appearance** The West façade of the building presents a blank façade onto a significant frontage of the building, potentially creating problems in relating to the street and urban public realm
- **Compliance with regulations and standards** Potential tension between the blank, customisable interior and the requirement for the scheme to meet regulations and standards. Negotiation needed with LBBD and Greater London Authority (GLA) to achieve a balance of flexibility and standards

"The design review process provided some really valuable advice and critique which helped to make improvements to the design and move the project forward." **Shamim Akhter, Be First**

Scheme progress:

A House for Artists successfully received planning permission in July 2018.

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