

## 5 PROACTIVE TESTS FOR TALL BUILDINGS

### INTRODUCTION

**5.1** In the recent past development economics were the overriding consideration when it came to the siting of tall buildings. The outcome has been buildings that at best do not fit comfortably within the townscape and which at worst present a major disruption to the character of the surrounding area. Today, policy at all levels demands that the arguments for where tall buildings can be located should be much more carefully and comprehensively considered.

**5.2** This section sets out positive arguments or ‘tests’ for tall buildings that are supported by the Council. It goes on to discuss other reasons commonly used to support proposals for tall buildings, but which may not be considered sufficient justification within the Royal Borough. It is not enough that tall building proposals are outside inappropriate or sensitive areas, or that they present negligible visual disruptions. All tall building proposals are also expected to satisfy the proactive assessment.

#### Positive tests

**5.3** There are three positive tests that support the case for locating tall buildings within the Royal Borough and need to be taken into account when reaching a final decision.

- design quality
- townscape legibility
- London-wide public uses.

## Design quality of tall buildings

**5.4** Tall buildings can offer an exciting alternative to the more traditional development form, but more than any other typology they require design excellence to maximise their contribution to the skyline and local environment and mitigate their negative impacts, particularly at street level.

*Tall buildings should be of an exceptional architectural, sustainable and urban design quality.*<sup>61</sup>

**5.5** In the right place, tall buildings and structures can contribute positively to the character of the Royal Borough, its townscape and skyline, creating distinguished landmarks. To do so, however, they must possess an architecture that is convincing and highly attractive, especially when viewed in the round. This requires the skilful handling of scale, form, massing, aspect ratio<sup>62</sup>, proportion, silhouette and crown, and the careful selection of facing and glazing materials. Graceful and slender designs are far more likely to be successful than bulky designs. Slender buildings often achieve an aspect ratio of 5:1 or more. This applies both to tall structures designed as stand-alone buildings and to those integrated within the street block where a slender element rises above the building shoulder (e.g., podium and tower). Building services

and telecommunication equipment should be integral to the design. The provision of a high-level gallery or activity from which the public can enjoy the view from tall buildings is welcome.

**5.6** Tall buildings are likely to have a greater impact on their environment than other building types. Due to their massing and height, tall buildings usually overshadow and overlook their immediate surroundings. This is especially harmful for residential environments and amenity spaces. Furthermore, tall buildings can have negative effects on the microclimate, causing air turbulence and diversion of winds to ground level, glare and noise reflection. Detrimental impacts on amenity and the environment should be prevented through careful siting and building orientation; sensitive architectural form, in terms of height, massing, set-backs and floorplate design; and clever façade treatment, for example, using architectural devices or materials that baffle microclimatic effects, such as awnings, skirts and terraces. Any night-time lighting should avoid causing light pollution, and be well designed and appropriate to the building and its setting.



**5.7** Design quality applies equally to the top of tall buildings, where the impact is on the skyline, as to their base. At the lower levels it is not only the impact on the streetscape and local views that can be significant, but also how the building functionally relates to the street. Tall buildings may disrupt the continuity of public spaces within an area. Public spaces around tall buildings are often weakly defined and lack enclosure, legibility and passive supervision. Such ambiguous spaces make it difficult to orientate and personal security fears deter non-residents from passing through high-rise estates.

**5.8** The quality of urban design is therefore an essential component of any tall building design. It should ensure the successful physical and visual integration of a tall building into its surroundings, fostering positive relationships with neighbouring buildings and open spaces. This includes promoting connectivity and permeability; defining edges that reinforce existing building lines and give a coherent form to open space; and responding positively to valid opportunities to define and landmark points of significant urban activity and civic importance (*see below*).

**5.9** Tall buildings that integrate with the street block and avoid creating an object on their own are more likely to be successful, making for a meaningful public realm. A tall building should orientate its front and main entrance to the street or public square. The ground level should be highly accessible and improve the quality of the pedestrian environment. It should provide for active ground floor frontages and a stimulating and inclusive public realm. The façade should be transparent with sufficient openings to assist overlooking and passive supervision of the public realm. Blank walls should be avoided. This makes the street or square feel safer and creates more attractive environments for pedestrians. The public realm itself should be enhanced through high quality landscape treatment.

**5.10** Tall buildings should be designed to contribute to the quality of life of those using the building in terms of function, fitness for purpose, access, safety and amenity. Good design implies good economics; tall buildings should be durable, as well as having a design that incorporates flexibility and can be adapted over time to suit new living standards or working practices, or changes of use.





Well-used, popular tall buildings are more likely to be better maintained, optimising their contribution to the Borough's building stock and townscape appearance.

**5.11** As significant investments of material and energy resources, tall buildings represent significant opportunities for exploring and utilising sustainable design and construction practices; and as such they should set exemplary standards. This includes minimising energy use and reducing carbon emissions, using the latest building technologies and resource management. Sustainability should be delivered through sensitive building configuration and orientation; careful consideration of energy sources and conservation, material source and lifecycle; the design of internal temperature control and use of natural ventilation; water use and conservation, and mitigation of water run-off; waste management; and on-site ecology. The highest rating of sustainability should be achieved (e.g., 'excellent' BREEAM or EcoHomes rating, or recognised equivalent).

**5.12** Tall buildings are expensive and complex to build. Therefore it is important that the design excellence does not become diluted during the process of procurement, detailed design and construction. Quality

must be assured if the scheme is to be successful and the new building is not to disappoint. The Council has to be satisfied of the credibility of the design, both technically and financially. Tall building promoters will need to demonstrate their capability and commitment to carry through the vision and design qualities set out in their proposals. <sup>63</sup>

### Townscape legibility

**5.13** According to the London Plan the Mayor will promote the development of tall buildings where they create attractive landmarks enhancing London's character and where they are also acceptable in terms of design and impact on their surroundings.<sup>64</sup> Furthermore, By Design advises that a building should only stand out from the background of buildings if it contributes positively to views and vistas as a landmark.<sup>65</sup> Landmarks are by definition easy to see and recognise. They provide geographical and cultural orientation points, and act as carriers of meaning. Tall buildings and structures are obvious landmark features. Depending on their size and location tall buildings can perform as local, district or metropolitan landmarks.

**5.14** The Royal Borough has a tradition of local landmarks that articulate the local townscape, highlighting important squares,

streets, street geometries and functions that have significance to those living and working in the area. Taken together they build up into a greater level of legibility across a broader area. There may be opportunities to extend this legibility through additional urban markers within the local townscape. Therefore, new local landmarks may be used to express important junctions and highlight activities or services of localised meaning and importance.

**5.15** *District landmarks should articulate positively a point of townscape legibility of significance for the wider Borough and neighbouring boroughs, such as deliberately framed views and specific vistas.* They may serve to close or fix the vista, frame the view or provide a counterpoint in a deliberately framed view, in the Classical town planning tradition. It is important that vistas are not misinterpreted to be any straight street. Given the built character of the Borough and the lack of availability of very large sites, the opportunities for developing new tall buildings within a strong directional alignment that offer a point of visual significance will inevitably be limited. Where this can be achieved, the aesthetic aspect of the proposed tall building cannot usually be separated from its functional role (see below).

## London-Wide Public Function

**5.16** Tall buildings are one model for landmarking significant public uses. The Royal Borough is home to several major public institutions and uses of London-wide or national importance that are located in landmark buildings of local or district scale. They include the Natural History Museum, Victoria and Albert Museum, Brompton Oratory and the Earl's Court Exhibition Centre. *New public functions of similar standing and public significance may warrant a proposal for a tall building within the Borough.*

**5.17** Opportunities for new buildings of significant public interest are likely to be very occasional. Where they do arise, legibility within the Borough will be an important factor that could justify a new building of district height. If they are to be fully effective and have meaning, however, generally the building should accommodate the pan-London function, rather than be linked to a wider development that provides the function.

## OTHER ARGUMENTS

**5.18** There are a number of other arguments often presented in support of tall building proposals, but which on further analysis are unlikely to be relevant to the



Royal Borough. This section summarises the arguments and sets out why they may not apply.<sup>66</sup> They are:

- World City
- Economic Clusters
- Regeneration
- Opportunity Areas
- Density / Accessibility
- City Legibility

### ‘World City’ thesis

**5.19** London is one of the world’s major business, political and cultural centres. It has a considerable influence worldwide and is regarded as one of the world’s major global cities. London accommodates international financial institutions, law firms, corporate headquarters (especially conglomerates) and stock exchanges that have influence over the world economy. It has been argued that world cities have to represent their status through clusters of tall buildings, which dominate the skyline. Proponents furthermore argue that in order to maintain their leading role global cities need to provide sufficient sites for the development of tall buildings.

**5.20** Global companies invest in their corporate image; head offices are usually bespoke buildings of high quality with well-known addresses. Many companies tend to prefer tall buildings, since they have a strong presence and a greater impact than lower buildings when seen from medium and long distances. It has been argued that there is a risk that global companies would relocate outside the U.K., if not enough tall building opportunities are provided in London.

**5.21** Nevertheless, there is no overwhelming evidence that global cities need to be characterised by tall buildings or that global companies will locate outside the UK if opportunities for tall buildings are not provided.<sup>67</sup> Should there effectively be a future need for tall ‘global’ buildings, they would be best located in the City of London and Canary Wharf, which already serve to attract advanced producer services. Indeed it is argued that the Royal Borough makes an invaluable contribution to London’s World City status precisely because of the exceptional quality of its remarkable historic townscape and large numbers of historic buildings. The Royal Borough has no global economic clusters and is not suitable to accommodate new global economic clusters, which might or might not require tall buildings.

### Economic Clusters of Related Activities / CBD

**5.22** The London Plan highlights that the Mayor will promote the development of tall buildings where they help to provide a coherent location for economic clusters of related activities.<sup>68</sup> The City of London, Isle of Dogs and Croydon are obvious economic clusters and are identified as appropriate locations for tall buildings by the Mayor.<sup>69</sup>

**5.23** *The Royal Borough of Kensington and Chelsea has no major clusters of commercial or economic activity*, with only some pockets of office use, hotels and retail activity located around public transport nodes and along key corridors. These clusters of business activities are insufficient in size or concentration to merit the location of new tall buildings. Current estimates are that Kensington and Chelsea may see some 23,000 sqm of new offices and 31,000 sqm of new retail during the lifetime of the Core Strategy.<sup>70</sup> Hotel accommodation will improve in quality but is unlikely to grow substantially. These figures are totals for the Borough and by themselves are unlikely to generate high building activity, especially as retail rarely works above first floor level. *The Royal Borough is not identified as appropriate for tall buildings to mark clusters of economic or commercial activity.*

## The Regeneration argument

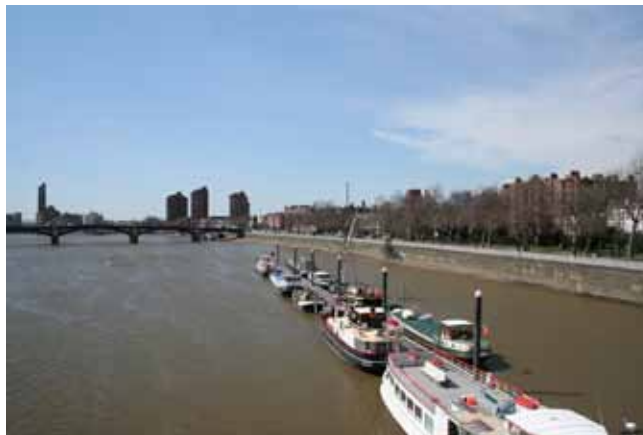
**5.24** Tall buildings when incorporated into major developments are thought to alter the perception of an area in terms of land values and long-term investment potential. In this way they may act as a catalyst for regeneration, particularly when used to subsidise transport and social infrastructure improvements. The London Plan reflects this line of thinking. It promotes the development of tall buildings where they act as a catalyst for regeneration.<sup>71</sup>

**5.25** Regeneration is about bringing development and economic activities to an area through increasing its profile and concentrating activity. Regeneration is generally achieved through higher densities and more mixed and intensive uses. It has been argued that regeneration areas should be represented through tall buildings as they represent a sure way of increasing an area's profile by making a significant physical change. Nevertheless, there is no evidence that high-rise buildings act as a catalyst for regeneration.<sup>72</sup> In the Royal Borough confidence in regeneration is signalled through quality urban design and public realm improvement rather than tall buildings. *In Kensington and Chelsea tall buildings are not required for regeneration, as it can be achieved through medium rise, high-density development in the traditional urban form, preserving the distinctive character and*

*appearance of the Royal Borough.* Warwick Road and Wornington Green are examples in the Royal Borough where this is taking place.<sup>73</sup>

## Opportunity Areas

**5.26** Tall buildings have become synonymous with the development of Opportunity Areas within London. Opportunity Areas are generally major brownfield sites regarded as capable of accommodating substantial growth in new jobs and homes in the Capital. The London Plan seeks to maximise the potential contribution of Opportunity Areas through significant densification. Typically each area can accommodate at least 5000 new jobs or 2500 new homes or a combination of the two, together with the provision of supporting infrastructure.<sup>74</sup>

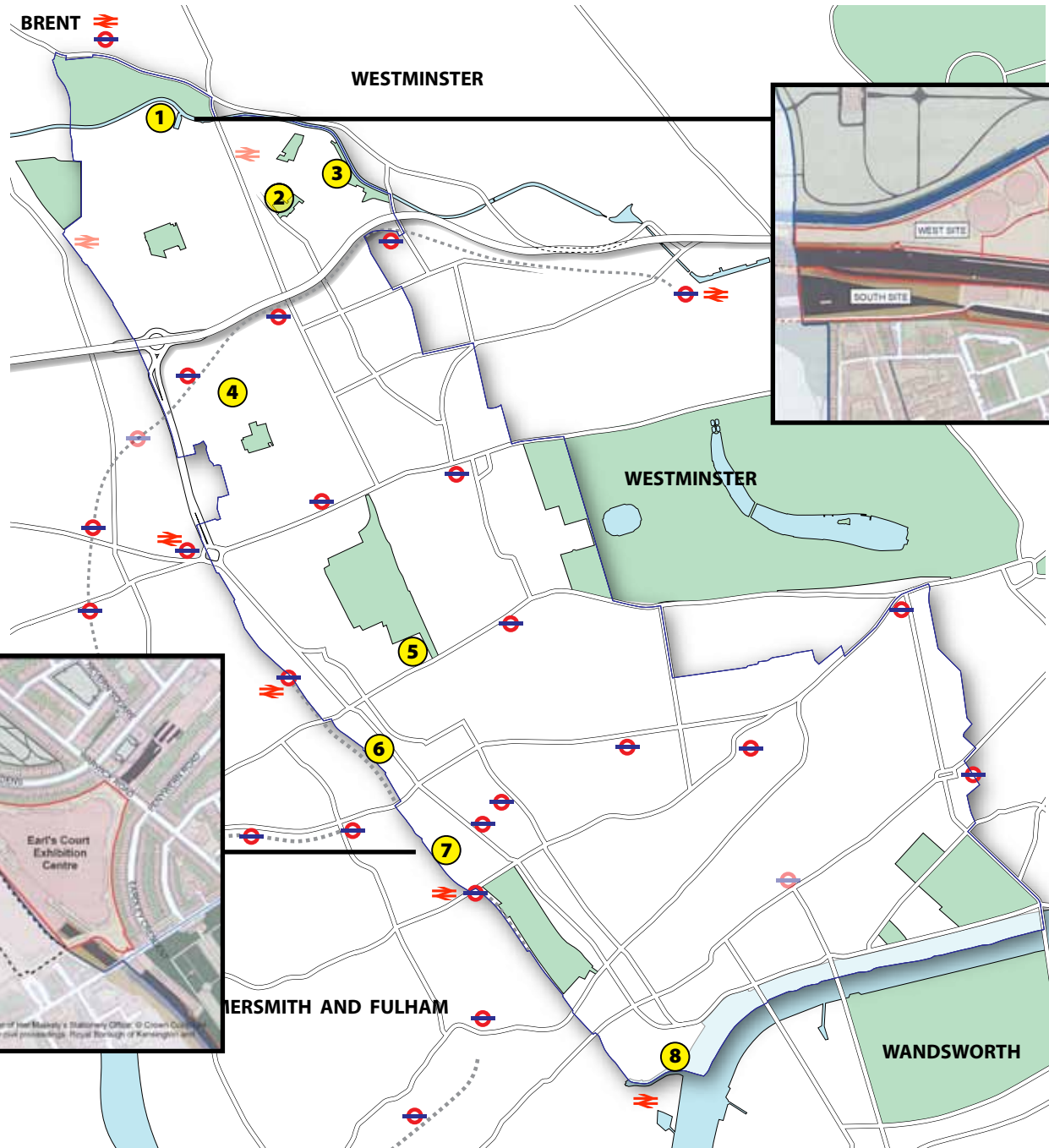


**5.27** The strategic focus of the London Plan is on the location and overall intensity of growth of the Opportunity Areas, and generally not on the types of built form. However, reference is made within the plan to some Opportunity Areas being identified as suitable locations for tall buildings. It is argued that 'tall buildings can be a very efficient way of using land...They can support the strategy of creating the highest levels of activity at locations with the greatest transport capacity'.<sup>75</sup>

**5.28** The adopted London Plan identifies 28 Opportunity Areas, mostly concentrated within inner London boroughs and to the north and east, in areas of good public transport or where public transport improvements would readily support their development. There are *no Opportunity Areas currently located within the Royal Borough of Kensington and Chelsea*. The nearest designated sites are Paddington, Victoria and White City. Of these, White City should relate to the intensification of development at Shepherd's Bush and not to locations within the Royal Borough.

# STRATEGIC SITES

- 1 Kensal
- 2 Wornington Green
- 3 Land adjacent to Trellick Tower
- 4 North Kensington Sports Centre



- 5 Commonwealth Institute
- 6 Warwick Road (5 sites)
- 7 Earl's Court
- 8 Lots Road Power Station

Figure 08  
Strategic Sites



**5.29** The draft replacement London Plan proposes 5 additional Opportunity Areas in the capital. Working in partnership with the Council, the GLA has identified parts of Earl's Court and West Kensington<sup>76</sup> in the west and Kensal Gasworks in the northwest of the Borough as new Opportunity Areas.<sup>77</sup> The GLA continues to regard tall buildings as part of a strategic approach to the regeneration of opportunity Areas, but points out that they can also have a significant detrimental impact on local character. As such 'they should be resisted in areas that are particularly sensitive to impacts and only can be considered if they are the most appropriate way to achieve optimum density in highly accessible locations or to ensure the best local design outcome....'<sup>78</sup>

**5.30** The Core Strategy has responded by identifying the Earl's Court and Kensal Gasworks sites as two of 8 strategically important sites within the Royal Borough where great change is envisaged, and by referring to their status as emerging Opportunity Areas [See Figure 8]. Work has commenced with stakeholders to prepare planning frameworks for the areas, which will identify opportunities and constraints, and realistic programmes and timetables for delivery. This work includes examining

in close detail the appropriate quantum of development and the location and specific height of buildings, and the likely visual harm.

**5.31** Tall buildings may be appropriate within those parts of the Earl's Court/ West Kensington Opportunity Area that fall within the London Borough of Hammersmith and Fulham. This is in accordance with their Core Strategy Options (June 2009). However, they are not being promoted on those parts within the Royal Borough, which are mostly considered sensitive to the visual impact of high buildings, being in close proximity to conservation areas that are characterised by their homogeneity and level roofscape and to Brompton Cemetery which is designated as a conservation area and Metropolitan Open Land. The Council considers a medium-rise, street-based approach could nonetheless achieve the intensity of development required and would be the best local design outcome, seamlessly integrating this part of the scheme into the surrounding, highly-regarded Earl's Court area.

**5.32** The potential for tall buildings within the Kensal Opportunity Area is highly constrained by the site's location adjacent to the Kensal Green cemetery and the Grand Union Canal. The cemetery is designated

a conservation area and Metropolitan Open Land, and contains a number of listed buildings and monuments. The canal is designated a site of Metropolitan Importance for Nature Conservation.<sup>79</sup> Tall buildings are likely to have adverse effects, visually disrupting views out of the conservation area, the setting of the canal and listed structures, as well as overshadowing the waterway and green open space. Investigations have shown that the considerable densities can be achieved without recourse to tall buildings.<sup>80</sup> A medium-rise, high-density built form would be consistent with the wider urban context and complement the Royal Borough's local distinctiveness, whilst still achieving the development quanta envisaged as being provided by Opportunity Areas in the London Plan.

## THE DENSITY / ACCESSIBILITY ARGUMENT

**5.33** With increasing energy awareness and a requirement for sustainable development, densities in urban areas should relate to their accessibility by public transport. PPG13 states that local authorities should promote high density, mixed use development in and around town centres and near to major transport interchanges.

Likewise, the Kensington and Chelsea Core Strategy underlines that high trip generating development should be located in areas well served by public transport.<sup>81</sup>

**5.34** By Design advises that higher density commercial and mixed-use developments, civic buildings and developments likely to generate large numbers of visitors are best located within close walking distance of public transport interchanges.<sup>82</sup> Areas within walking distance of up to 400m (0.25mile or up to a 10 minute walk) from public transport nodes are highly accessible and can ideally be developed to higher densities. In London, public transport accessibility is measured in PTALs<sup>83</sup> which takes all modes of public transportation into account to create an index of how easy is it to travel to a particular place.

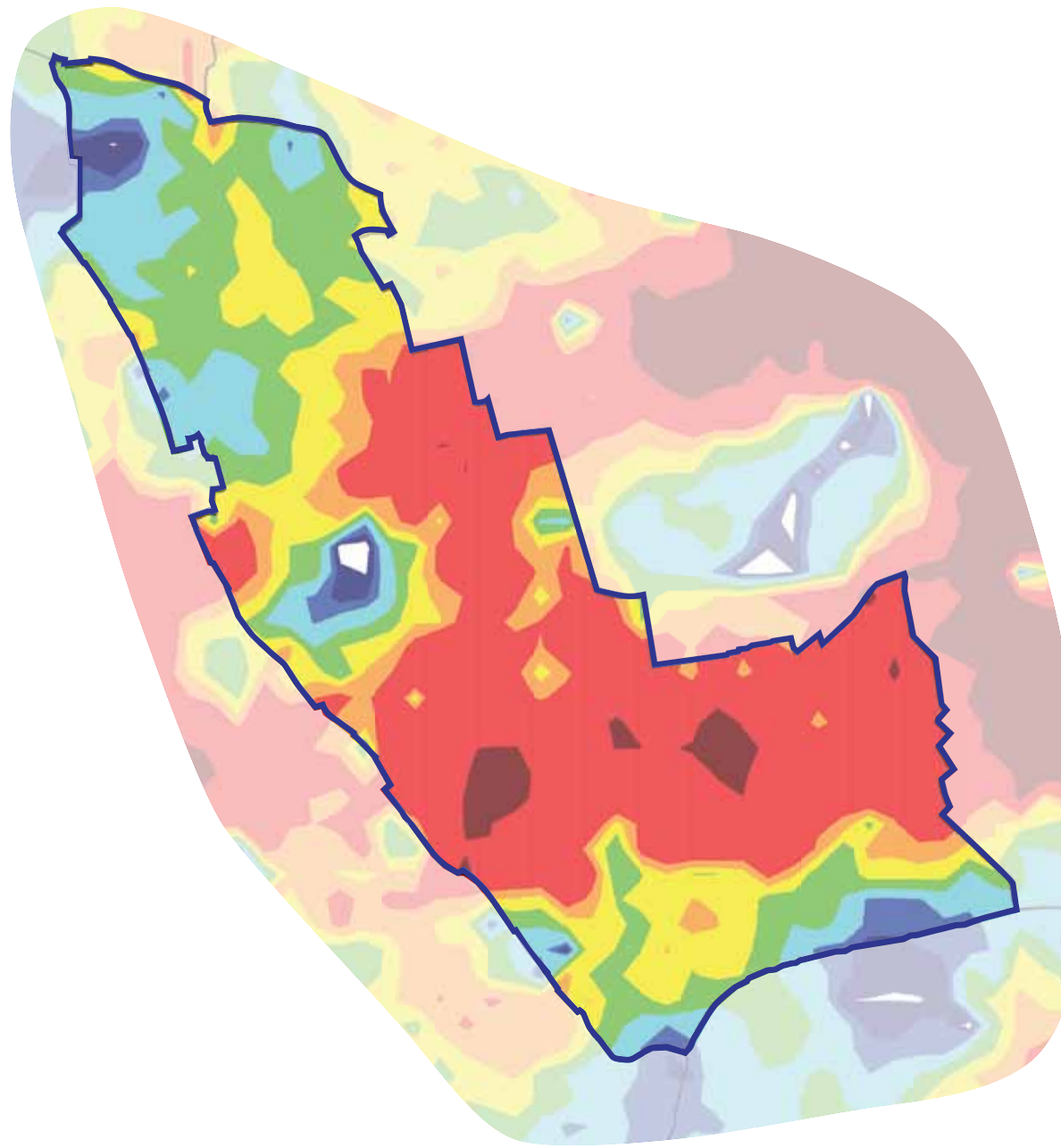
**5.35** The Royal Borough of Kensington and Chelsea is generally well served and accessible by high capacity public transport, with 11 underground stations and 3 surface rail stations. Only North Kensington and South Chelsea are less well served by tube and train. Accessibility of rail public transport is improving in West Chelsea, South Fulham and along the western border of the Borough through the new stops on the West London Line, the OrbiRail and the planned Chelsea/

Hackney Line (Crossrail 2). The Royal Borough is also pursuing a new station within Kensal on the Crossrail line.

**5.36** The current provision of bus services has generally improved accessibility in the Borough, though it is insufficient to make up for the shortfall in access within North Kensington and South Chelsea due to the absence of rail and underground stations. These areas have PTAL scores of between 2 of 3, reflecting poor to moderate public transport access. *[See Figure 9]* High density, high trip generation activities, such as offices and hotels, are resisted in these areas regardless of the development height or form. Much of the Borough, however, has a PTAL score of 4 or above, enjoying good to excellent public transport access. It is here that the pressure for new high-density development is greatest and the case for increasing density levels strongest on sustainability grounds. The capacity of part of the public transport system becomes an important issue that must be addressed.

**5.37** The London Plan asks boroughs to ensure that developments, among other principles, optimise the potential of sites, are sustainable, durable and adaptable.<sup>84</sup> The Plan also highlights that compact city and intensive development does not





**Access to Public Transport  
PTAL**

- 0 Little or no access
- 1a Very poor
- 1b Very poor
- 2 Poor
- 3 Moderate
- 4 Good
- 5 Very Good
- 6a Excellent
- 6b Most Excellent

Figure 09  
**Public Transport Accessibility Levels  
in the Royal Borough**

necessarily imply high-rise buildings and that London has achieved some of its highest residential densities in relatively low-rise areas.<sup>85</sup> Nonetheless it does not discount tall buildings as a viable model of high-density development.

**5.38** Tall buildings, however, are only one possible model for high density. Densities are linked to form and footprint of development as well as building height, and lower-rise typologies such as terraces can achieve as high densities as towers. For most of the Royal Borough, the urban street block lined with terraced housing or mansion buildings is the dominant development form. Victorian terraced housing in the Borough typically provides 700 habitable rooms per hectare

(hrh) in 4 storeys, and Edwardian terraced mansion blocks increasing this to 970 hrh in 6 storeys.<sup>86</sup>

**5.39** Not only has the traditional built form achieved high densities, it has also proven robust and adaptable. Over the past two centuries large parts of Kensington and Chelsea have been able to adapt to changing living and lifestyle requirements and have only seen minimal structural change. Therefore, the Royal Borough already provides a successful model for high density in its traditional Georgian, Victorian and Edwardian building typologies. It is an exemplar of high-density living where the benefits of urban living are achieved whilst avoiding the adverse effects of tall buildings on the local environment.

*In the Royal Borough tall buildings are inappropriate to achieve high density, as it can be achieved through medium rise development in the traditional urban form, preserving the distinctive character and appearance of the Borough.*

**5.40** Where tall buildings are promoted in the Royal Borough in support of the high density levels achievable, it is important to demonstrate that the viability and appropriateness of other lower-rise forms of high-density development



have been explored. This is a matter of design credibility. Evidence of this active consideration of other development forms will be material to the Council's evaluation of the planning applications.

### CITY LEGIBILITY ARGUMENT

**5.41** Tall buildings and structures are obvious landmark features. They can provide important geographical points of reference that most people experience from the outside, aiding their navigation to or through an area. They may mark strategic points, such as locations or buildings of significant public relevance; or they may mark intermediate points, dividing routes into recognisable elements. This section comments on tall buildings used as:

- Gateway landmarks into the Royal Borough
- Progression landmarks along major road corridors
- Landmarks along waterways

### Gateway Landmarks

**5.42** Tall buildings are sometimes used to mark the transition from one 'place' to another, for example, a borough boundary or entry point to a city centre. In the Royal Borough the boundaries to the south, east and north generally coincide with major

physical barriers: the River Thames to the south; the West London Line, itself following the line of culverted Counter's Creek to the west; and the Grand Union Canal and main railway line into Paddington Station to the north. But these boundaries have no real significance of meaning in the wider city landscape, as they are not boundaries of 'place'. They are only local government administrative boundaries. *There is no overriding case for landmark buildings to define administrative districts or local boundaries.*

**5.43** Bridges maintain connectivity with neighbouring areas, some more expressive and memorable than others, offering a sense of arrival or departure contained within the general townscape. Orientation for drivers and pedestrians at these points can be an important consideration, though this is a matter of internal legibility within a localised area and is often accomplished by a range of lower order visual clues, including signing. As with borough boundaries, they do not represent boundaries of 'place'. *The locations do not represent gateways to central London and make no obvious contribution to the image of the city as a whole.*

**5.44** Parts of Knightsbridge and South Kensington, on the other hand, are within the central London's Central Activities Zone. The sense of arrival here is marked by well-known and historic public buildings, monuments and spaces: *The Royal Albert Hall, the Albert Memorial, Hyde Park, Hyde Park Corner and the Wellington Arch support the historic townscape and negate any requirement for gateway landmark tall buildings to central London.*



## Progression Landmarks

**5.45** Tall buildings along major access and transit routes are said to improve the legibility of the city by expressing the hierarchy of the street or marking specific points and dividing the corridor into recognisable segments. In Kensington and Chelsea many of the major road corridors perform a significant shopping function and have a strong presence on a local and metropolitan scale. Nevertheless, the street hierarchy is typically expressed by modest increases in building heights or emphasized through means other than height, such as the design quality of the buildings or public space. Whilst intermediate markers may provide articulation and help give someone the sense of getting somewhere, the frequency of junctions within the Borough's predominantly finely grained urban structure serves this purpose well. Similarly, more modest design signals, such as projecting a building forward or backward in plan relative to the adjacent street frontages, are used to distinguish buildings and mark progress without visually overwhelming the townscape. Therefore there is no merit in lining the main transit routes with tall buildings to give them greater identity. Many of the major road corridors in the Royal Borough are within its conservation areas.

*Tall buildings are an unnecessary and, in all likelihood, unsuitable form of progression landmarking in the Royal Borough.*

## Landmarks along Waterways

**5.46** The London Plan highlights that 'views to and from the waterways are especially significant because the openness of water spaces allows for relatively long-distance views'.<sup>87</sup> Development should recognise the opportunity to provide landmarks of cultural and social significance along the waterways, providing orientation points and pleasing views, but without causing undue harm to the cohesiveness of the water's edge. The Plan recognises, however, that there are a number of adverse effects that tall buildings can have when located adjacent to water spaces,<sup>88</sup> which include overshadowing, wind turbulence and creating a visual canyon.

**5.47** With the exception of seven interlinked towers as part of the World's End estate in southwest Chelsea and the adjacent area of Lots Road, the water's edge of the Royal Borough is designated a conservation area. It is one of the most famous parts of the Borough and contains many attractive buildings and open spaces that are of architectural, cultural and historical importance.

*The townscape is regarded as highly sensitive and the special waterfront character is afforded protection by the Council's statutory plan.<sup>89</sup>*



