Design Code

This note will outline the purpose of a design code for Kensal Canalside, how it will fit within the planning process and discuss the level of detail required.

- Purpose
- Where it sits in the planning process
- Level of detail with examples

Purpose

Kensal Canalside is complex in nature. The site will be brought forward by different developers over several years. Kensal Canalside meets the criteria for where design codes are considered most valuable. These characteristics are:

- Large sites that will be built out in phases over a long period of time
- Sites in multiple ownership, where co-ordination is desirable
- Sites likely to be developed by several different developers and/or housebuilders

Whilst design and access statements must be submitted at outline stage in the traditional planning process with details submitted at reserved matters stage, a co-ordinated approach to strategic multi-phased development is best secured through submission of a design code. The design code should act as a mechanism for delivering high quality and ensuring that co-ordinated approach. It should seek to ensure cohesion and consistency across a large development area, without hindering creativity or variety in design.
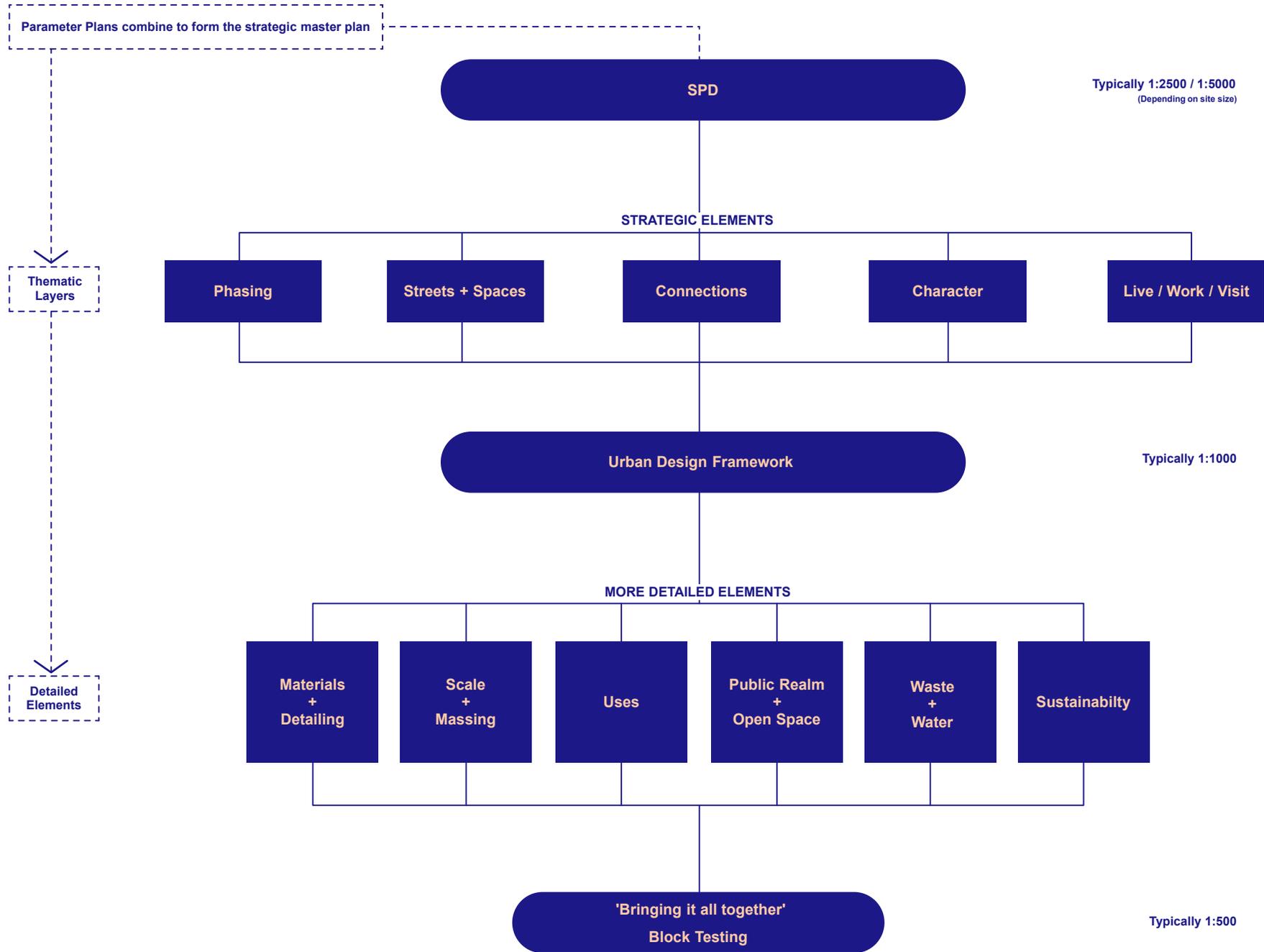
Where it sits in the Planning Process

A draft design code should be prepared before the outline planning application and reserved matters stages, by the developers in consultation with RBKC and the community so as to maximise its influence in the planning process. To build in flexibility and ensure that the developers work together, the draft code should be tested by the developer, reviewed by RBKC and revised if necessary, before the code is finalised at planning application stage.

Level of detail with examples

The Design Code should systematically and gradually break down elements that contribute to the creation of high-quality place making, starting from the most strategic elements. The strategic elements of a code expand upon and tie together, the themes established in the parameter plans submitted with the outline application, as illustrated in Figure 1.

Figure 1.

Parameter Plans combine to form the strategic master plan

SPD

Typically 1:2500 / 1:5000
(Depending on site size)

STRATEGIC ELEMENTS

Thematic Layers

| Phasing | Streets + Spaces | Connections | Character | Live / Work / Visit |

Urban Design Framework

Typically 1:1000

MORE DETAILED ELEMENTS

Detailed Elements

| Materials + Detailing | Scale + Massing | Uses | Public Realm + Open Space | Waste + Water | Sustainabilty |

'Bringing it all together'
Block Testing

Typically 1:500

Crucially, the design code should be progressive, ambitious and aim to achieve the highest quality in design of the built environment. Specific to the KCOA site and in addition to addressing the objectives outlined in the 'Purpose' paragraph above, RBKC expect a design code that will elevate the ambition for quality of landscape and building design on the site. The design code should ensure a holistic design approach which addresses all scales of development, from site-wide movement and transport principles, infrastructure and topographical challenges, to building typologies, energy performance and suggested material palettes, as well as how all matters relate to one another and contribute towards achieving the site vision and the highest possible quality of design. In addition to this, a design code should achieve the following primary objectives:

1. Establish a narrative for the site which describes its uniqueness. For example; a journey from the former gasworks and railway depot into a thriving, dockside development with well-connected communities, improved access to the waterway and new connections that knit the new neighbourhood into the existing city fabric.

2. Identify experiential qualities which are a priority for the site. Who will use the site? How should they experience the site and how can design of the built environment achieve this? For example, how can design ensure a safe and enjoyable experience for a person spending their day on the canalside, or a cyclist commuting though the site, or a group of children playing on their residential street?

3. Ensure permeability and ease of movement through the site, and successful integration with the adjacent suburban areas via Scrubs Lave and Old Park Royal, ensuring movement networks give priority to pedestrians and integrate cyclists and sustainable transport methods.

4. Deliver a new north-south pedestrian and cycling bridge across the Great Western.

5. Encourage cohabitation with wildlife on the site by maximising biodiversity and natural habitats.

6. Provide new connections and improved access to the towpath with a pedestrian bridge over the canal.

7. Encourage optimised residential densities, delivering a minimum of 3500 new homes, of which 35% on private land and 50% on public land are genuinely affordable and aspire to meet the borough's tenure need, subject to viability.

8. Identify street types, movement networks, edge treatments, building typologies and character areas, each with its own set of design codes beneath the site-wide design principles, whilst ensuring cohesion across the site.

9. Ensure a high quality of place and public realm which is diverse, vibrant and people friendly.

10. Identify appropriate material palettes and construction methods whilst taking care not to hinder creativity or variety across the site.

11. Encourage contemporary, innovative and exemplary landscape and building design.

12. Deliver a healthy walkable neighbourhood, defined by a hierarchy of tree lined streets and public space, delivering exceptional architectural quality drawings from the high quality of development with the borough and the character within the local context.

A design code can be structured in a number of ways according to the primary objectives for the specific site or area. To encourage a holistic design approach which focuses on site-wide design principles and filters down to more detailed building design codes, a design code for Kensal Canalside could be formatted as follows:

Introduction

- What is a design code and what is its purpose?
- How is this design code formatted and how can design teams use it to inform development of reserved matters proposals?

Narrative

- What is the primary site narrative or vision of development for the site? The site narrative should be a clear and concise ambition which can be easily and consistently referred back to throughout the design process.
- What are the key policy objectives for the site and how do these support the site narrative? Our policy aims to secure a modern, high quality and sustainable mixed use development to help meet the future needs of the city, improve accessibility and provide new community facilities to share with adjacent neighbourhoods.
- How will the design code ensure that future development is aligned with the site narrative?

Site Wide Design Principles & Codes

What are the primary design principles for the site as a whole? These will be closely related to the site narrative and can include; capitalising on views, responding positively to topography, a landscape design approach, green infrastructure, ecology / biodiversity and ease of movement.

To uphold these principles, the following should be developed as a minimum:

- **Connections:** This should consider how to achieve intuitive and accessible permeability through the site. It should consider methods of filtered

permeability to establish appropriate movement priorities. The topography of the site presents great opportunity for innovative design of movement networks. It should also consider integration between potential development parcels and with the adjacent urban and natural context. This code should have the potential for movement networks to impact on wellbeing of future occupants. It should carefully consider parking strategies, as well as waste and service vehicle routes.

- **Streets & Spaces:** The identification of Road & Street Types will be closely related to the site-wide movement network in that each should consider movement priorities i.e. pedestrian, cyclist or vehicle. It is important to distinguish between Road and Street in terms of balancing vehicular movement with place function and each type should detail experiential qualities of place. For example, a central public boulevard is expected to be livelier than a residential muse street; how can design facilitate this? They should also consider aspects of physical design including appropriate widths, verges, people-friendly surfaces & pedestrian zones, edge or boundary treatments, accessibility, on or off-street parking, refuse collection, planters, seating, lighting, crossings, junctions and material types. Road and Street Types will be instrumental in establishing a site-wide planting and tree-planting strategy. To facilitate this; planting palettes and specific tree planting strategies focusing on species mix, density, maintenance and longevity should be attached to each. Each Road and Street type should be illustrated by scaled drawings.

- **Character:** This must include reference to how the proposed character has learnt from the existing immediate and wider borough context. 8 Character Areas have been identified and need to be developed further. Character Areas can respond to land use, site topography, building heights and residential density targets and should relate to adjacent landscape as well. They should also reference back to the site narrative and to the adjacent environmental context. Although Character Areas will vary, Kensal Canalside should knit together as a single identifiable neighbourhood. To build on those already identified, Character Area codes should be developed as a minimum (refer to Figure 2 plan):

Figure 2: Character Areas

- **Live / Work / Visit:** This should outline and support the Council's target to deliver 3,500 new residential homes, 10,000 square metres of new office space, 2,000 square metres of non-residential floorspace including social and community uses and shopping facilities. It should also encourage the best use of land by following a design led approach that optimises capacity, ensuring the delivery of 3,500 new homes.

- **Phasing:** This should consider the delivery and phasing of the project, setting out the sequence of development across the site and identifying and addressing the implication of construction work to immediate sites as well as areas in close proximity.

Specific Design Codes

These codes go further in detailing specific, identifiable areas of the site or design typologies. The design codes associated with each area or typology should always refer back to the site narrative and the site-wide design principles. Identified areas and typologies are not mutually exclusive, but will interact with one another in order to achieve a holistic design approach. Specific areas and design typologies to be coded should include the following as a minimum:

- **Building Typologies:** These are prescriptive and more detailed, including codes on massing, scale, uses, frontage, elevation principles, façade design, materials, roof scape and biodiversity measures. Some building codes will be more prescriptive than others. For example, a Neighbourhood Centre requires

a more detailed code than residential buildings because of its importance with regard to public realm. Similarly to Road & Street Types, some Building Typologies will be more appropriate to some Character Areas, but do not determine Character Areas in themselves.

In order to achieve the highest quality built environment on the Kensal Canalside site, the design code should identify and expand on typologies with the aim of establishing a holistic and clearly defined set of design principles.

- **Public realm + open space:** This should encourage visual cohesiveness throughout the development through, a select pallet of surface materials and street furniture, street details that reinforce the public realm character and structured street planting. The code should outline the layout and use of public realm and encourage design that prioritises pedestrians where vehicles are not permitted, in addition to ensuring entrances are clearly identifiable with an open an accessible design, with streets that cater for a range of diverse activities along their length throughout the day. This code should consider access, circulation and movement through public spaces including the provision of blue-badge on street parking and secure cycle parking. This code should consider how street lighting will reinforce the character and structure of the streets though location and spacing of lighting as well as the materials and colours which should relate well to the overall pallet of materials. This code should encourage minimising opportunities for street crime, maximizing the benefits of natural surveillance.

- **Waste + Water:** This code should outline the design considerations for recycling and waste facilities as well as detailing a refuse strategy with diagrams showing refuse collection routes and the location of refuse/recycling centres, electrical sub stations and water pumping stations. Sustainable drainage strategies must be delivered as part of the development of the site. Therefore, the code should also outline the strategic sustainable surface water strategy detailing demonstrating the site wide sustainable drainage strategy (SUDS) requirements to be implemented throughout the scheme. There are a range of options available which will suite constraints to KCOA. These may include water butts, permeable paving, ponds, underground water storage tanks, swales and ditches, rain gardens and rills.

- **Sustainability:** The Council is committed to considering the environmental impacts of our decision making as a priority and as such the development must prioritise sustainability with a view to achieving the net zero carbon commitment. This code should set out how the sustainability aspirations and targets effecting the external built form should be considered by the designers. These considerations include renewable energy, materials, microclimate and ecology. The code should not aim to cover a comprehensive list of all sustainability matters, but instead should focus on only those that the design code needs to influence. A separate sustainability statement should be prepared which details a comprehensive manifesto of sustainability requirements. This code should consider energy performance targets for the site as a whole and should also differentiate between residential and non-

residential building types. It should consider decentralised energy systems on the site. It should also consider principles of building orientation and passive design solutions to reduce energy demands. This code should encourage the use of low carbon and renewable energy to contribute to carbon offsets if required. This code should consider the environmental implantations of the sourcing and manufacturing of materials as well as the longevity and long-term weathering as part of the design. The BRE Green Guide should be referred to. This code should consider the deign impact on microclimate giving thought to future climate resilience, addressing the projected changes to London's climate including significantly warmer drier summers and wetter windier winters. This code should consider site-wide methods for achieving a net biodiversity gain. Crucially, this code should outline how to achieve the ambition to cohabit with wildlife and natural habitats, by detailing aspects such as SUDS, wildlife corridors / crossings, tree planting, perennial planting, continuous soil volumes, soil type & irrigation, maintenance and long-term design objectives. This code should consider the wellbeing of future occupants and the wildlife which may also inhabit the site.

With regard to more specific requirements, the design code should include the following as a minimum:

Block and Building Codes			
No.	Design Code element	Requirement	Best Practice Examples
1.	Detailed heights strategy for the site	This will set out clearly how building heights will be dispersed across the site in line with the principles set out in section CH3 of the SPD. This should include justification for and proposed locations of tall buildings and include a height plan for the site.	Section 4.8.3 of the Marshgate Design Code
2.	Block plan strategy	This will show the proposed dimensions of each block, the proposed roofscape and building form. This should be generated from the character area code.	Section 1.1 of the Clay Farm Design Code. Section 3.1 of the UCL East Design Code
3.	Façade details	This will include details of the façade design of each block showing how the building relates to the street at ground floor level and propose boundary treatments where appropriate. A description of the elevation	Section 3.13 to 3.6 of the UCL East Design Code

		principles along with diagrams illustrating how these work, should be included	
4.	Materials strategy	This will set out the preferred materials for each character area and details of how these may vary from block to block	3.6 of the UCL East Design Code
5.	Residential amenity details	Details of external amenity space for residents including diagrams and sizes	
6.	Housing typologies	A detailed description and diagrams of the proposed housing typologies to illustrate show how the masterplan will cater for a large range of different households and deliver well designed new homes.	The Dwelling Typologies Appendix to the Chilmington Green Design Code 2016.

Section 2.1.5 of the Clay Farm Design Code. |
| 7. | Workspace provision | A detailed description of workspace provision and how these meet the requirements set out in the SPD | |
| 8. | Public Realm strategy | A site wide public realm and open space strategy, describing the streets and spaces set out in the earlier codes in more detail. This should include:
- A materials strategy
- Sections illustrating, street width, parking provision, planting, interface with buildings, boundary treatments

For each open and green space the design code should include

- A sketch design
- A materials pallet/ street furniture / lighting / planting strategy
- Sections showing how the buildings relate to the | Section 2.2 of the UCL East Design Code |

		space and boundary treatments - Provision and design of play space	
9.	Waste + recycling strategy	A detailed description of the refuse strategy describing the strategy for the storage and collection of waste, location and specification of refuse storage for dwellings and the location of site wide recycling facilities noting how they have been positioned to minimise disturbance to neighbouring properties, whilst still being easily accessible. This section should also include a refuse collection plan illustrating the refuse collection routes and location of refuse and recycling centres.	Section 1.11 of the Clay Farm Design Code
10.	Surface water + drainage strategy	A detailed description of the site-wide SUDS requirements to be implemented throughout the scheme. This should include diagrams illustrating the above and below ground sustainable drainage proposals	Section 1.10 of the Clay Farm Design Code
11.	Sustainability strategy	A site-wide detailed description of sustainability targets and aspirations for the site including the following: - A declaration of commitment to design to an accredited sustainability assessment method(s) - A detailed description of hoe the design will maximise the use of low carbon and renewable energy - A materials and waste strategy outlining the sustainable sourcing of materials, the	Section 3.8 of the UCL East Design Code

		requirement to specify materials with low environmental impact and a design approach that minimises waste. - A Climate strategy that addresses future climate resilience and designing in a comfortable micro climate by optimising wind, daylight and mitigating solar gain. - An ecology strategy encouraging engagement between people and biodiversity and the incorporation of new habitats that promote ecosystem services	
12.	Utilities	A detailed description of proposed location and specification of utilities on the site including (but not limited to) street lighting, utility boxes, pipes/flues/vents, letter boxes, photovoltaic cells and domestic lighting.	Section 1.12 of the Clay Farm Design Code

We encourage the developers to refer to the Design Code for Graven Hill Village 2018, the Design Code for Clay Farm 2011 and the UCL East Design Code, as good-practice examples. The informal guidance notes on 'Design Codes for Strategic Development Sites with the Cambridge Fringe Areas' is also a useful reference document that provides useful guidance that can be applied to the repetition of design codes in general.