

SPD Background Paper

# Housing Design

Audit 2018



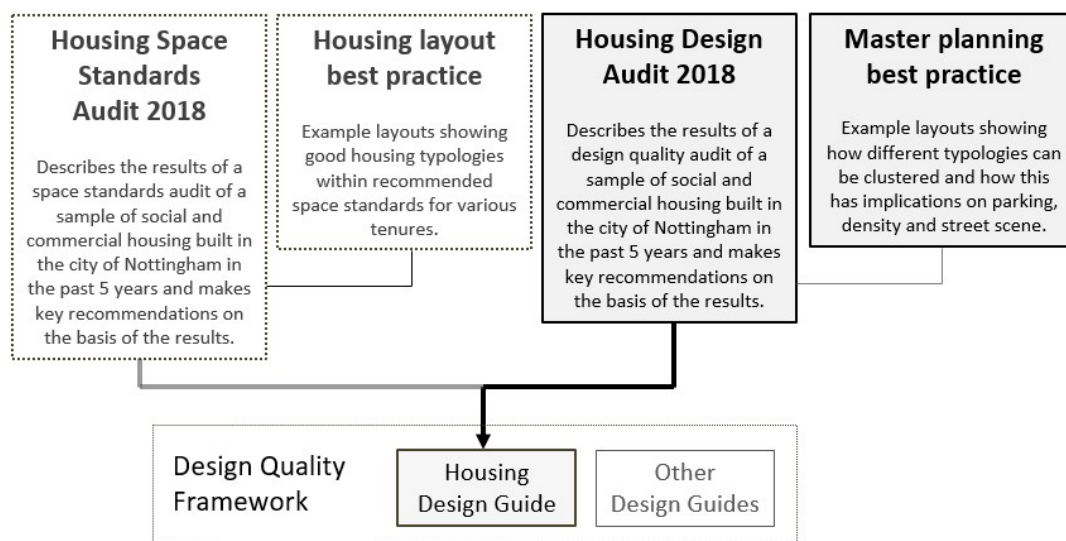
Nottingham  
City Council

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## 1. Introduction

- 1.1 The Housing Design Audit 2018 (HDA) is a background paper to the Housing Design Guide (HDG), a series of documents that sit under the umbrella of the Design Quality Framework (DQF) for Nottingham City. The DQF is aligned with the Local Plan.
- 1.2 The DQF is a flexible, evolving set of documents that will continue to grow and adapt periodically in response to latest evidence and sound research on areas concerning the quality of design.



- 1.3 The HDG applies to all schemes with a residential component that are located within the boundaries of the city of Nottingham.
- 1.4 An audit of a random sample of 20 residential schemes comprising 1,157 dwellings built in the past 5 years informed the recommendations included in Section 7 of this background paper. Section 4 explains the study in more detail.
- 1.5 The purpose of the audit was: to understand what was being built, if it worked or not and the reasons why; to find examples of best practice; and to aid the selection of the HDG criteria for the city of Nottingham.

## 2. Policy background

- 2.1 The National Planning Policy Framework (NPPF) states that optional planning standards and recommendations can be set by Local Authorities in response to the objectives of their

Local Plan. This background paper provides evidence to support the recommendations that informed the HDG Supplementary Planning Document (SPD).

2.2 The recommendations of this HDA are in line with: the NPPF (2012), Planning Policy Guidance (PPG, 2014), Nottingham Aligned Core Strategy (2014), the Local Plan (2017) and Local Strategies.

### 3. Housing Design Audit 2018 objectives

- 3.1 **Establishing areas of excellence** regarding the quality of residential schemes recently built in Nottingham to create a best practice platform that celebrates high design quality.
- 3.2 **Establishing areas of excellence** in the delivery of the Local Plan Spatial Objectives regarding housing development with the aim to highlight processes and strategies that are currently working well and that can serve as examples of good practice.
- 3.3 **Establishing areas of underperformance** regarding the quality of residential schemes recently built in Nottingham in order to inform the contents and focus of the Housing Design Guide.
- 3.4 **Establishing areas of underperformance** in the delivery of the Local Plan Spatial Objectives with the aim to find remedial actions for those areas.
- 3.5 **Understanding the role of the tools and strategies** currently used during the **planning process** for residential schemes in order to seek opportunities for improvement and for enhancing efficiency in the use of resources and speeding up the planning process.

### 4. Housing Design Audit 2018 methodology

- 4.1 The Housing Design Audit 2018 was completed using Building for Life 12<sup>1</sup> and another tool developed to appraise compliance with the spatial objectives of the Local Plan Spatial Vision and Objectives.
- 4.2 The HDA looked at the design quality of a random sample of 20 housing schemes built in Nottingham by 11 different developers in the last 5 years<sup>2</sup>.

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<sup>1</sup> Birkbeck D and Kuczkowski S., 2015. Building for Life 12: *The sign of a good place to live*. CABE.

<sup>2</sup> Data source: Nottingham City Council planning applications 2013 to 2018.

- 4.3 Building for Life has been a very useful tool for Nottingham City Council as it served as a benchmark for quality. The assessment criteria was used in recent years as reference point, a minimum design quality for residential schemes to achieve. For this reason, the tool was used to appraise the Audit 2018 sample with a view to highlighting potential local trends regarding particular criteria.
- 4.4 The sample included residential development for both the commercial market and social housing and it encompassed different master planning approaches for schemes ranging from 10 to 300 units, which is the range of development size currently being built in Nottingham.
- 4.4.1 The scoring system meant that a minimum mark of 1 (non-compliant), a medium mark of 2 (partially compliant), and a maximum mark of 3 (fully compliant) had to be assigned to each one of the 12 key Spatial Objective of the Local Plan and against each one of the 12 appraisal areas of Building for Life 12.
- 4.4.2 The minimum score possible was 12 per area of appraisal (Local Plan or Building for Life 12).
- 4.4.3 A compliant scheme needed to achieve a score of 24 per area of appraisal (Local Plan or Building for Life 12).
- 4.4.4 The maximum score possible was 36 per area of appraisal (Local Plan or Building for Life).
- 4.4.5 The planning process that led to the actual design quality output of the sample schemes was also analysed through the following questions:

*Whether applicants had engaged in pre-application discussions (yes/no)*

*How long did pre-application discussions take from first contact to planning submission (number of weeks)*

*How long did pre-application discussions take from first contact to planning granting (number of weeks)*

*How many times was the schemes significantly revised (number of pre-application submissions)*

*What was the number of planning conditions issued with the planning consent*

- 4.4.6 The scoring was conducted by four experts in the field trained for the purpose of the audit, and the results were duly moderated afterwards.
- 4.4.7 The masterplan layouts were scrutinised in detail to understand how the clustering of units resulted in parking provision, street amenity and efficient use of land. The analysis

also looked at how different plotting arrangements can deliver optimum densities in relation to the widths and depths of both dwellings and plots.

## 5. Audit 2018 results

5.1 The mean values scored for all schemes appraised were: 25.25 for the Local Plan (5% above the minimum compliance mark of 24) and 30 for Building for Life (15% above the minimum compliance mark of 24).

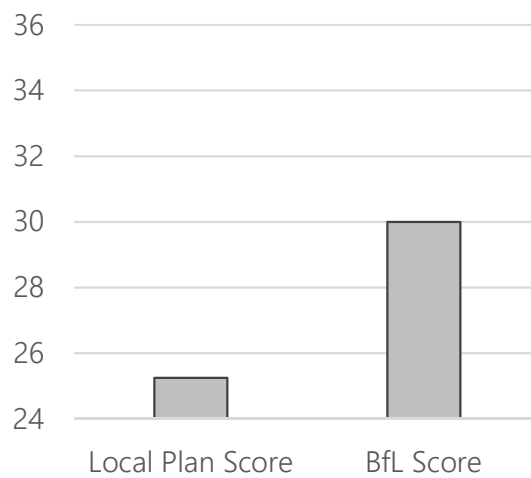


Figure 1: Mean values scored by all 20 residential developments appraised

5.1.1 Most appraised schemes achieved an overall compliant mean value. There were more schemes that met the Building for Life 12 criteria and fewer that met the Local Plan Spatial Objectives criteria, as shown below:

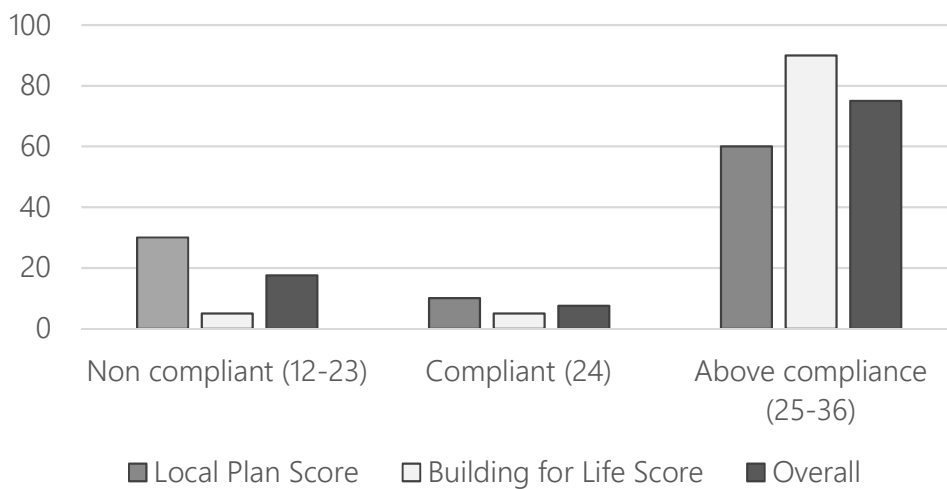


Figure 2: Percentage of compliant schemes in each score band

5.12 These results mean that Nottingham has spatial ambitions beyond those of Building for Life 12 and that therefore, the city requires a tailored set of criteria and a customised evaluation tool to appraise the delivery of the Local Plan Spatial Vision and Objectives.

## 5.2 Areas of excellence

5.2.1 Some schemes scored between the 24 and 36 marks in some areas:

Table 1: Percentage of schemes that scored more than the 24 compliance mark for the some of the Spatial Objectives of the Local Plan

Local Plan Spatial Objectives criteria	% of schemes that scored 25-36
The scheme regenerated a brownfield or a disused/derelict building	60
The Scheme provide decent and affordable homes, it rebalance the housing mix in the area, it supported people into home ownership, it catered for particular groups (aging) and it delivered a mixed balanced community	40
The scheme made the most of the existing physical and social infrastructure and where applicable, it made contributions through existing funding mechanisms	30
The scheme is highly accessible by sustainable transport, applied environmentally sensitive design (orientation, etc.), it reduced the risk of flooding, it included low carbon technologies	30
The scheme protected and enhanced the historic and landscaped environment	25
The scheme provided local jobs, training and education and it encouraged local enterprises	25
The scheme provided improvements/additions to local educational, sports and cultural facilities and responded to the needs of older and disabled people	10
The design prompted behavioural changes such as sustainable forms of transport, innovative IT use and home working	10
The design provided new green infrastructure that is multifunctional, inclusive and that increased biodiversity	10
The design process encouraged people to express their views, it designed out crime and it enhanced local distinctiveness	10

Table 2: Percentage of schemes that scored more than the 24 compliance mark for some of the Building for Life criteria

<b>Building for Life criteria</b>	<b>% of schemes that scored 25-36</b>
Will public and private spaces be clearly defined and designed to be attractive, well managed and safe?	70
Does the scheme integrate into its surroundings by reinforcing existing connections and creating new ones, while also respecting existing	70
Does the scheme have good access to public transport to help reduce car dependency?	65
Is the scheme designed to make it easy to find your way around?	65
Are buildings designed and positioned with landscaping to define and enhance streets and spaces and are buildings designed to turn street corners well?	60
Are streets designed in a way that encourage low vehicle speeds and allow them to function as social spaces?	55
Is resident and visitor parking sufficient and well integrated so that it does not dominate the street?	55
Does the development have a mix of housing types and tenures that suit local requirements?	50
Does the scheme take advantage of existing topography, landscape features (including water courses), wildlife habitats, existing buildings, site orientation and microclimates?	45
Does the scheme create a place with a locally inspired or otherwise distinctive character?	40
Is there adequate external storage space for bins and recycling as well as vehicles and cycles?	40
Does the development provide (or is it close to) community facilities, such as shops, schools, workplaces, parks, play areas, pubs or cafes?	35

5.2.2 Areas of good performance were grouped according to their impact/relevance into the following categories: Community and Governance; Economy; Environment and Landscape; Built Environment, Transport and Heritage. The relative impact of these higher scores in each category is shown below:

Table 3: Relative impact (%) of the highest scores on the key critical categories

Relative impact (%) of the lowest scores on the key critical categories	<b>Local Plan Spatial Objectives</b>	<b>Building for Life</b>	<b>Average</b>
<b>Health and Wellbeing</b>	40	21	<b>37</b>
<b>Community and Governance</b>	34	37	<b>34</b>
<b>Environment and Landscape</b>	26	42	<b>28</b>

### 5.3 Areas of underperformance

5.3.1 Although schemes were generally in compliance, there were areas of underperformance where some schemes scored under the 24 compliant mark, these are shown below:



Table 4: Percentage of schemes that underperformed against some of the Spatial Objectives of the Local Plan

<b>Local Plan Spatial Objectives criteria</b>	<b>% of schemes that scored under the 24 compliant mark</b>
The design provided new green infrastructure that is multifunctional, inclusive and that increased biodiversity	55
The design prompted behavioural changes such as sustainable forms of transport, innovative IT use and home working	50
The scheme involved input from local healthcare partners and it improved access to cultural, sport and leisure facilities	40
The scheme provided improvements/additions to local educational, sports and cultural facilities and responded to the needs of older and disabled people	40
The scheme protected and enhanced the historic and landscaped environment	20
The design process encouraged people to express their views, it designed out crime and it enhanced local distinctiveness	20
The scheme provided local jobs, training and education and it encouraged local enterprises	15
The Scheme provide decent and affordable homes, it rebalance the housing mix in the area, it supported people into home ownership, it catered for particular groups (aging) and it delivered a mixed balanced community	5
The scheme regenerated a brownfield or a disused/derelict building	5
The scheme made the most of the existing physical and social infrastructure and where applicable, it made contributions through existing funding mechanisms	5

Table 5: Percentage of schemes that underperformed in some areas of Building for Life

<b>Building for Life criteria</b>	<b>% of schemes that scored under the 24 compliant mark</b>
Does the development provide (or is it close to) community facilities, such as shops, schools, workplaces, parks, play areas, pubs or cafes?	35
Does the scheme create a place with a locally inspired or otherwise distinctive character?	15
Is the scheme designed to make it easy to find your way around?	5
Does the scheme take advantage of existing topography, landscape features (including water courses), wildlife habitats, existing buildings, site orientation and microclimates?	5

5.3.2 Areas of underperformance were grouped according to their impact/relevance into the following categories: Community and Governance; Health and Wellbeing; Environment and Landscape. The percentage of underperforming schemes per category is shown below:

Table 6: Relative impact (%) of the lowest scores on the key critical categories

Relative impact (%) of the lowest scores on the key critical categories	Local Plan Spatial Objectives	Building for Life	Average
<b>Health and Wellbeing</b>	40	21	<b>37</b>
<b>Community and Governance</b>	34	37	<b>34</b>
<b>Environment and Landscape</b>	26	42	<b>28</b>

### 5.4 Analysis of the planning process

5.4.1 Only 29% of schemes engaged in full pre-application processes and the rest engaged informally in minor pre-application discussions (14%) or did not engage at all (57%).

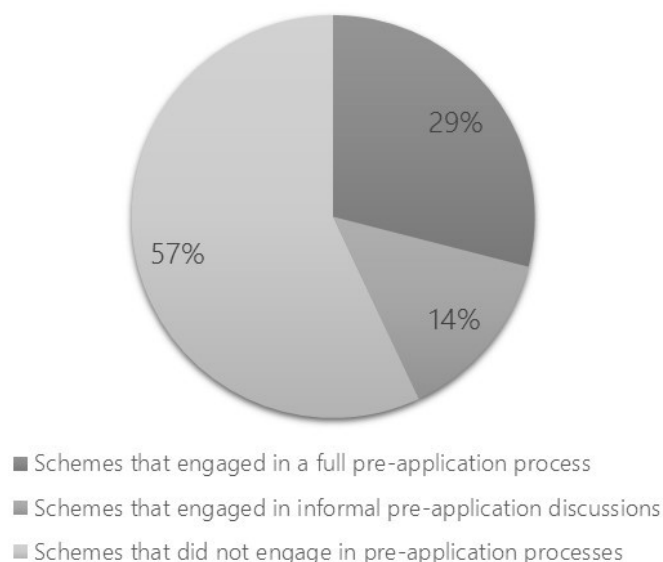


Figure 3: Pre-application engagement rates

5.4.2 The schemes that engaged in pre-application discussions spent an average of 19 weeks from first point of contact to full planning submission. The scheme with the longest process was in pre-application stage for almost a year. The scheme with the shortest process was in pre-application stage for 8 weeks.

5.4.3 The main reasons for delays during the pre-application process related to the following design issues:

- Highways and access
- Massing and heights
- Façade design, proportions and composition

- Public realm and landscape

- 5.4.4 During pre-application processes, 45% of schemes were significantly revised two to three times on average and 55 % of the schemes went through minor amendments only.
- 5.4.5 Schemes that engaged informally (14%) or did not engage at all in pre-application discussions (57%) had 26 planning conditions on average. The scheme with most conditions had a total of 31 items whilst the scheme with fewer conditions had a total of 25 items.
- 5.4.6 Schemes that engaged in full pre-application discussions (29%) had 15 planning conditions on average; the scheme with most conditions had a total of 19 items whilst the scheme with fewer conditions had a total of 7 items.
- 5.4.7 All planning conditions were discharged without major constraints.
- 5.4.8 The 29% of schemes that engaged in full pre-application discussions spent an average of 16 weeks from first point of contact to full planning granting. The scheme with the longest process was in pre-application stage for 35 weeks. The scheme with the shortest process was in pre-application stage for 11 weeks.
- 5.4.9 The schemes that did not engage in full pre-application discussions spent an average of 29 weeks from first point of contact to full planning granting. The scheme with the longest process spent 51 weeks. The scheme with the shortest process spent 14 weeks.

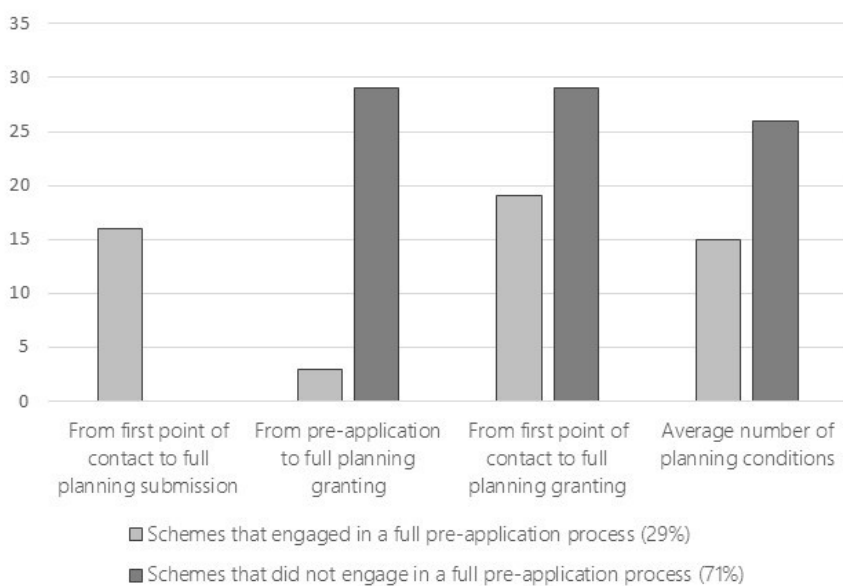


Figure 4: Impact of pre-application engagement on the speed of the planning process

5.4.10 In-depth qualitative analysis showed that tools being used currently such as the 3D city model, the Design Issues process and Design Review Panel are all proving very useful in the delivery of higher quality schemes, particularly as communication and evidence gathering tools, and are key strategies to accelerate the design process during pre-application engagement processes.

5.4.11 Qualitative analysis of pre-application processes showed that the housing industry has not yet caught up with best practice in urban design. There was a visible deficiency regarding the use of technical language and there was a lack of understanding of core concepts and design strategies, especially regarding the design of quality, future-proof homes.

Table 7: Length of the planning process for housing developments in Nottingham

Length of the planning process in weeks for housing developments in Nottingham (2013-2018)	From first point of contact to full planning submission			From pre-application to full planning granting			From first point of contact to full planning granting			Average number of planning conditions		
	Average	Longest	Shortest	Average	Longest	Shortest	Average	Longest	Shortest	Average	Longest	Shortest
Schemes that engaged in a full pre-application process (29%)	16	32	8	3	3	3	19	35	11	15	19	7
Schemes that did not engage in a full pre-application process (71%)	0	0	0	29	51	14	29	51	14	26	31	25
Difference	-16	-32	-8	26	48	11	10	16	3	11	12	18

## 6. Conclusions

6.1 The HDSA 2018 showed that audited schemes **were largely compliant** with the Spatial Objectives of the Local Plan and with Building for Life 12.

6.2 Categories of **excellence** where specific schemes driven by leading, innovative developers achieved scores above the minimum compliant (24) were:

**Built Environment, Transport and Heritage**  
**Environment and Landscape**  
**Community and Governance**  
**Economy**

6.3 The best practice examples will inform a database of images and case study briefs that will be shared broadly through the DQF and other publications, and at future conferences, training programmes and seminars.

6.4 **Categories of underperformance** were those that achieved scores below the minimum compliant (24) when the planning system alone could not safeguard poor design:

Health and Wellbeing

Community and Governance

Environment and Landscape

6.5 Particular **areas of underperformance** were:

- Integrating and expanding on existing existing **green and blue infrastructure**.
- Managing and promoting **positive lifestyles and behaviours** through design.
- Tackling **health and wellbeing** through design.
- Providing/connecting to a range of **accessible services and facilities** in the vicinity.
- Responding/creating strong **local character** that related to the historic context of the area.
- **Engaging with the community** and local residents and delivering social resilience through the process (creating jobs, delivering training, etc.)

6.6 Pre-application engagement speeded the planning process by an average of 13 weeks.

6.7 Pre- application engagement reduced the amount of planning conditions by 11 on average.

6.8 The main areas of delay during the pre-application process related to:

- Highways and access
- Massing and heights
- Façade design, proportions and composition
- Public realm and landscape

6.9 The main reasons for delays were: a) lack of understanding of context and integration of the scheme in the local environment; and b) the absence of adequate surveys and studies such as tracking, parking requirements/behaviours and site microclimate.

6.10 This HDA background paper includes some overarching recommendations to improve further the quality of residential schemes built in the city of Nottingham by targeting areas of underperformance. The HDG will address these areas in more depth by explicitly levelling design issues found through further in-depth analysis of the underperforming residential schemes. Guidance will be based on expertise drawn from best urban design practice and sound academic research available.

## 7. Recommendations

The HDG must address the highlighted areas of underperformance (6.4). It will do this by:

- 7.1 Having a **strong focus on the particular areas of underperformance** (see 6.5).
- 7.2 Having a **strong focus on the reasons for delay** (see 6.8 and 6.9).
- 7.3 Prioritise the **production of a Street Design Guide** that tackles with specific issues regarding highways.
- 7.4 Establishing **clear and firm rules** that tackle the key points of delay during pre-application stages in order to speed up the process.
- 7.5 Launching the HDG with a **training programme** for all involved in the delivery of residential schemes and offering opportunities for training industry in the long term.
- 7.6 Encouraging **applicants/designers to adhere to the HDG** from the very first stages of feasibility, also looking at latest research and other best practice guidance throughout the whole length of the planning process.
- 7.7 Capitalising on opportunities for enhanced community engagement, Placemaking and governance through the broad and consistent use of a HDG **free of jargon, simple to use and accessible to the general public**, and investing in the **production of a Community Engagement Guide**.
- 7.8 Continue to encourage applicants, designers and developers to **engage in pre-application processes**.
- 7.9 Continue to encourage applicants, designers and developers to **use Design Review Panels**.
- 7.10 Continue to **use the 3D modelling** software to appraise schemes and seeking to develop the software further.
- 7.11 Applying new evaluation tools like those used for the HDA and using skills and resources more efficiently during the planning process in order to **simplify and accelerate planning applications**.
- 7.12 **Addressing every opportunity to work in multidisciplinary ways**, creating partnerships with key agencies concerned with the fields of communities, health and the natural environment

(e.g. Public Health England, NHS, Age Friendly, Sports England, Community Organisers, relevant charities, etc.).

7.13 Creating opportunities to work alongside local and regional universities and professional bodies (such as RIBA, RTPI, UDG etc.) to **deliver high-level training and upgrading skills** in the region regarding the areas of underperformance

## 8. Summary

Table 8: Summary of HAD 2018 findings and actions

HDA 2018 FINDING	ACTION
More schemes met Building for Life criteria than the Local Plan Spatial Objectives	Creating a tailored set of criteria for Nottingham that helps deliver the Local Plan and include these in the DQF
Areas of <b>excellence</b> were found in some schemes: Built Environment, Transport & Heritage Environment & Landscape Community & Governance Economy	<b>Celebrate</b> these and use these examples as best practice in the DQF
Areas of <b>underperformance</b> were found:  Health & Wellbeing Community & Governance Environment & Landscape	<b>Tackle</b> these particular areas by strengthening the focus of the DQF on these issues drawing from best practice examples and most recent academic research findings  Creating a <b>specific Community Engagement Guide</b> to break communication barriers between agencies  Making design quality <b>more accessible to the general public</b> through a simple, free of jargon DQF
<b>Value of pre-application</b> process and current tools used in accelerating the planning process: 3D city model Design Review Design Issues Most <b>recurrent areas of delay</b> during the planning process:  - Highways and access - Massing and heights - Façade design, proportions and composition - Public realm and landscape	<b>Encouraging the use</b> of pre-application processes from the outset  <b>Revising the Pre-application</b> support offer available for industry/applicants

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<p>Most recurrent reasons for delays during the planning process:</p> <p style="padding-left: 40px;">Lack of understanding of context and integration of the scheme in the local environment Absence of adequate surveys</p>	<p>Creating a <b>specific Street Design Guide</b> to tackle delays relating to highways, access and parking</p> <p><b>Tackling</b> the other three particular areas by strengthening the focus of the DQF on the core aspects of good design and how these can help achieving the quality threshold</p>
<p><b>Lack of skills</b> in industry</p>	<p><b>Tackling</b> these particular areas by strengthening the focus of the DQF on the steps that are necessary during the design process in order to achieve the quality threshold</p>

## 8. Acronyms

3D: Three-dimensional

BUILDING FOR LIFE: refer to Building for Life 12

DQF: Design Quality Framework (Nottingham City)

HAD: Housing Design Audit 2018

HDG: Housing Design Guide (Nottingham City)

NACS: Nottingham Aligned Core Strategy (2014)

NPPF: National Planning Policy Framework (2012)

PPG: Planning Policy Guidance (2014)

RIBA: Royal Institute of British Architects

RTPI: Royal Town Planning Institute

SPD: Supplementary Planning Document

UDG: Urban Design Group

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