

London Borough of Southwark: Coding in a dense inner urban area

This case study was prepared as part of the six month testing programme for the draft National Model Design Code (NMDC), run by DLUHC (then, MHCLG) from April to September 2021. Not all participants prepared design codes and all the pilot projects were at different stages when the pilot started. This case study is not a recommendation of best practice but seeks to highlight the work the local authority did as part of the pilot programme and the local authority's reflections on the programme and the design coding process.

London Borough of Southwark: Coding in a dense inner urban area

Scale:	Site-specific
Context:	Urban
Focus:	Producing a code for a highly dense and complex opportunity area.
Project team:	London Borough of Southwark; Farrells; Gbolade Design Studio; Exterior Architecture; Momentum Transport Consultancy; Savills.
Region:	London



Introduction

This pilot case study sought to explore the National Model Design Code (NMDC), focusing on developing a design code for a highly dense and complex opportunity area (Hatcham Road and Ilderton Road, Southwark). A key theme of the testing was a strong emphasis on engagement to drive forward the work, which included site visits, interviews, workshops (including a pattern making art workshop), a webinar, exhibition events, 3D and physical models, and a Community Review Panel meeting.

An approach to building rapport – and supporting engagement – with existing local businesses through having a regular design team site presence was particularly successful. Clear briefing and strategic decisions concerning the structure and focus of the design code – being very concise, well-illustrated and focusing on the street level pedestrian experience – have resulted in a very well-received design code.

“ If you are the owner of a big estate then there is long-term interest, however on this site there are many different landowners so long-term stewardship is inherently difficult. So - this is really about enabling a place to flourish and change ”

Southwark is an inner London Borough situated on the south bank of the River Thames. It is bounded by Lewisham to the east, and Lambeth to the west. It is a diverse and densely populated borough. Development is typically high density by national standards.

The context for coding

The Hatcham and Ilderton Roads site is a sub-area within the larger Old Kent Road Opportunity Area (OKROA). The design coding work draws on - and incorporates - masterplan principles contained within the draft AAP for the Opportunity Area; it aims to transform low density industrial to high density residential over industrial/ business uses in a pedestrian-friendly street environment. The design codes do not seek to change the general principles of the masterplan in terms of height, massing, density or use, or define area types; instead, they focus on their specific application to Hatcham and Ilderton Roads. The design code document highlights that the area comprises an industrial park, which benefits from some historic characteristics and vibrant uses; however, its identity is 'fragmented'. The consultants' team responsible for producing the design code pilot work comprised Farrells, Gbolade Design Studio and Exterior Architecture, with Momentum Transport Consultancy and Savills providing specialist advice.



Hatcham and Ilderton Roads site (red boundary)



The existing draft OKR AAP masterplan

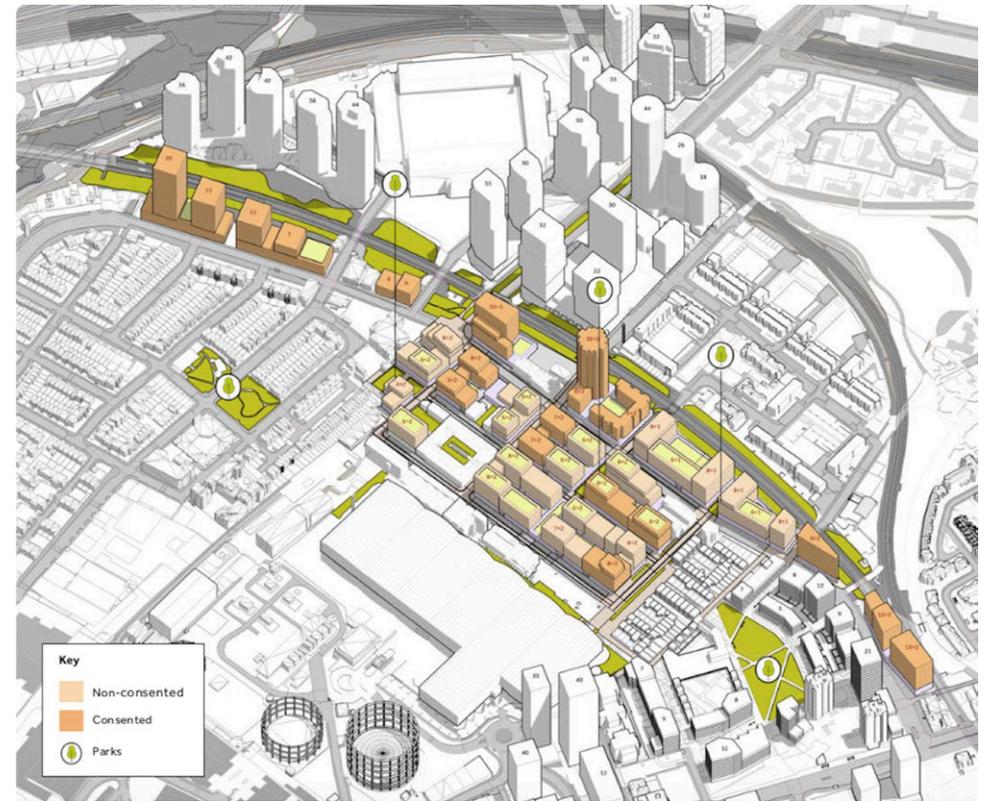
“ One of the things we liked about the design team was their mix of ideas, their mix of experiences – bringing in smaller and more emerging practices with larger practices ”

Why code?

The Hatcham and Ilderton Roads site is within the Old Kent Road Opportunity Area for which an Area Action Plan (AAP) has been created. The Council sees the AAP as a strategic design code for this opportunity area. Using the existing, primarily text-based, planning policy approach had limitations and developers and council members found difficulty interpreting what was required. It was hoped that a more visual approach would help to communicate how planning permission could be achieved – and what should be avoided – when designing new development. Design coding was seen as integral to this change of direction.

Alongside improved clarity, the council was keen to explore the following as part of the testing programme for this site:

- Reconciling provision of industrial space with residential space
- Understanding and testing how the street level plane could work given the intention to retain significant industrial and business use and its associated freight and servicing needs
- Addressing density and tall buildings
- Demonstrating a focus on the community and its views - and that the outcomes reflect the character of that community.



Hatcham Road and Ilderton Road masterplan

“ The benefit of the Hatcham and Ilderton Roads Design Code is that it will need to work with an incremental development approach, so it won't be the 'grand single project' ”

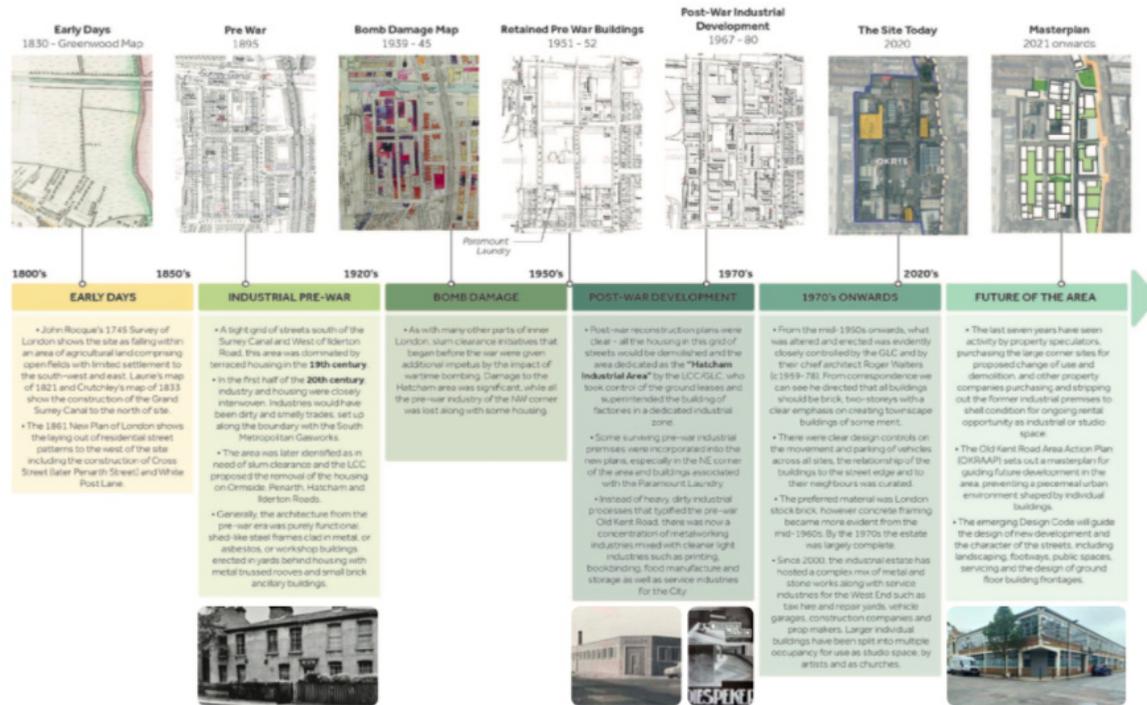
What was the coding process?

The coding process broadly encompassed three steps: site analysis, developing a vision and producing the code. A project timeline was produced that illustrated how the different elements of this process all fed into the project.

1. Baseline analysis

The project began with information gathering and research. This helped to illustrate that there was a rich history of typology, form, uses and stewardship over the site over time.

HISTORY OF THE AREA



An example of part of the baseline analysis

2. Developing the coding plan with consultation

Stakeholder engagement and public consultation played a central role in the development of the code. In addition to regular site visits and over 30 one-to-one interviews with local businesses and landowners, the design team held an online webinar and two in-person exhibition events at the Penarth Centre, within the site, which was attended by over 50 residents, businesses, and representatives of religious groups. This occurred twice, to enable businesses and different sections of the community to attend. A Community Review Panel was also held.

The consultation with businesses started with an introductory email from the senior council officer to introduce the team to key business owners and ward councillors. The success of the consultation with businesses was attributed to the extensive time and resources deployed and in particular, the decision to locate members of the design team on site for two days a week during the first month, to 'be present' and 'knock on doors'. This enabled the design team to build a rapport with local businesses, and to challenge the locally held assumption that the council wanted the businesses to move out. When it became clear that the code could enable them to stay in the area, the engagement with businesses became very positive.

“ There is a big emphasis on how they involve the community in the design process and how the outcomes reflect the character of that community ”

Another novel consultation approach was a pattern making art workshop with residents, which explored visually how locals conceived the area and its character to start teasing out pointers for the code.

The code was presented to the Southwark Community Review Panel for feedback, and to test whether the process had been successful in capturing and responding to the community's views. The response was that "This all looks very good, but will it really be carried through?", highlighting the importance of having a credible delivery plan alongside ensuring that the code has sufficient weight within the planning process. To this end, the code is currently being tested 'in action' with developers and Development Management officers on schemes coming forward on the site.

“ One of the issues in discussion was to not ‘over design’ the streets, given the expected range of uses and activities that may be going on. The feedback from businesses was the need for management of the streetscape to allow co-existence of different uses, including significant commercial uses. It is not - and will never be - a purely residential area. ”

What form will the code take?

The code is focused on seven principles which map to seven of the ten characteristics of a well-designed place, identified within the NMDC. It was felt these characteristics were most relevant to this site, including: sustainability, nature, movement, public open space, identity and character, land use, and homes. The priority for the code was to explore the ground floor character of development and how this contributes to shaping the overall identity and character of the area. Some of the coding principles overlap.

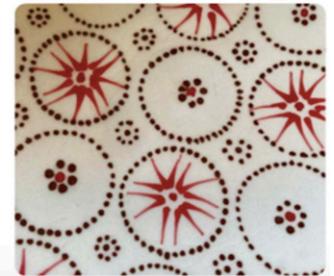
The coding document contains 38 pages, and each of the seven core principles are explained in a coloured text box, accompanied by introductory text, diagrams, and images showing examples, referenced to the code items. An illustrative drawing or image is included for each core principle, that brings all of the code elements for that together. This was felt to be particularly beneficial by developers because it was showing what the council wants. The developers that have tested the code have said they consider it to be exemplary.

Each theme includes a list of several code parameters/requirements, one or two visualisations used to indicate how the parameters should be applied on site and additional images of design details such as materials, landscaping, and exemplars. Most of the codes are considered a requirement and are worded as ‘must’. There are also many codes which are considered guidance and are defined as ‘could’ or ‘should’. While these codes are expected to be achieved, there is a degree of flexibility if a particular site is clearly unable to deliver a specific code, acknowledging the challenges in the area.

The design code will be used in Development Management to evaluate proposals as they come forward as well as by developers seeking to develop in the area. It will be adopted as a Supplementary Planning Document (SPD) to the adopted AAP, due for examination in public in 2022. The code does not seek to change any of the established principles within the AAP but does build on it; a two-page summary of the design code will be included in Sub Area 4 “Hatcham Ilderton and Old Kent Road (South)” of the submission version of the OKR AAP (see: <https://oldkentroad.org.uk/wp-content/uploads/HatchamIldertonDesignCode.pdf>).



Images of local consultation



Images of local patterns from a workshop event

A. SUSTAINABILITY

Southwark Council have declared a Climate Emergency, committing to becoming carbon-neutral by 2030; and have dedicated to their Fairer Future Commitments across eight key themes to achieve their vision of a fairer future for all.

Sustainability is therefore at the beginning of this guidance to ensure that all design decisions are made with these overall goals, running as the golden thread through each section.

DESIGN CODES:

- A1** Inset balconies should be located to south-facing elevations to provide shading and reduce challenges from overheating. Projecting balconies could be located to north-facing elevations so residents can take advantage of solar gain once on these spaces.
- A2** To reduce the chances of overheating, south-facing windows should be smaller than north, east, and west-facing facades, or could be recessed to take advantage of shading. External shading devices should also be allocated to fenestration as required.
- A3** A simple/ compact building form with a form factor of <1.5 should be targeted. The form factor is the ratio of thermal envelope surface area to the treated floor area, and determines how much heat is lost from a buildings' fabric.
- A4** A fabric-first approach must be adopted with expected u-values for walls, roofs and floors ranging between 0.10 – 0.158W/m2.K; and fenestration u-values will ranging between 1.1 – 0.8W/m2.K (triple glazing)
- A5** An Operational Energy Target of 35 kWh/m2/yr (residential) and 55 kWh/m2/yr (commercial) should be targeted; and an Embodied Carbon Target of <625 kgCO2e/m2 (residential) and <750 kgCO2e/m2 (commercial) should be targeted.
- A6** Performance Certification (such as RIBA 2030 Climate Challenge / LETI Guidance / Passivhaus) should be targeted.
- A7** Cold spaces such as storage, bins & bike spaces, substations should be separate from the insulated building fabric and located towards the north-end of buildings. These cold spaces should be grouped together, rather than interspaced between warm spaces on the ground floor
- A8** The building line at upper floors (podium level and above) could be set-back from the street to allow for maximum solar gain to the narrow widths at street level. Designers could therefore aim for 1-1.5M of street distance for every 1M of height.
- A9** High performance acoustic glazing must be provided to all windows and doors (where relevant) addressing Ilderton Road. All glazing addressing Ilderton Road must incorporate attenuated ventilation systems.
- A10** All new dwellings must connect to Southwark Councils District Heating (DHN)

ILLUSTRATIVE TYPICAL STREET VIEW



Design of the balconies reflecting the orientation



Projecting balconies to north elevations and example of texture and pattern



External shading devices, shutters to address overheating. The green wall elements should be considered for natural cooling and to increase greening factor



Stepped back facade



Rainwater Harvesting



Reuse of existing building material



Generous glazing to ground floor shaded facades to maximize daylight and chamfered corner example



Widened pavements for street tree planting to provide shading and strengthen social infrastructure

Section A: Sustainability shows 'must', 'should' and 'could' codes relating to sustainable design in the box on the left, illustrative reference images at the bottom, and an annotated illustrative drawing on the right.

G. HOMES

New apartments will be expected to achieve all existing standard residential policy requirements. Residential buildings will also be expected to respond to the specific challenges of the high density, industrial context of the site.

The environment should be planned to mitigate the detrimental effects of air and noise pollution on physical and mental health and reduce the impacts of urban heat islands and climate change.

DESIGN CODES:

- G1** New homes and indoor spaces must be good quality and energy efficient to eliminate health inequalities relating to poor living conditions.
- G2** All residential cores require a clear street addresses: front door and lobby with direct pavement access. These must be located on the east or west elevations whenever possible.
- G3** The quality of design, materials and shared communal spaces must be consistent across all tenures.
- G4** All circulation cores will directly serve the primary podium level amenity space. Rooftop amenity spaces may serve individual blocks and be accessible from single cores.
- G5** Amenity spaces provided at roof level will include wind and safety screening of at least 1.6m high.
- G6** Rooftop spaces should include child play space and productive gardens.
- G7** In all rooftop softscape schemes use drought and wind tolerant species.
- G8** To facilitate community maintenance and formal or informal community events, a shared storage space will be provided at ground floor lobby level, podium and roof level. This will be at least 8 sq.m of convenient rectangular storage space.
- G9** Due to the narrow street widths and fine historic grain of plots, residential apartments will generally have close relationships between primary windows.
- G10** Apartments will have to be carefully designed to include screening elements, deep reveals an offset windows to mitigate overlooking. All Windows must be inset by at least one brick thickness.
- G11** Apartments to be screened against pollution, including Noise, vibration, Light and smell. This should include both horizontal and vertical panels or screens.
- G12** Balconies : 1st and 2nd floor units should have solid panels below 1100mm to ensure screening and increased privacy from the street level.
- G13** Ventilation: all units must include opening windows along with MHVR systems.
- G14** The high-density character of the area requires a significant level of careful design. Units should be primarily dual aspect. No more than 50% of total units to be single aspect. Units should not be solely north facing.
- G15** Dual aspect units with a north elevation must include at least 2 meters of an alternative façade and window in the living areas of the unit.
- G16** Hedging or other structural planting should be considered on podiums between communal and private spaces
- G17** Allow for a minimum of 0.80m wide defensible planting between communal spaces and private terraces.

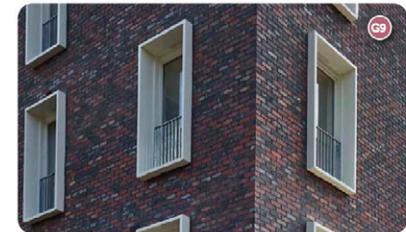
CORE AND AMENITY SPACES ARRANGEMENT



TYPICAL BUILDING SECTION



VIEW OF HATCHAM ROAD



Section G: Homes shows 'must', 'should' and 'could' codes relating to residential design in the box on the left, illustrative reference images at the bottom, and an annotated illustrative drawing on the right.

Lessons learned

Relate the code to the statutory plan making process – Developing a code through the Area Action Plan has grounded the coding work in the statutory plan making process. This gives it weight and enhances its credibility with residents and businesses, in contrast with some of the masterplans, frameworks and designs studies that have been undertaken previously.

Capturing the character of a place in the code is critical – It is critical for the code to capture the character of the place; this requires adequate time and resources to be invested in the process, to enable a thorough understanding of the built form, urban fabric, local patterns and the social and economic character to be reflected in the content of the code.

Embedded stakeholder engagement and public consultation strategy – Ensuring that effective consultation and engagement underpins – and is embedded within – the process can help achieve the best outcomes. At Southwark this included site visits, interviews, a webinar, exhibition events, in addition to a Community Review Panel meeting to test the draft design code.

Build rapport with local businesses – Having the design team on site each week was a very successful strategy to achieving engagement with businesses. The design team could see the businesses operating, start building rapport informally and understand how the place works.

Aim for clarity and brevity in the code – It was challenging for the design team to keep the code concise and brief – but being succinct and clear has made it easier for everyone to understand. Use of clear visuals and images supports clarity and can reduce the amount of text required.

Clear focus for the design parameters – The priority for the code was to explore the ground floor character of development, and the street level pedestrian experience, and how this contributes to shaping the overall identity and character of the area. Being able to zone in on these aspects contributes to a quicker process.

Effective briefing and collaboration – It was an enjoyable process for the design team and officers and has been highly collaborative. Effective collaboration requires a planning authority to be a good strong client. Effective briefing and direction early in a project can ensure that the design coding process fulfils its objectives.

In their words

As part of the NMDC pilot project research, interviews were undertaken with key stakeholders involved in each of the pilots. This section summarises some of those reflections.

Status of the design code

One of the challenges has been to avoid the situation where there is non-statutory guidance that nobody knows the status of; for example, planning documents and informal urban design frameworks and different teams producing different outputs. Developers would not know what they need to follow.

Embedding consultation within the process

It is important to be realistic – it takes a long time to bring people forward and socialise the ideas. It's not a 'single workshop' type activity. There had already been quite a lot of consultation done on the Area Action Plan, so there were good contacts. The success of the consultation was put down to the design team spending two days a week on site being 'present' and knocking on doors. This started to build some of the connections with key local businesses. The conversation with key businesses tended to start with an assumption that Southwark wanted them to move out and move away. When they realised the code could be a way to protect how they could stay, the engagement became very positive.

The structure and content of the design code

It was really challenging to find a way of summarising the deliverables to turn it into something short and readable. We were trying to get to under 40 pages in A4 format. It has got to be a document people can understand, so it needs to really be clear and succinct. It should follow the approach of a good pre-app meeting when you set out priorities and then you set out how they could respond to meet those priorities. The way the document is structured in each section there is a 'collage' of all the code elements together – illustrations to show how it could come together. There is a natural overlap of each issue/principle and there are tensions. This did encourage debate. We have had about eight revisions of this document and have put some flexibility into it. Particularly towards the end of the process – there is a balance to be arrived at, given the challenges within the area and the ways in which developers could develop within the code.

Characterising the area

We have taken this to be a single area type. It is defined as the 'High-rise City'. It does not mean that everything will be the same within it though; for example, different types of businesses and activities would be there. Different street character types have been identified; for example, the grid of streets within the Hatcham Road / Ilderton Roads area. Long streets within the grid itself have a different character to the short cross streets. The character of the street informs where residential entrances should go, on quieter streets. The design code captures the identity of the area. One of the feedback comments from the Community Panel was that it captured the character of the place.

Good design

The Community Review Panel has talked about creating places where people live and work – through their own experience. The panel shows there is a wide range of opinions. In talking about places and place quality with various stakeholders and businesses, it started to come together to create a set of principles for this place. The beauty in this place is the activities happening alongside each other; for example, unloading bricks and boxes next to a working art studio. It needs a rich mix of uses. There is some pride in the robustness of the place and it's not necessarily that it becomes conventionally attractive. We have benefited hugely from the approach of thinking about development at street level – the pedestrian experience. It has been a quicker process.

Evolution of the area

The aim was not to 'curate'. Can you create spaces that are attractive to various users so delivering/requiring Category-A fit out, but then allow a place just to evolve to accommodate new users? As an example, a knitting firm is looking to move in, others may move out. There is always a turnover with the ebb and flow of London life. Clearly if you are the owner of big estate then there is a long-term interest, however on this site there are many different landowners so long-term stewardship is inherently difficult. So, this is really about enabling a place to flourish and change.

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The full National Model Design Code (NMDC) Pilot Programme Monitoring and Evaluation can be downloaded here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1083852/NMDC_M_E_final_report_v5.pdf