

Strategic Vision to Urban Plan:

Tall Buildings Study and Gas Holder Site Assessment for
Kennington, Oval and Vauxhall Forum

Athena Brook

Chloe Evans

Ziad Rayya

Miriam Rogers

Henry Scutt

Group: KOV 2

Tutor: Angela Koch

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1. Introduction

Since the Mayor of London identified Vauxhall, Nine Elms and Battersea as an 'Opportunity Area' within the London Plan (2011) , there has been increasing development interest in the area. The number of Tall Buildings proposed in the area has been steadily increasing, and much change is forecast for the area in the future. These tall buildings, once complete, will dramatically increase the population currently residing in Vauxhall, which will have a massive increase on the availability of social infrastructure and transport. It is for these reasons that the first part of the report will focus on the proposed and already constructed tall buildings, social infrastructure, green spaces and transport currently available in the area.

The decommissioning of the Kennington / Oval Gas Holder site will make available a 2 Ha development site, located in central London and with excellent public transport links. The challenge for Lambeth Council will be to balance the commercial expectations of the landowner with the competing local needs for housing, employment floorspace, services, public open space etc. Of particular concern is the extent to which the historic gas holders themselves can be preserved and enhanced by the development.

1.1 Aim

This report aims to provide a detailed statistical and mapped analysis of the neighbourhood forum area in regards to the proposed tall building cluster and its effects on social infrastructure. This analysis will form part of the Kennington, Oval and Vauxhall Forum's (KOVF) evidence base for the preparation of their neighbourhood plan.

The report will also examine some of the competing visions for the Gas Holder site, and make suggestions which could inform KOVF's representations to Lambeth Council regarding the site.

Objectives

- Investigate the impact of the proposed tall buildings on the neighbourhood forum area particularly in relation to identified social infrastructure and transport provision.
- To analyse the character of the gas holder area and explore the opportunities arising as a result of the decommissioning of the gas holder site.

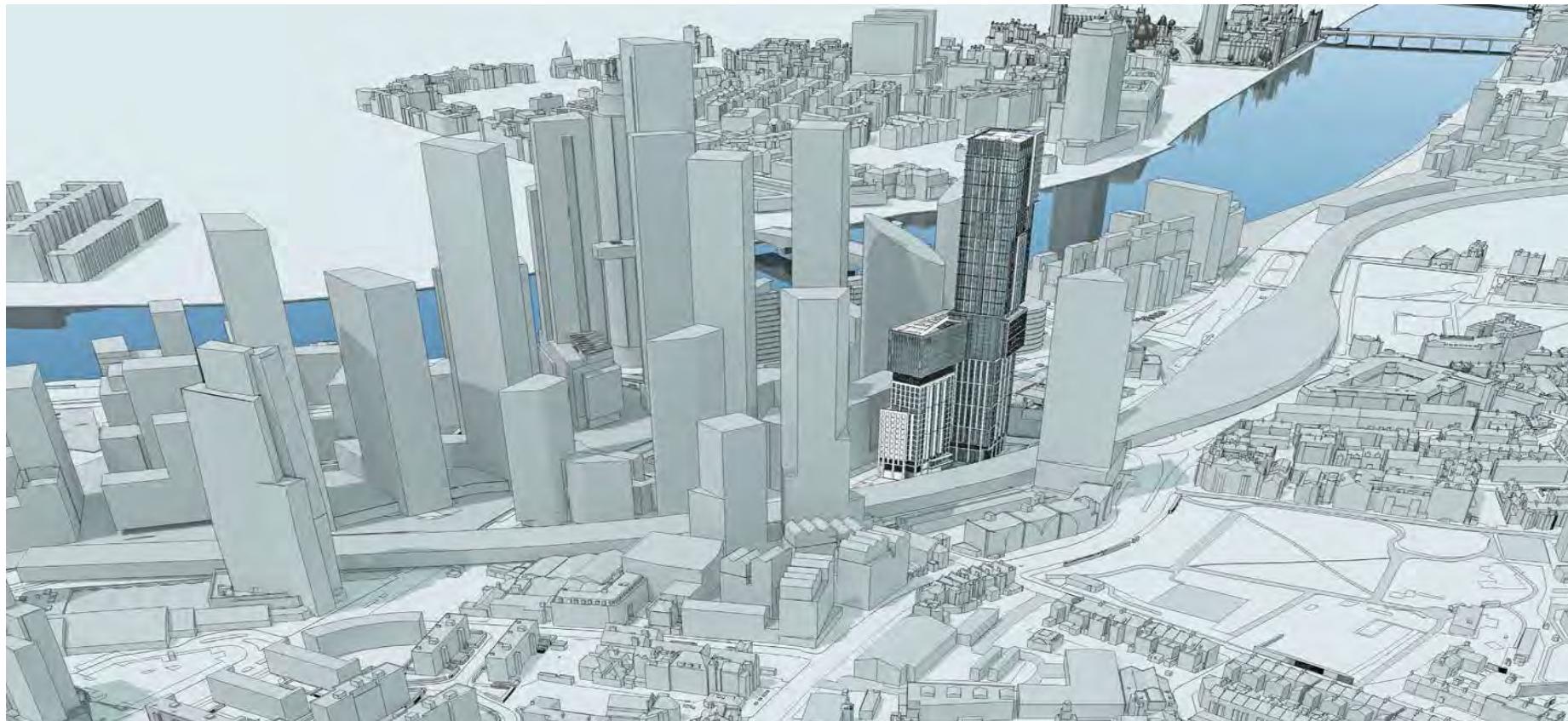
2. Tall Buildings Study

Methodology

- To investigate the impact of tall buildings on their environment we undertook significant data collection.
- This was a 'snapshot study' of proposed new tall building in the Kennington, Oval and Vauxhall study area, and those on the boundary in the borough of Wandsworth.
- Data on 17 proposed new building developments was collected from publicly available planning statements submitted by developers to Lambeth and Wandsworth planning departments.
- Our brief was to investigate the impact of tall building on their environment. Therefore we collected data that could be used to project the future increase in population that the tall buildings would generate.
- Data on residential unit type was collected and input into the Greater London Authority's development yield calculator. The resulting figures were used to inform our conclusions and used to visually map the effect the increase population may have on the surrounding environment.

For the purpose of this study, the definition of a 'tall building' was taken from the 2011 Lambeth Core Strategy, Policy S9:

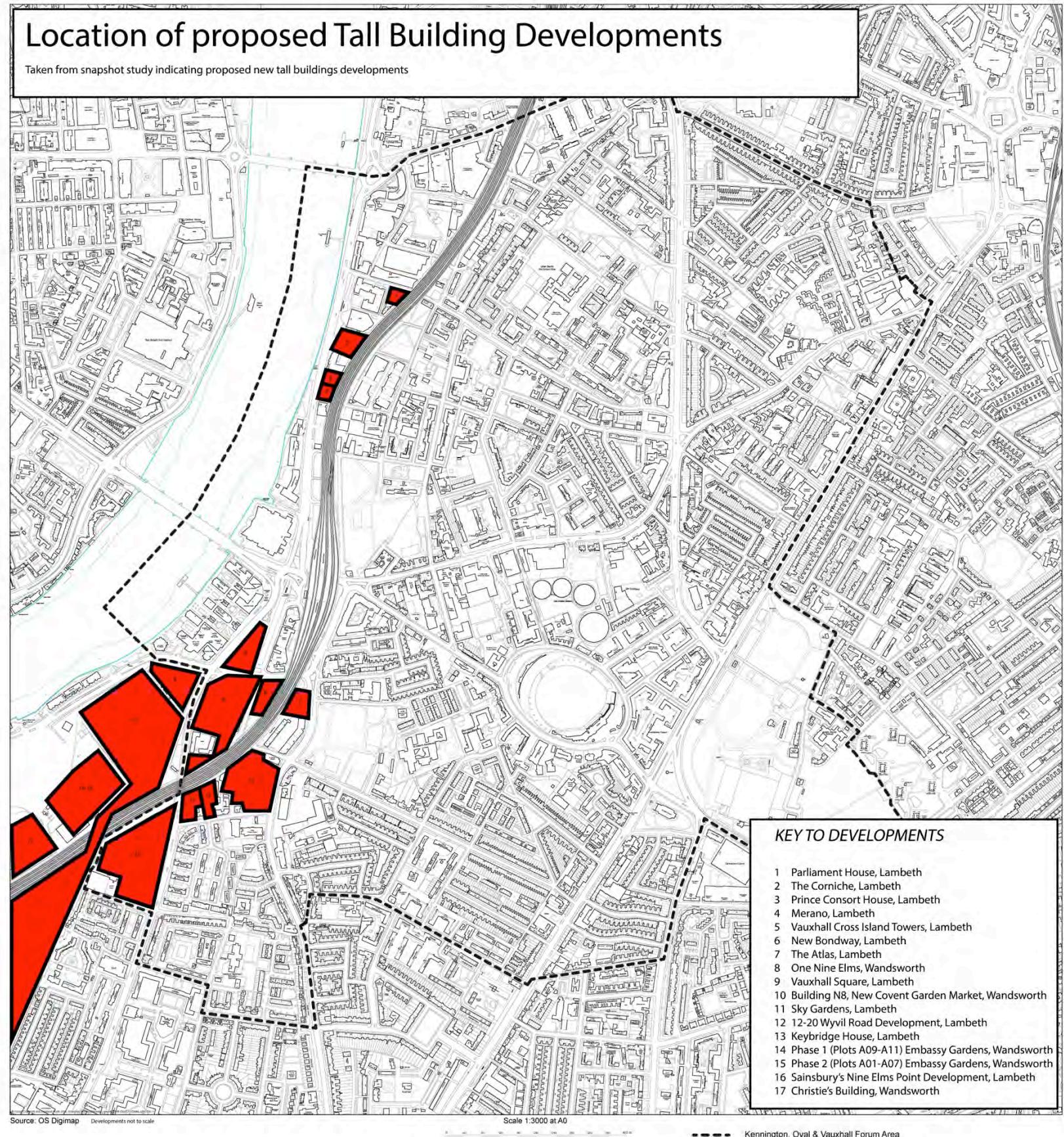
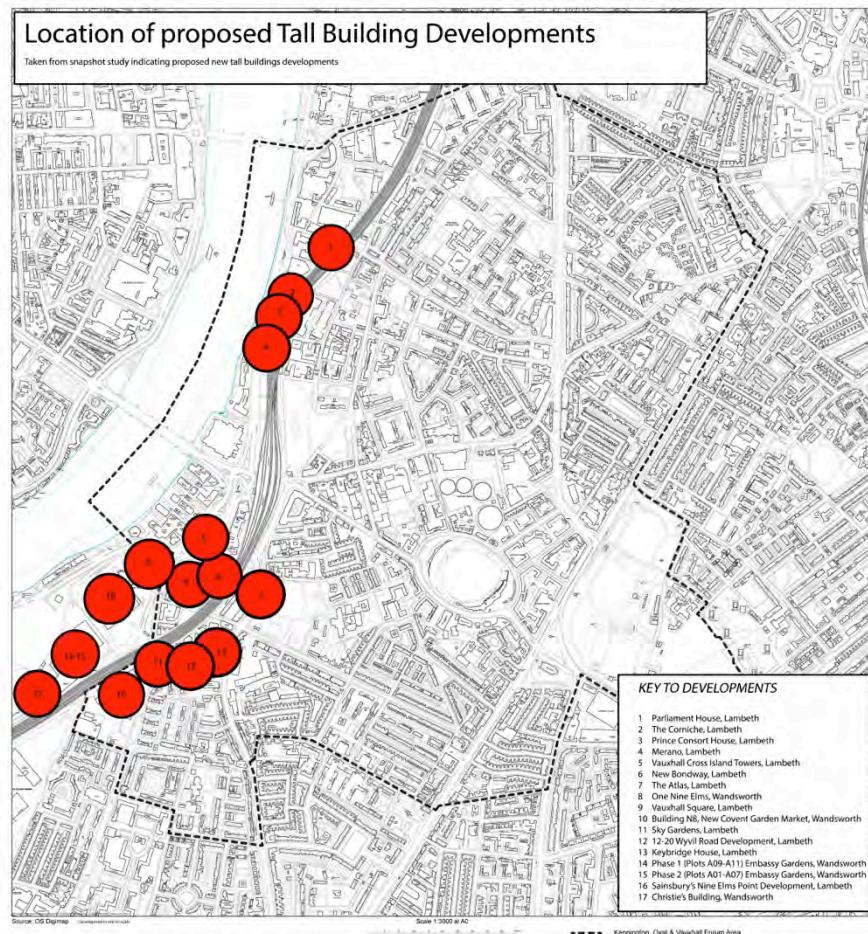
***“4.46 Tall buildings are defined as over 25 metres adjacent to the River Thames and over 30 metres elsewhere in the borough.”
(Lambeth, 2011)***



2.1 Location of proposed Tall Buildings

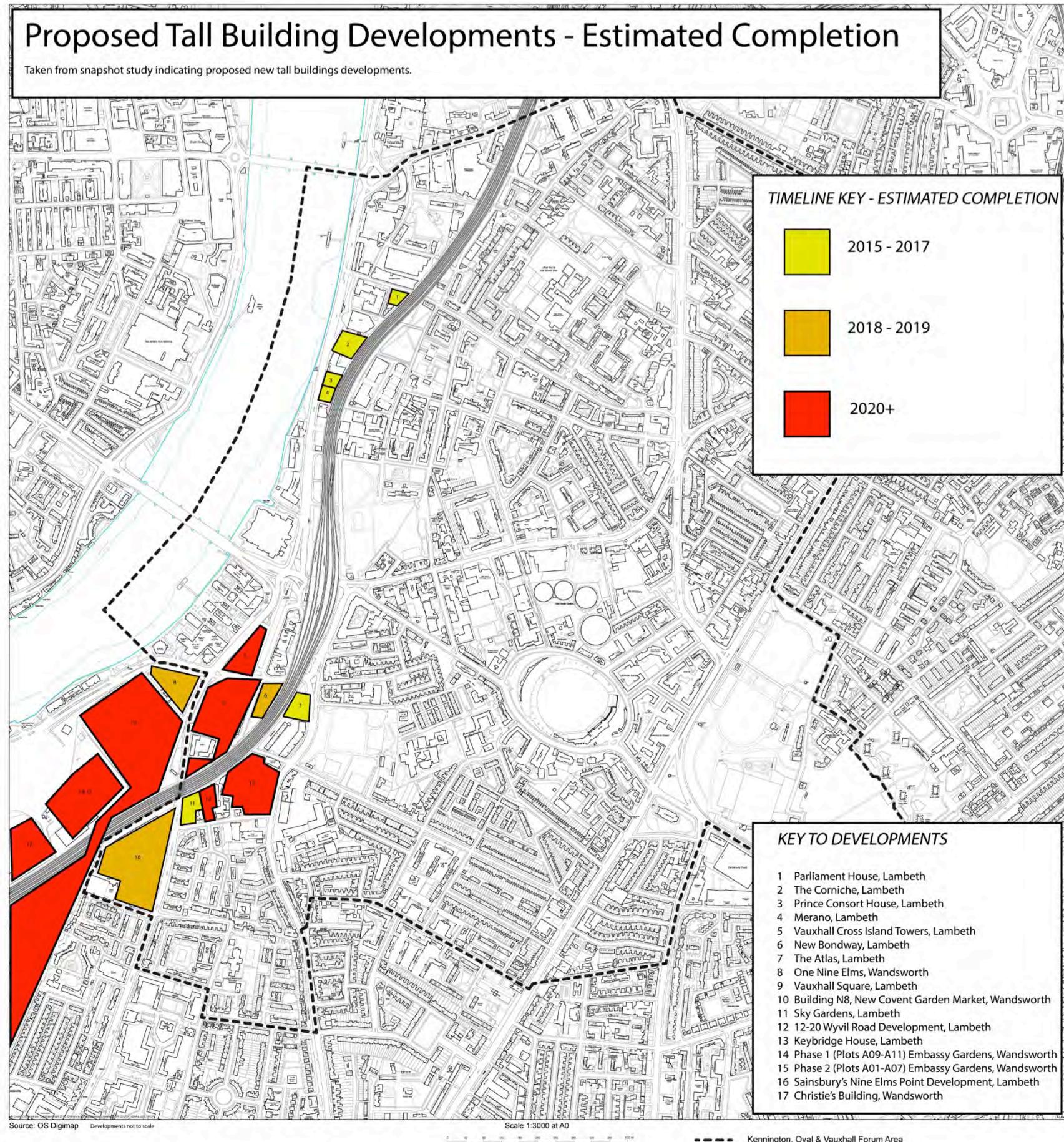
The first step in understanding the effect of tall buildings is to visually map them in the proposed environment.

The map opposite shows the location of the new proposed developments studied in this snapshot study.



2.2 Estimated Completion Date

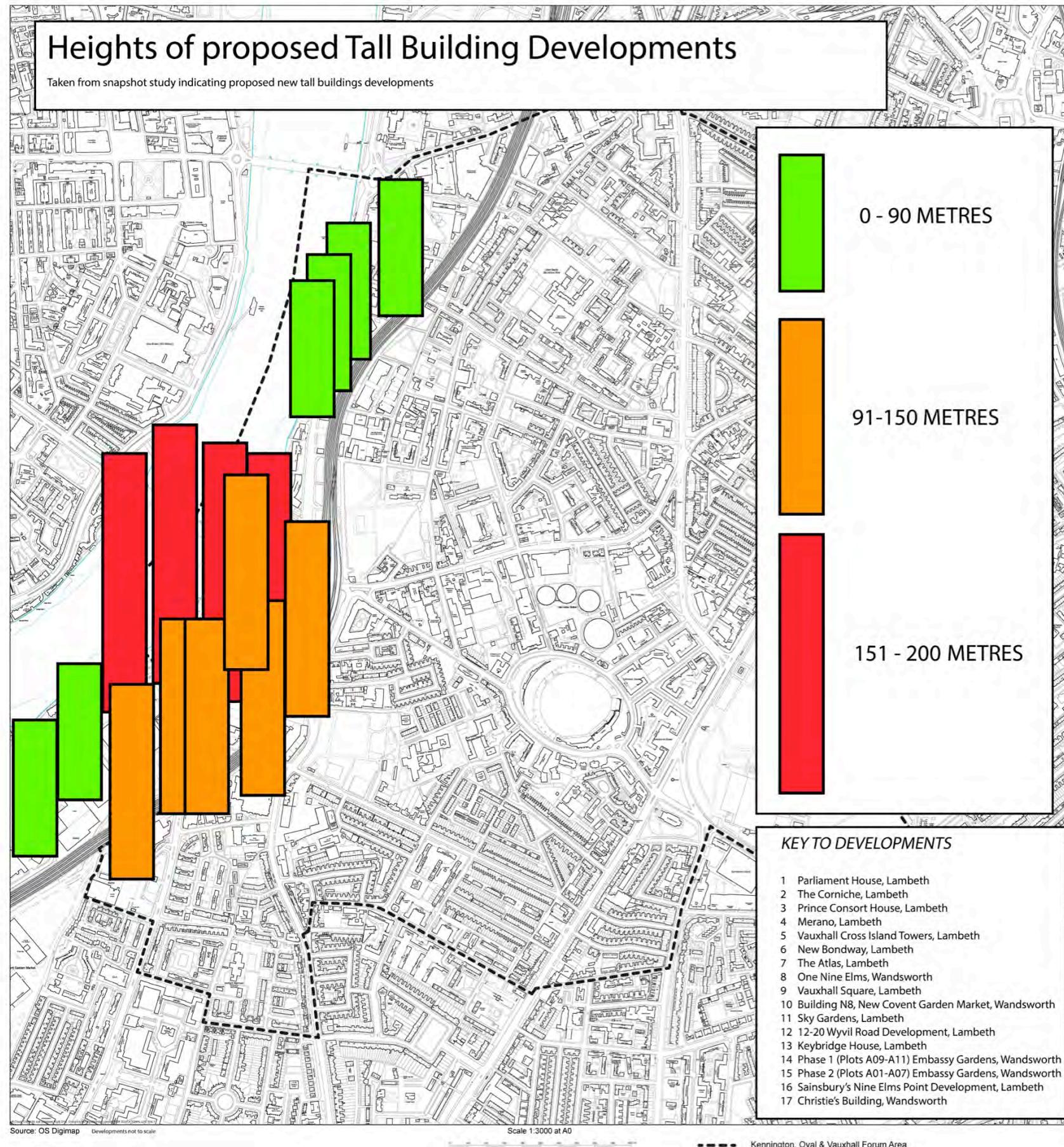
Many of the new tall developments are expected to be completed within 15-20 years.



2.3 Height Visualisations

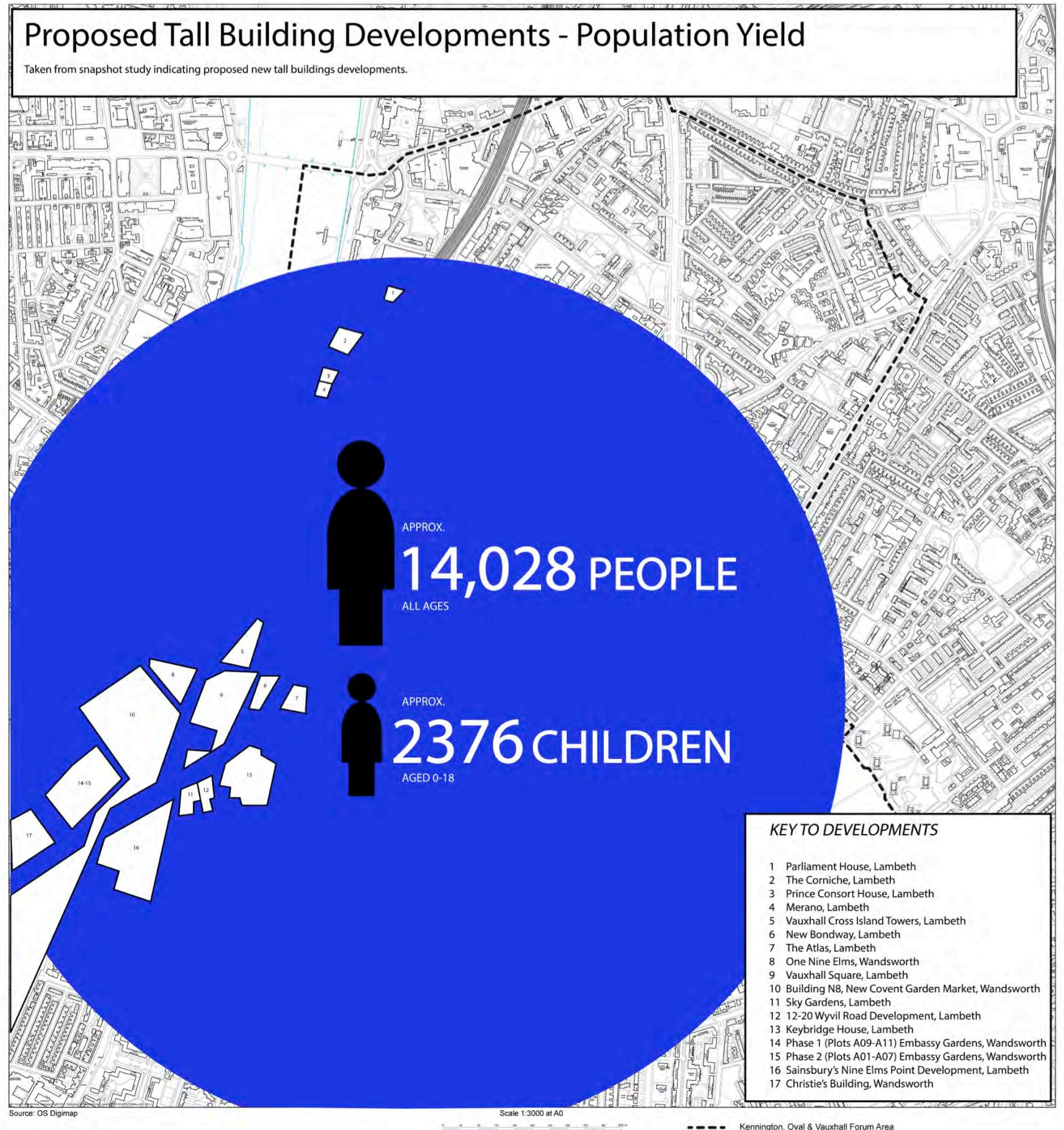
The Kennington, Oval and Vauxhall neighborhood forum identified the height of tall buildings as a major concern.

We have visually represented the approximate height of the proposed tall developments in the image opposite.



4. Residential Population Yield Projections

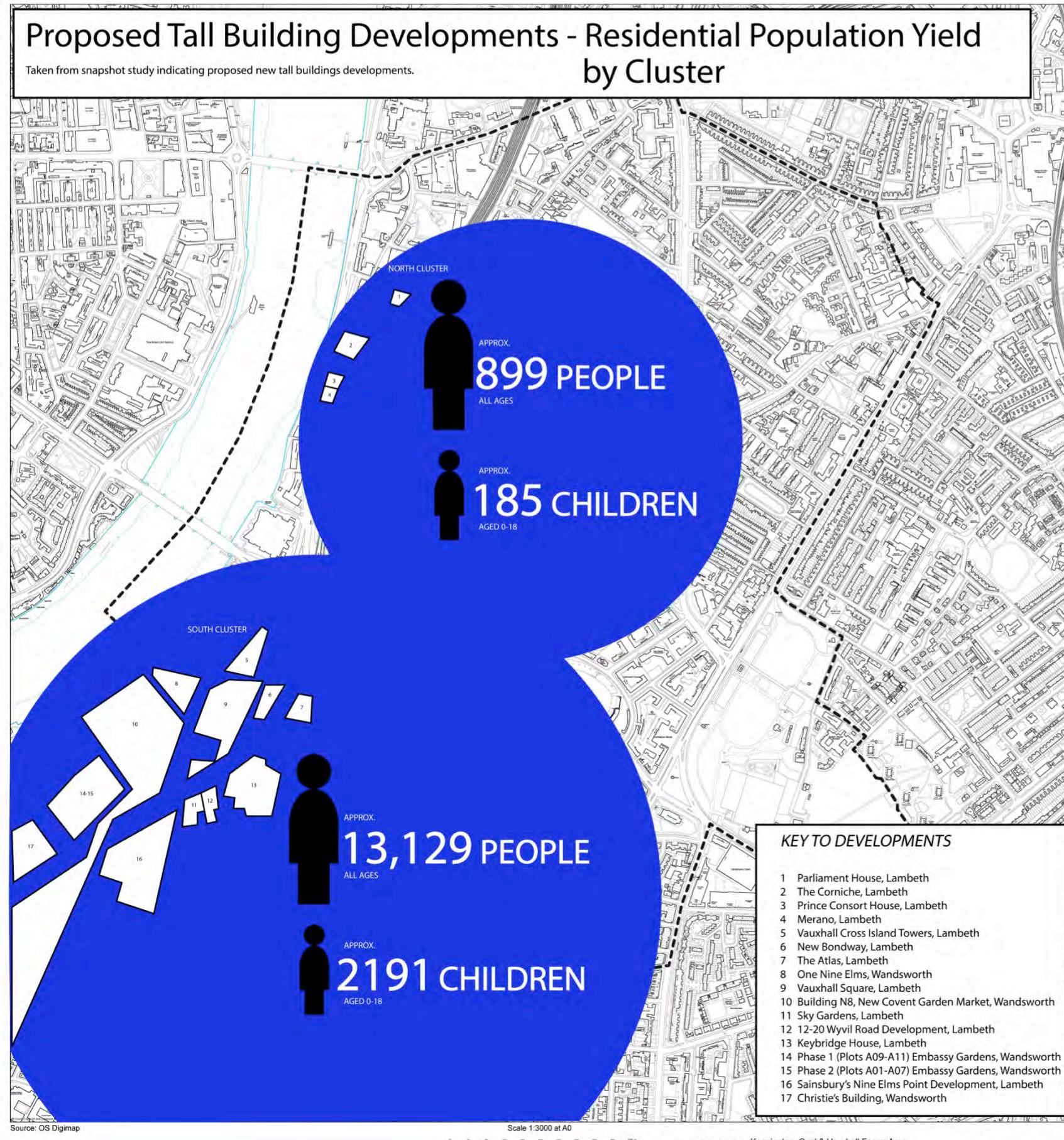
These figures show the mid estimate of the increased population generated by the proposed tall building developments across all tall building developments.



3.1 Population Yield Breakdown (1)

This map shows how there are two clusters of tall buildings emerging.

The projected population from these are likely to use different facilities in the north and south of the borough.

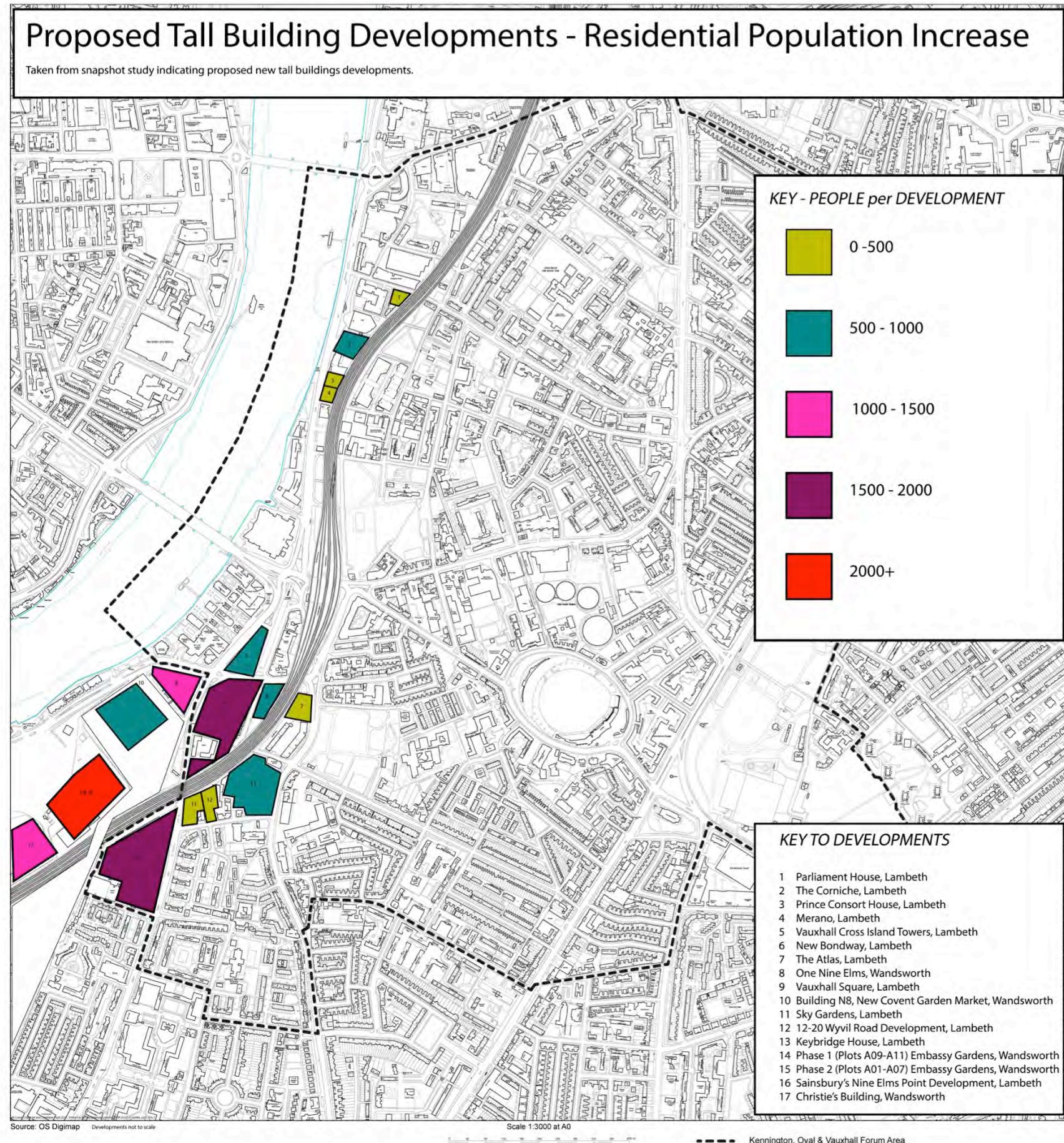


3.1 Population Yield Breakdown (2)

The next step is to look at the projected increase in residential population that the new developments will generate.

This has been estimated per development.

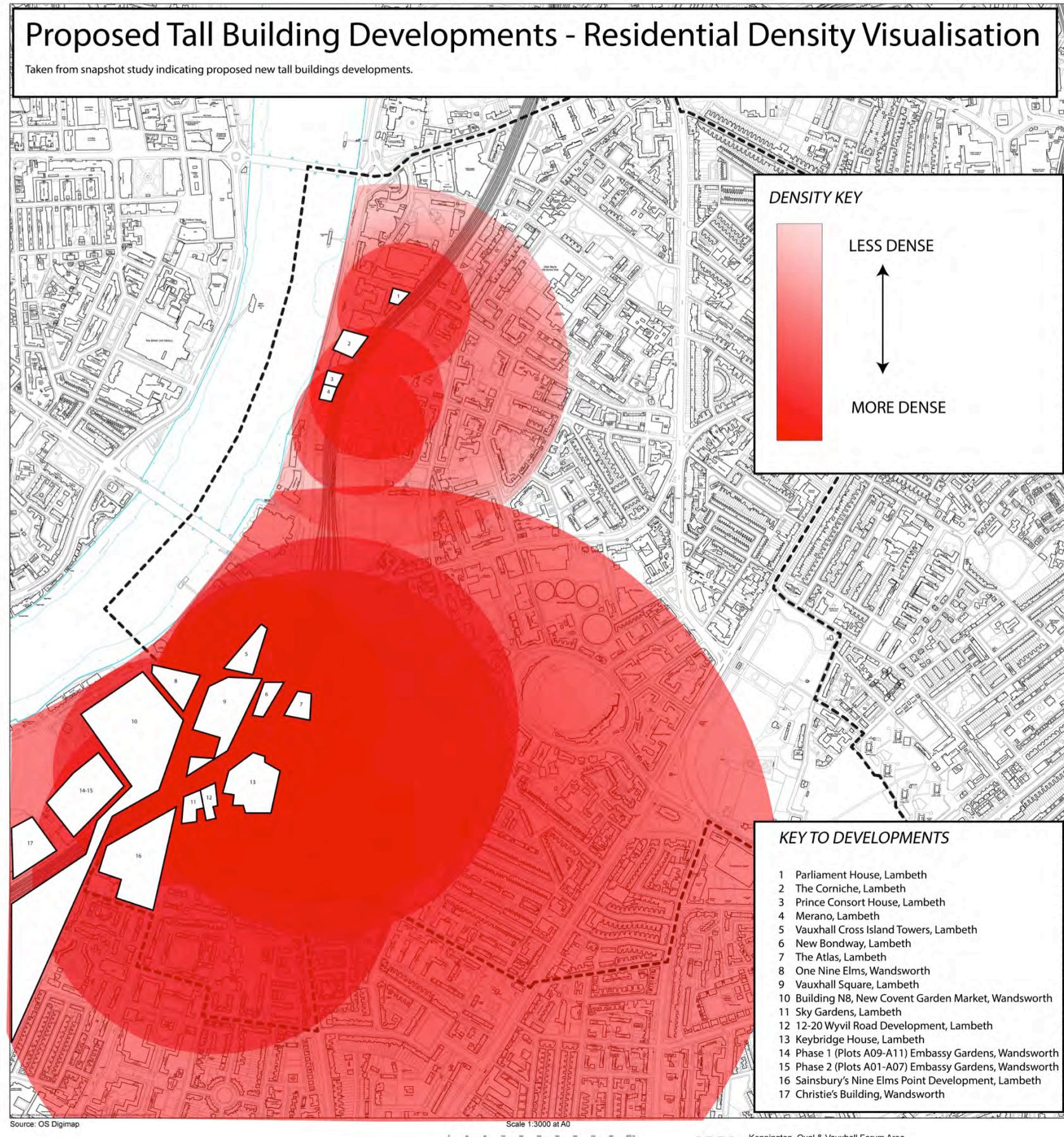
The more dense developments are located in the south of the study area.



3.2 Residential Density Visualisation

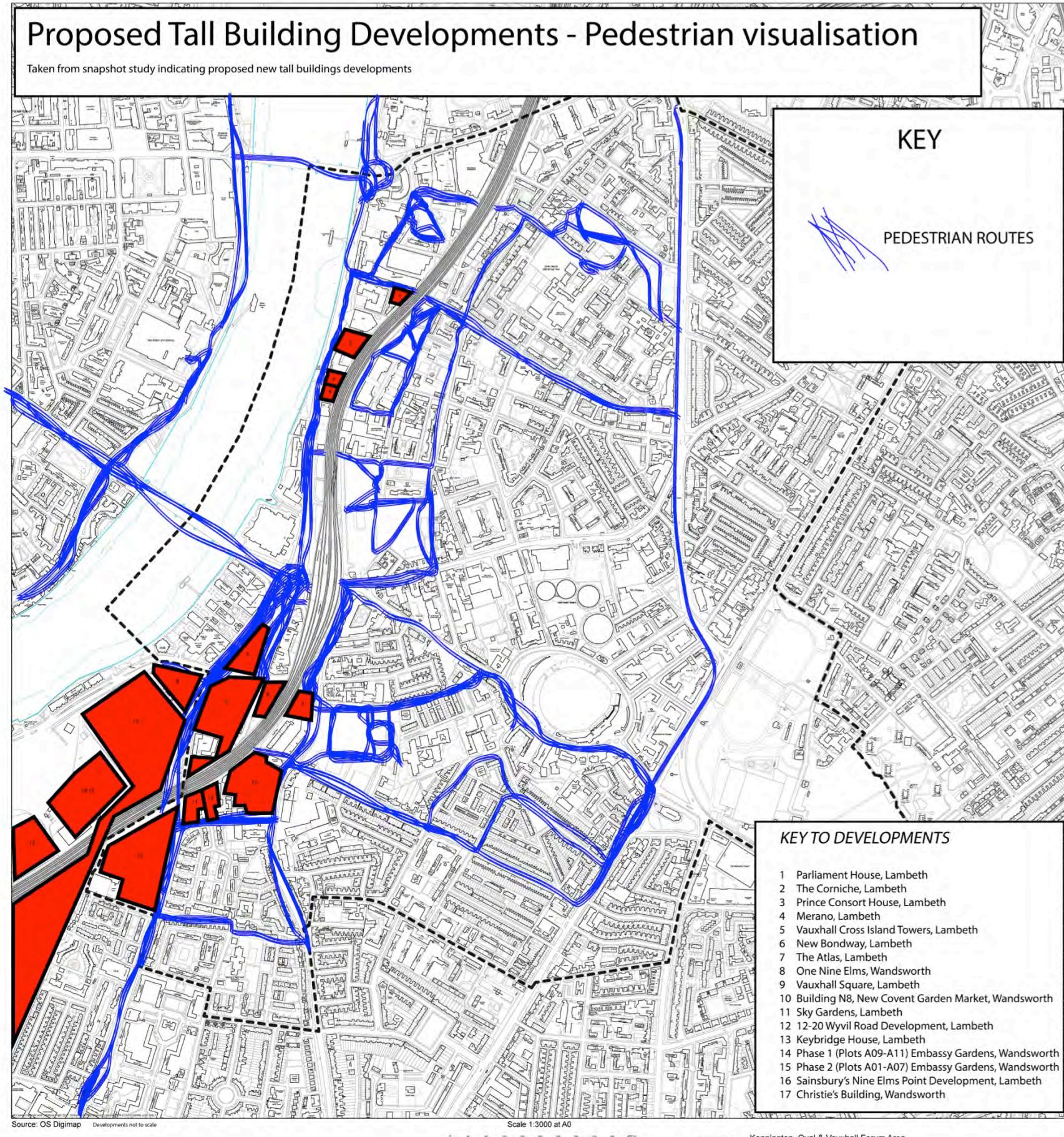
The figures generated from the study have been used to visually represent the increased density in the area.

The density is likely to increase mainly in the north, south and south east of the study area..



3.3 Pedestrian Routes Visualisation

This map shows the routes likely to see an increase in pedestrian flow.



4. Employment Projections

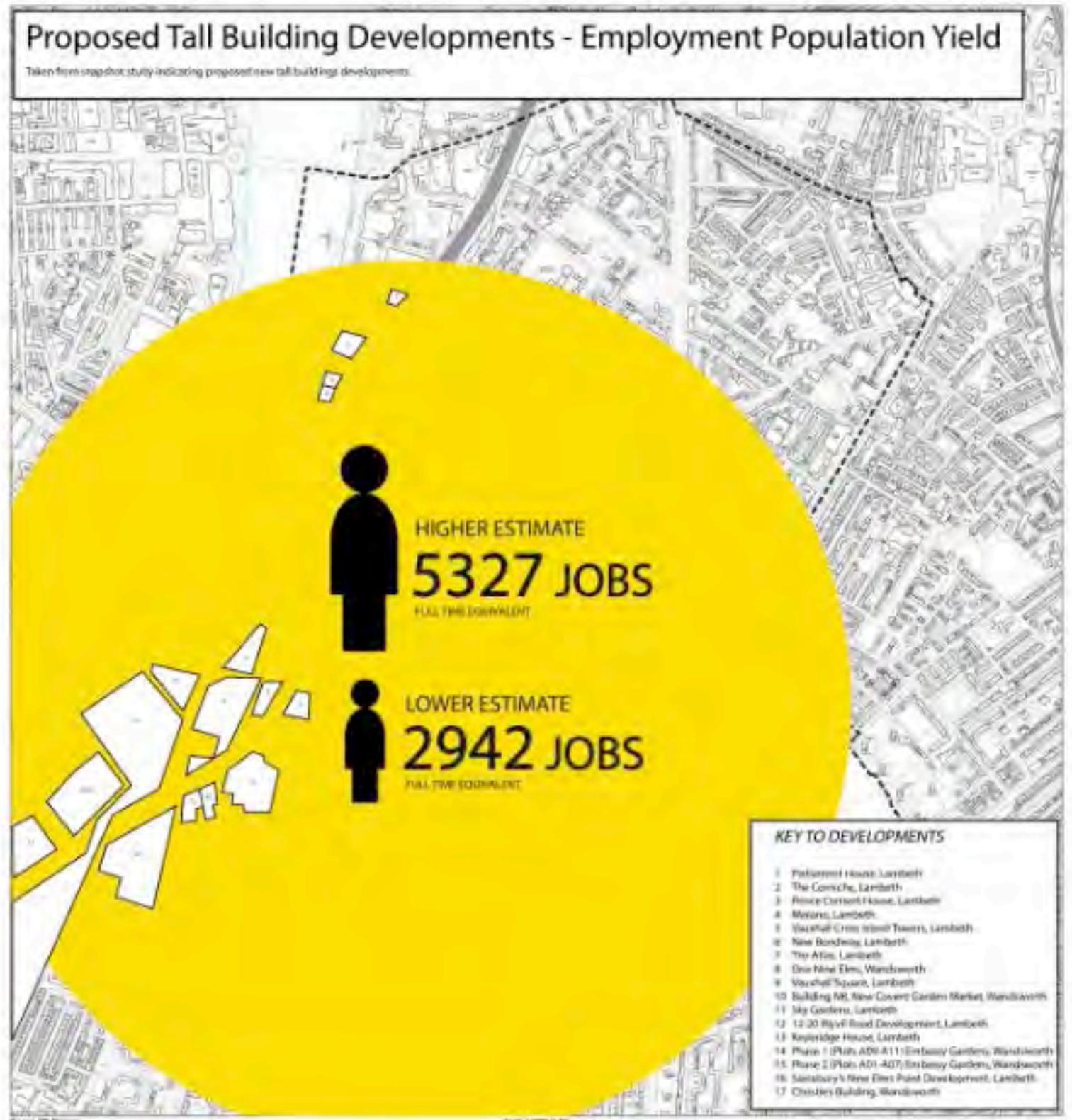
Employment Projections

The proposed tall buildings with the NF are anticipated to provide a number of jobs at different skill levels. The expected employment generated by the tall buildings development has been identified.

Methodology

- Assess the planning statements for each proposed building and identify the square meter (sqm) area designated for each use class within the building.
- Using the standards given in the OFFPAT Employment Density Guide (2010) identify the area of each use class required to support one full time employee (FTE).
- Calculate the associated employment projection for each use class by dividing the total area of each use class by its associated figure for supporting one FTE. Give both the upper and lower figure.
- Sum the projections for each use class to provide the potential total projected employment from the proposed building.
- Sum the totals from each proposed development to calculate the total anticipated jobs created by the proposed tall building cluster.

Total number of jobs generated by the proposed tall buildings.



4. Employment Projections

Table showing the expected employment projections form the proposed tall buildings.

Building	Class	Size (sqm)	1 FTE/ sqm (Lower)	1 FTE/ sqm (Upper)	Jobs (Upper)	Jobs (Lower)	Total Jobs (Upper)	Total Jobs (Lower)
Wyvil Rd	A1/A2/A3	1270	10	90	127	14		
	B1	1267	8	47	158	27	285	41
Atlas	D2	1831	30	120	61	15	61	15
Hampton House	A1/A2/A3/A4/A5	470	30	120	16	4		
	C1		NA	NA	134	84	150	88
Keybridge House	B1	2652	8	47	332	56		
	A1/A2/A3/A4/A5	802	30	120	27	7		
	D1	8600	36	36	239	239	597	302
Eastbury House	B1	840	8	47	105	18		
	A1/A3	100	10	90	10	1	115	19
New Bondway	A1/A2/A3/A4	1043	10	90	104	12		
	B1	6023	8	47	753	128	857	140
One Nine Elms	A1/A2/A3	333	10	90	33	4		
	C1	22783	NA	NA	370	370	403	374
Parliament House	A1/A2/A3/A4/A5	1770	10	90	177	20	177	20
Prince Consort	A3	380	10	30	38	13		
	D1/B1	715	8	47	89	15	127	28
Sainsbury's Nine Elms	A1	13059	17	17	768	768		
	A1	1707	17	90	100	19		
	D1	298	36	36	8	8		
	A1/A2/A3/A4/D1	787	10	90	79	9		
	B1	1860	8	47	233	40		
	Sui Generis	779	40	100	19	8		
	A1/A2/A3/A4/D1	1736	10	90	174	19	1381	871

4. Employment Projections

Building	Class	Size (sqm)	1 FTE/ sqm (Lower)	1 FTE/ sqm (Upper)	Jobs (Upper)	Jobs (Lower)	Total Jobs (Upper)	Total Jobs (Lower)
Sky Gardens	B1	4722	8	47	590	100		
	A1/A2/A3/A4/D1	257	10	90	26	3	616	103
Sleaford Crest	A1/A2/A3/B1	336	8	90	42	4		
	D1	214	36	36	6	6	48	10
Vauxhall Cross	C1	9941	NA	NA	143	90		
	B1	2420	8	47	303	51		
	A1/A2/A3/A4/A5	730	10	90	73	8		
	D1/D2	1546	30	120	52	13	570	162
Vauxhall Square	B1	22732	8	47	2842	484		
	A1/A2/A3/A4/A5	3119	10	90	312	35		
	C1	13624	NA	NA	321	201		
	Sui Generis	1928	40	100	48	19		
	D2	3777	90	120	42	32		
	D2	1377	30	100	46	14	3611	785

Source: Authors own

5. Social Infrastructure

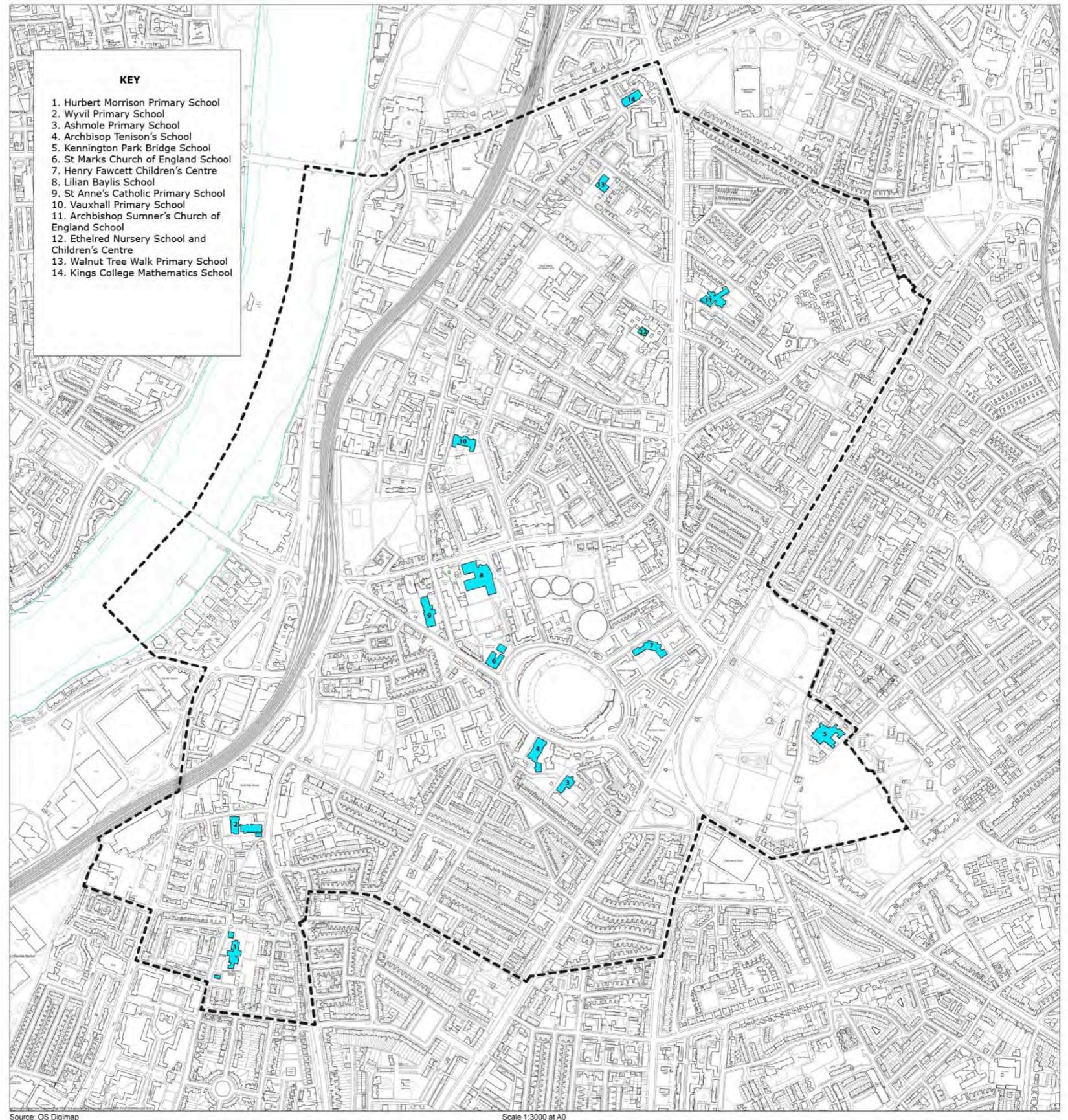
5.1 Schools

5.1.1 Existing Schools

Lambeth's Local Plan (January 2011: pp.24) Section D para 2.77 identifies that public transport, school places, health and social care services and open space accessibility are all currently under strain in the borough. In order to accommodate the population growth from the approved and suggested new tall buildings, these essential services will need further investment and development.

In order to investigate this fully we have undertaken a survey of the schools in the KOVF area.

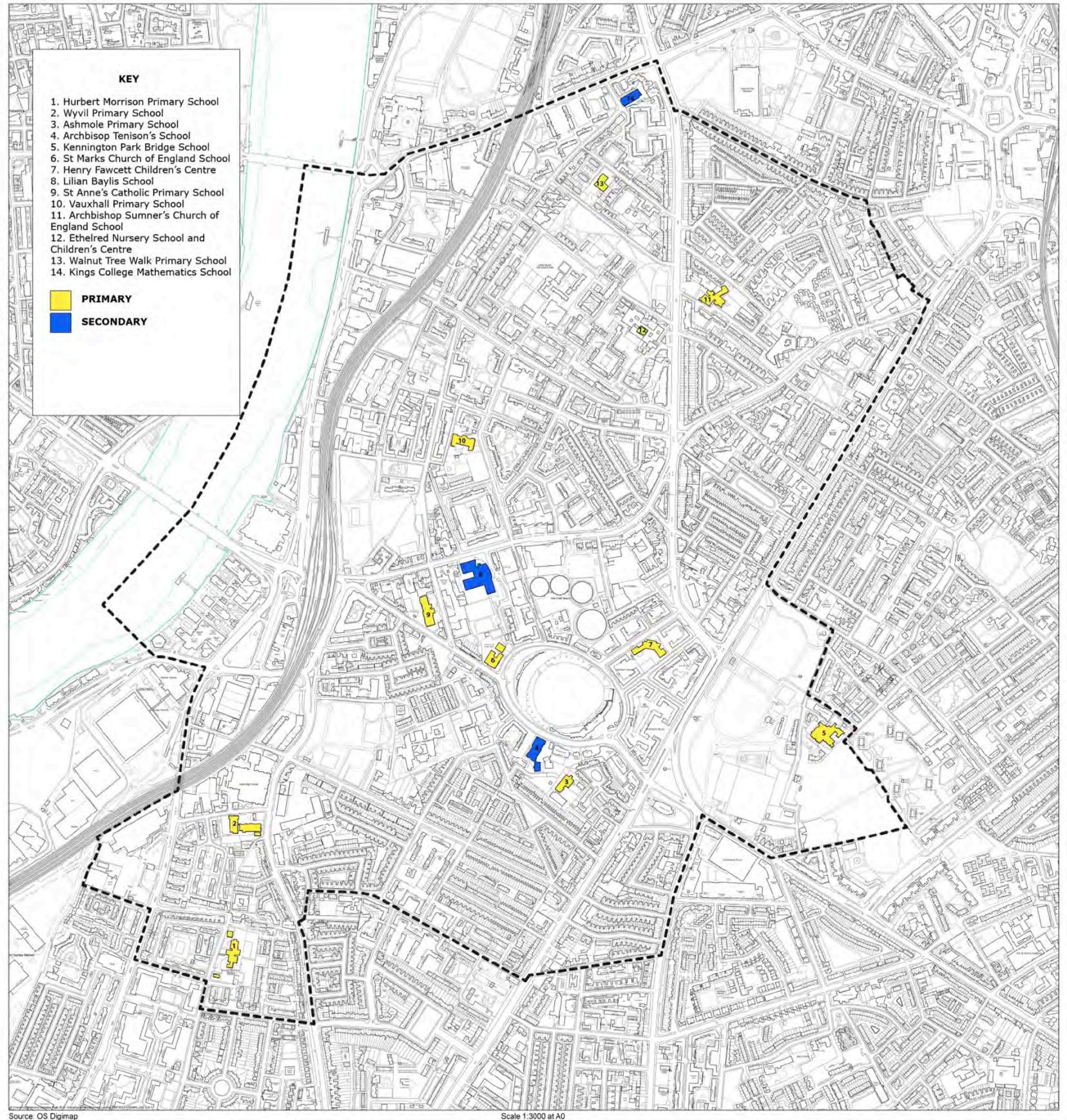
At present, 14 schools serve the neighbourhood area.



5. Social Infrastructure

5.1.2 Primary/Secondary split

Of the 14 schools which serve the surrounding area, three are secondary schools and eleven are primary schools



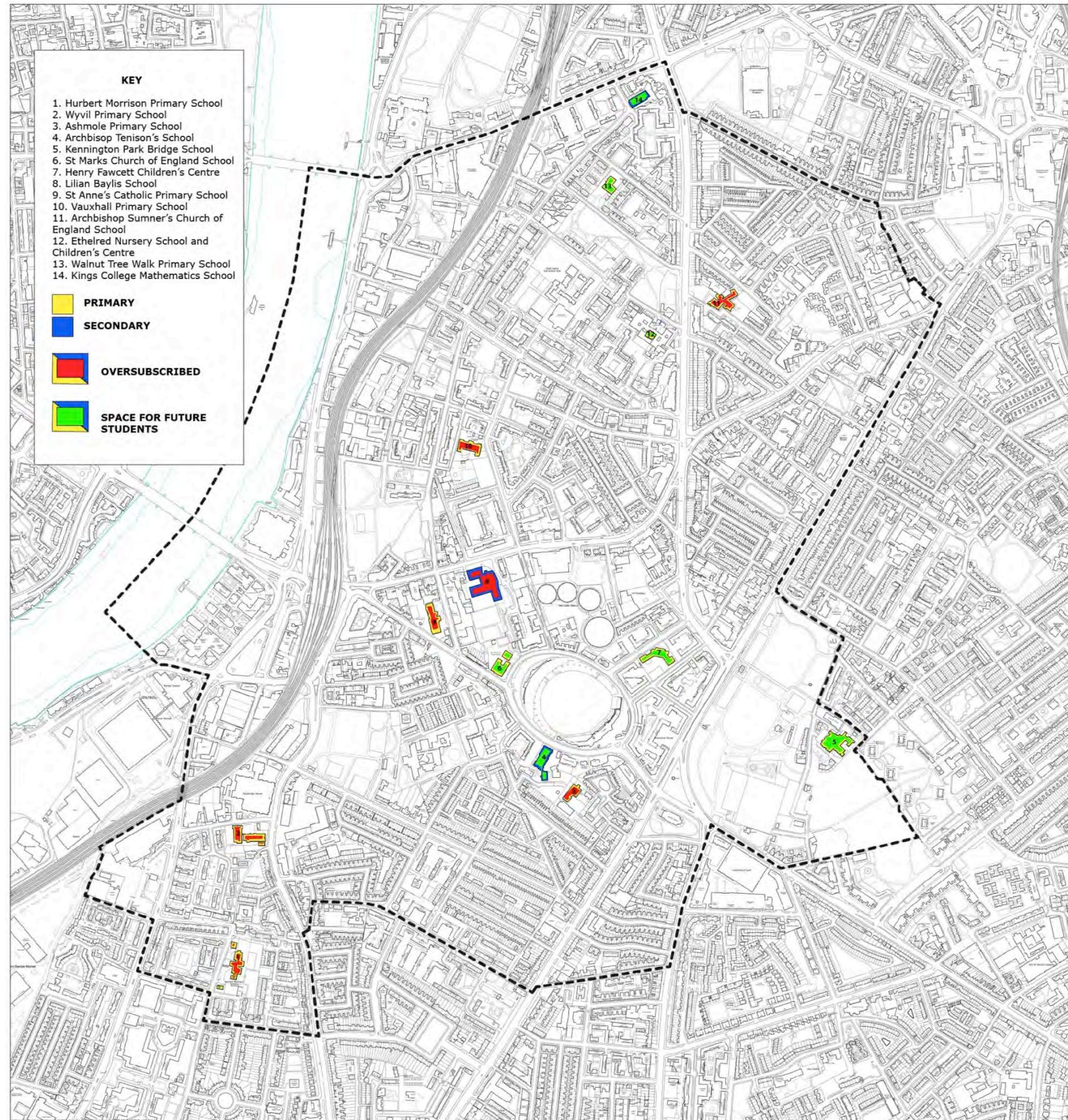
5. Social Infrastructure

5.1.3 School Capacity

50% of the schools in the KOV area are oversubscribed .

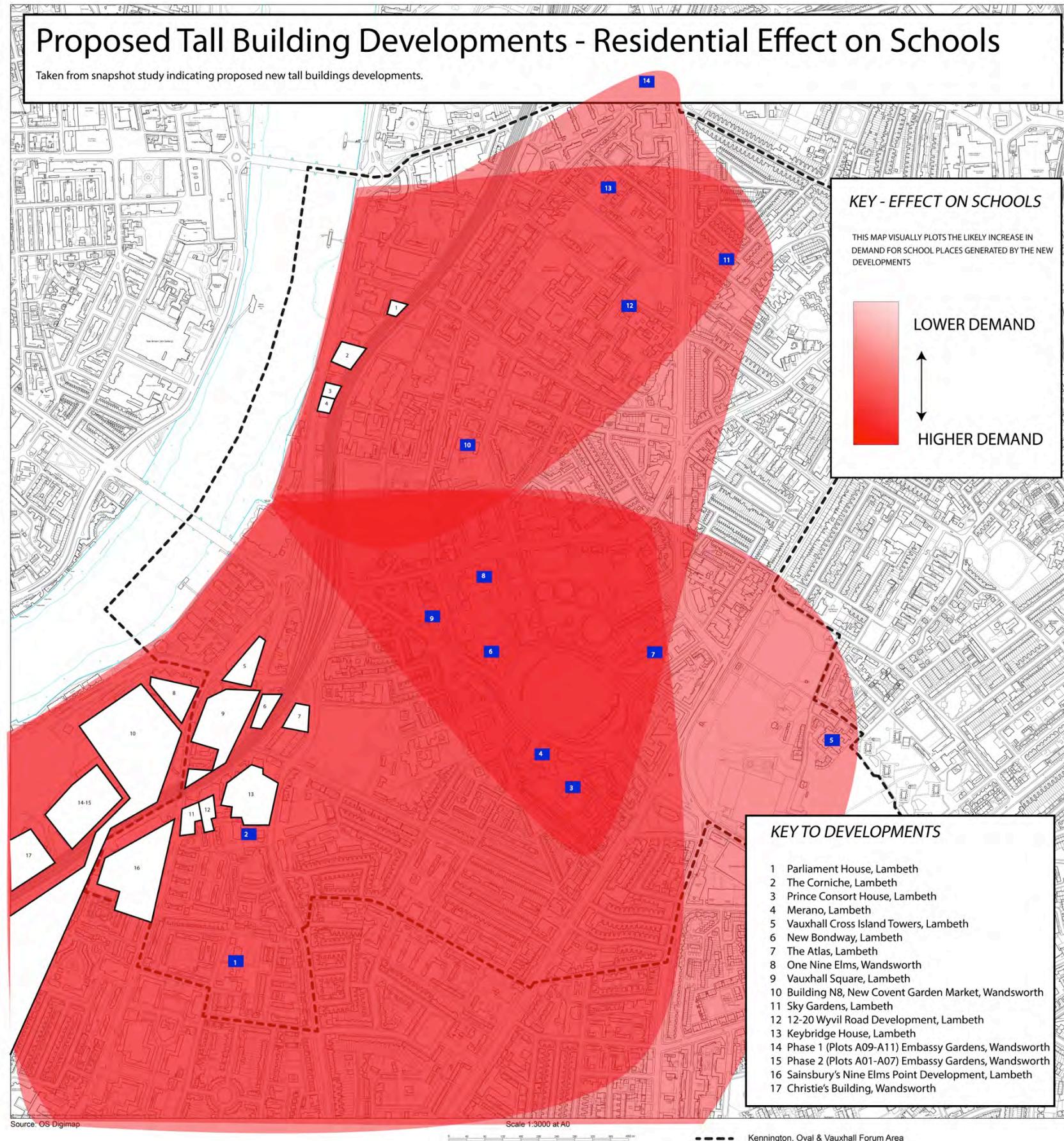
6 of the 11 primary schools are currently oversubscribed, and one of the secondary schools is oversubscribed.

The remainder of schools do have capacity for future students. Please see appendix for further data.



5.1.4 Effect of Tall Buildings on Schools

This map shows the schools likely to be affected by the increased child yield of the tall buildings

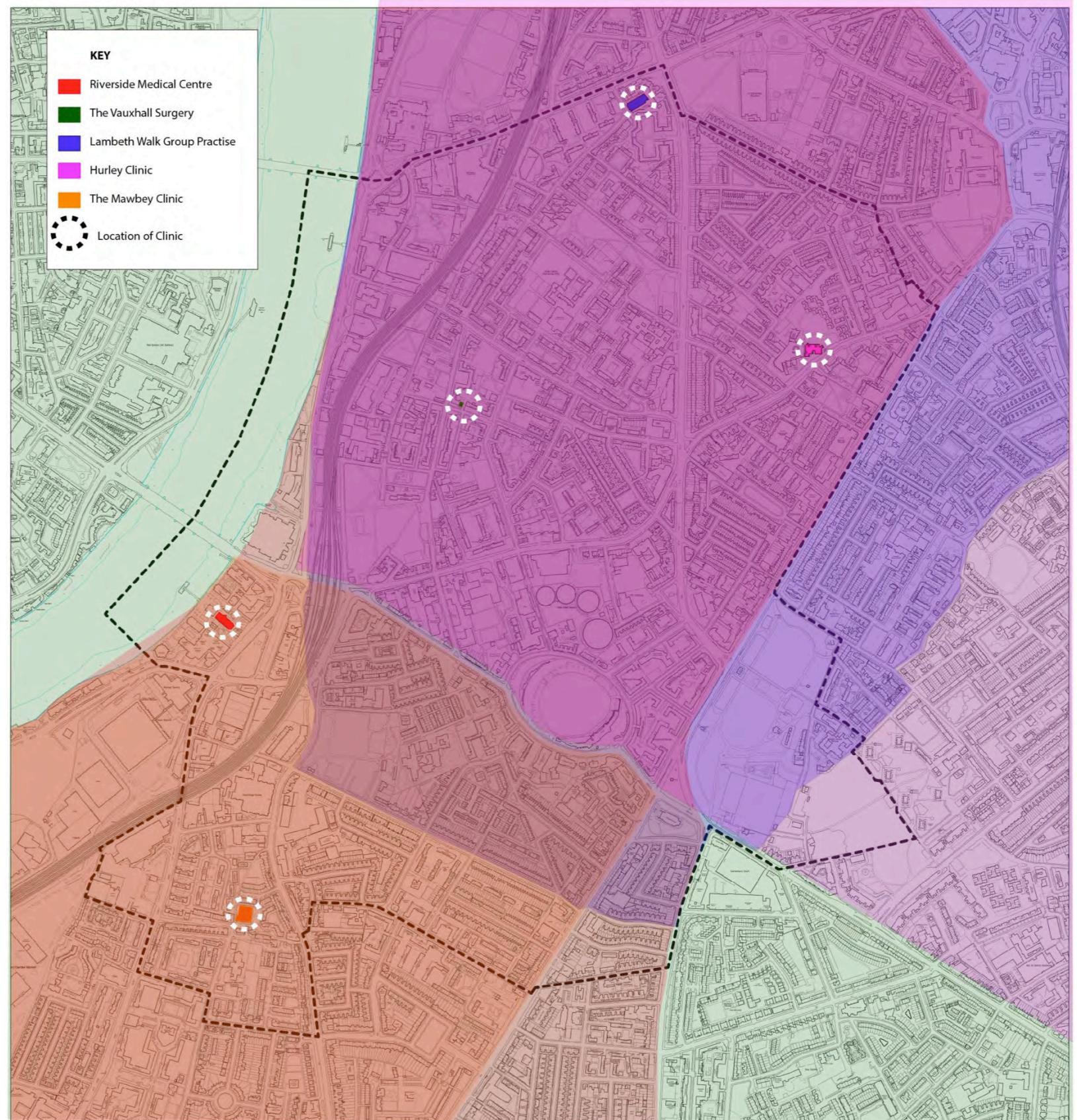


5.2 GP Surgeries

5.2.1 Existing GPs and catchment areas

GP capacity- At present five GP surgeries serve the KOV area. The catchment areas of these five GP surgeries combined mean that all parts of the KOV area have access to a GP.

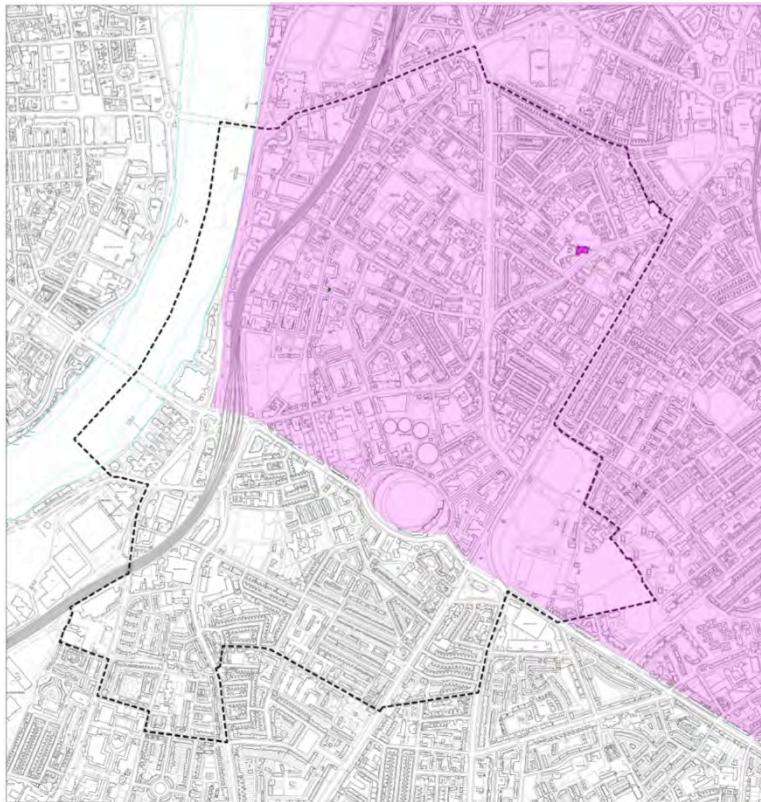
GP surgery	Address
Riverside Medical Centre	Hobart House, St George Wharf, London SW8 2JB
The Vauxhall Surgery	8 Johnathan Street SE11 5NH
Lambeth Walk Group Practice	5 Lambeth Walk, London SE11 6SP
Hurley Clinic	Ebenezer House, Kennington Lane, London SE11 4HJ
The Mawbey Clinic	39 Wilcox Close, London SW8 2UD



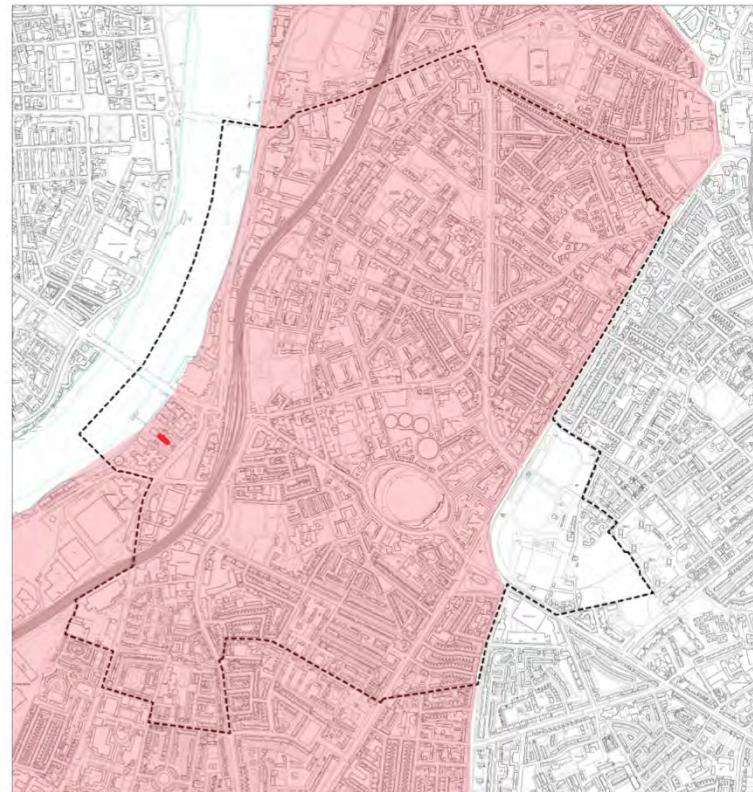
5.2.1 Existing GP Catchment Areas

These maps show the catchment areas for the five GP surgeries located within the KOVF area. All parts of the KOVF area is covered by at least one GP surgery.

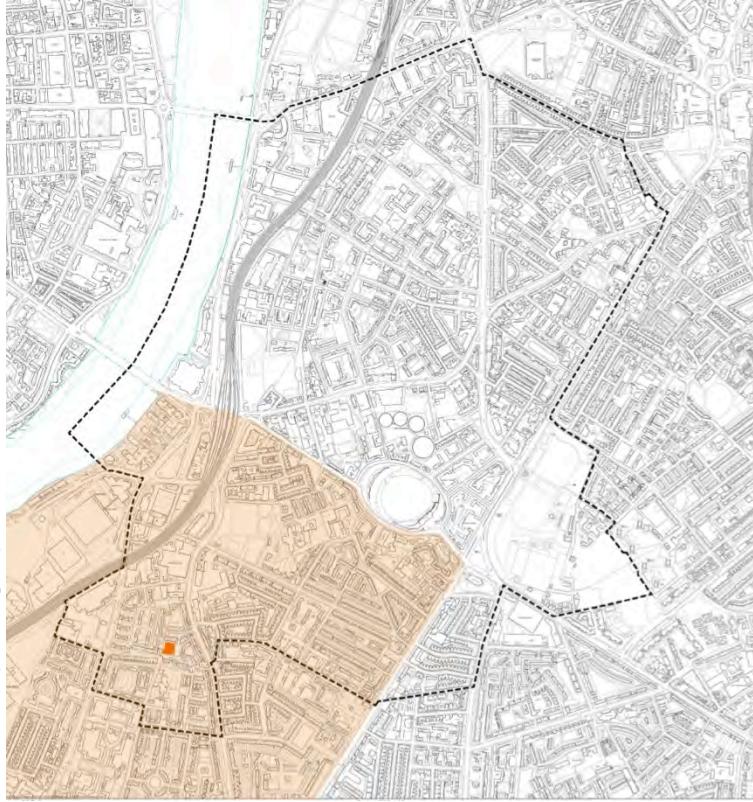
Hurley Clinic Catchment area



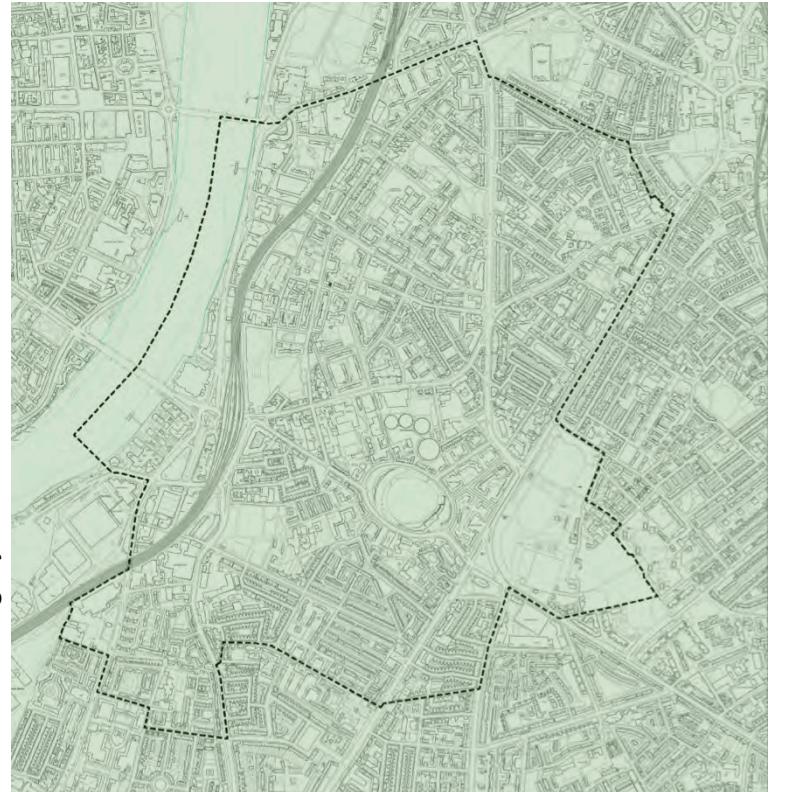
Riverside medical centre



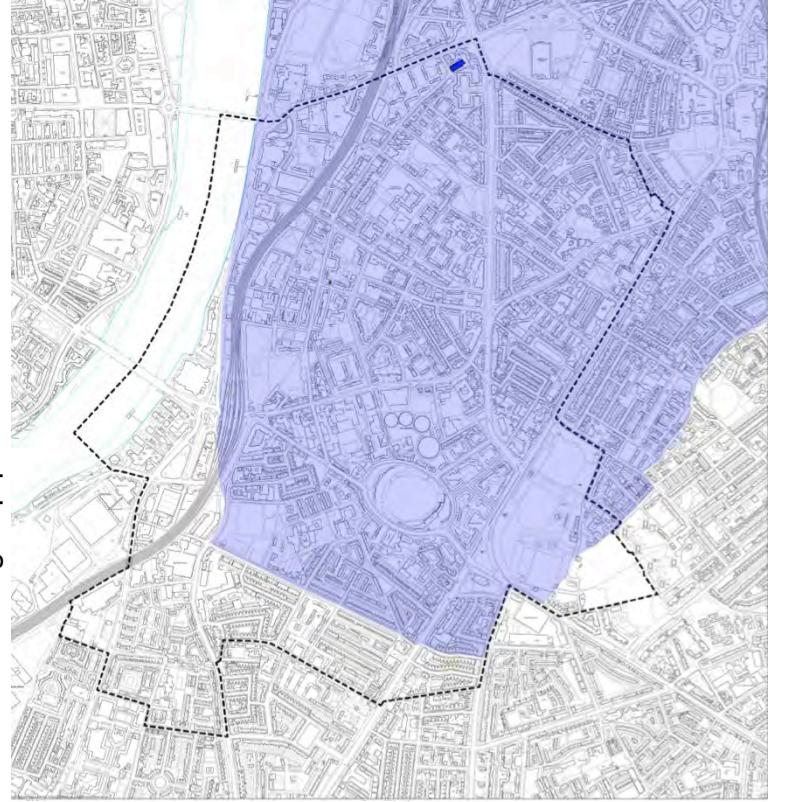
Mawbey Surgery Catchment area



Vauxhall surgery catchment area



Lambeth Walk group practice catchment area



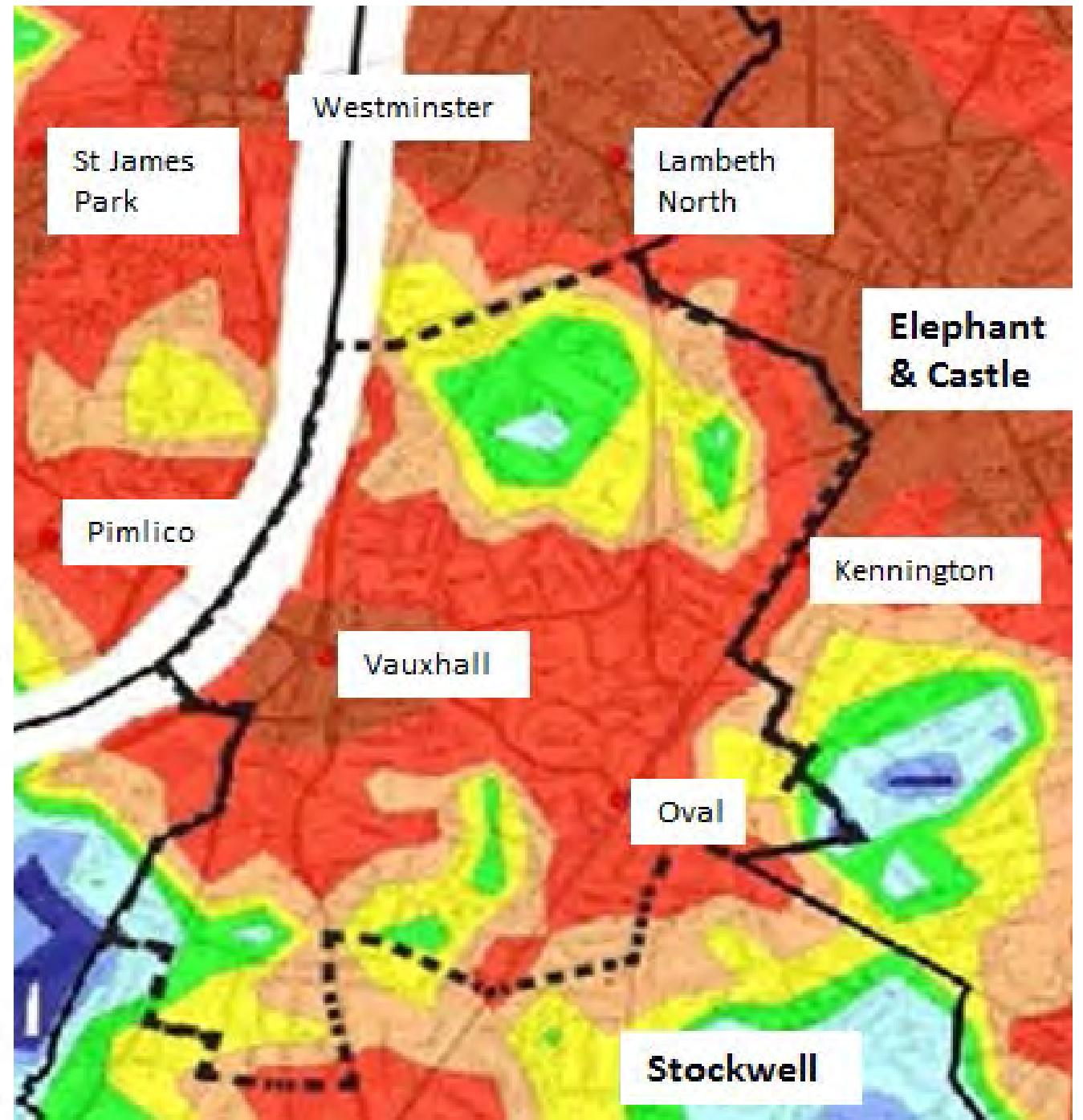
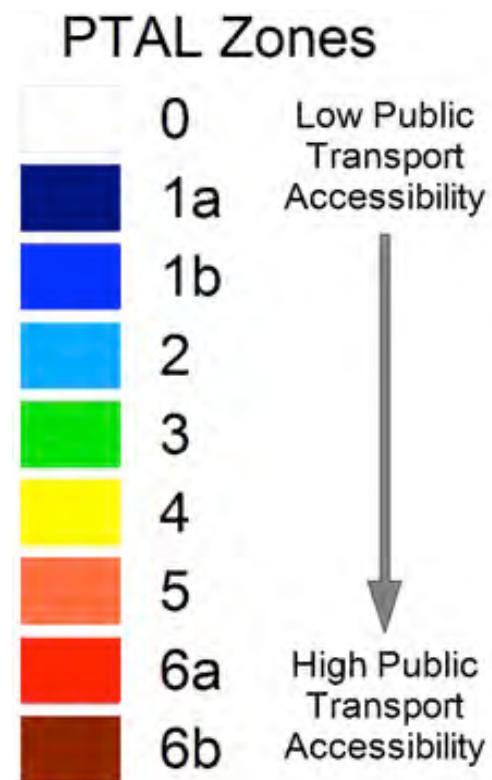
5.3 Transport Infrastructure

5.3.1 Existing Transport Provision - PTAL

The existing transport provision and the Public Transport Accessibility Rating (PTAL) for within the neighbourhood forum area has been identified.

The majority of the KOVF area exhibits excellent and exceptional access to public transport with a PTAL rating of 5, 6a and 6b across much of the site. Some areas towards its southern boundary as well as an area towards the north of the site are identified as having a relatively lower access to public transport. However, their PTAL ratings, concentrated around 3 and 4, are not a cause for concern. Furthermore, the bulk of new development is located in areas with the highest PTAL scores (the gas holder site has a rating of 6a and the Vauxhall tall buildings cluster 6a and 6b).

LB Lambeth
Public Transport
Accessibility Levels
PTALs- 2012



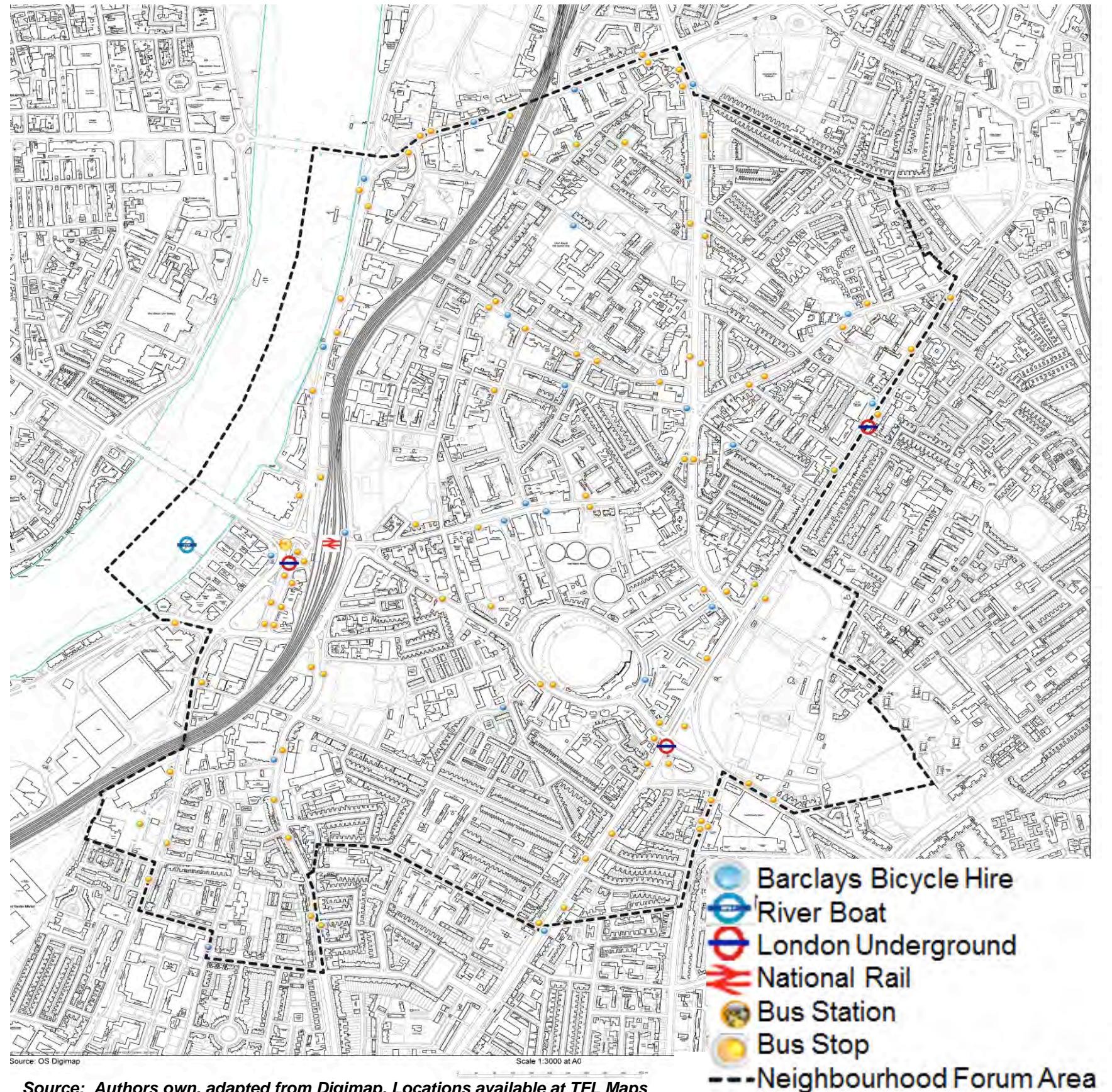
Source: Adapted from TFL 2014

5.3.2 Location of Existing Provision

The baseline accessibility to public transport has been identified and the location of the existing provision of National rail stations, tube station, River boat docks, bus stations, bus stops, and Barclays Cycle Hire Stations with in the NF area have been mapped.

There is extensive provision of public transport covering the area with a National Rail terminal, three tube stations and a river boat dock at Vauxhall. The areas identified as having the lowest PTAL rating are located in the areas furthest away from rail and tube stations but they are still serviced by several bus routes and have good accessibility to Barclays Cycle hire stations.

The distribution of transport provision across the KOVF area is relatively even which is reflected by its overall excellent PTAL score. The two areas in the far north and far south are areas which could benefit from improved transport infrastructure in the future.



Source: Authors own, adapted from Digimap. Locations available at TFL Maps

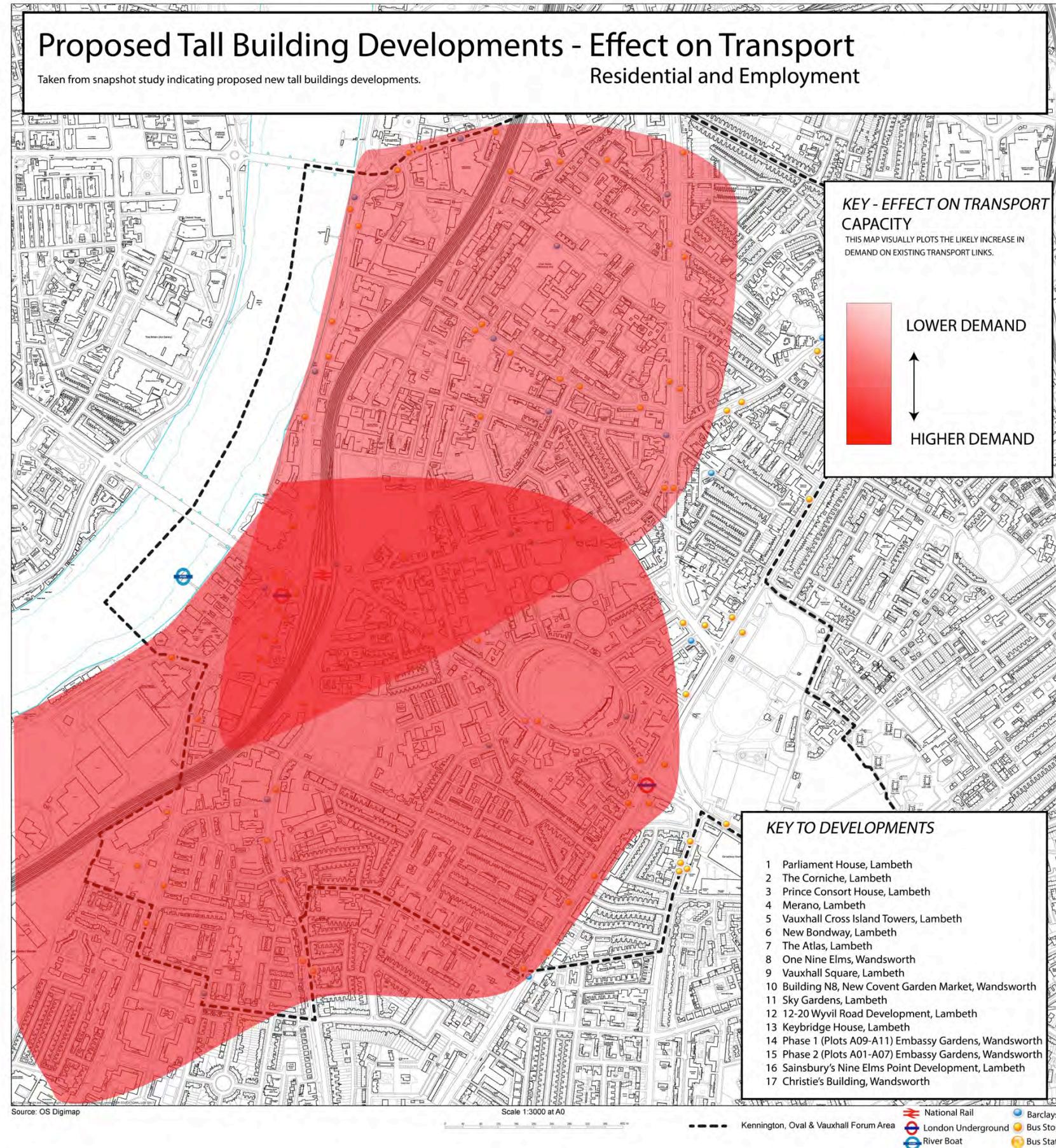
5.3.3 Planned Future Transport Provision

Project	Description	Who	Delivery	Funding
Bakerloo line Upgrade	To achieve a 38% increase in capacity	Transport for London - TfL Business Plan 2011/12 - 2014/15 Includes high capacity rolling stock and signalling works	2022	No funding is committed for the new stations and access improvements. Platform lengthening to 5 car trains at Clapham High Street and Wandsworth Road to be implemented by TfL. Lambeth Council are lobbying TfL for the new stations and improvements.
Northern Line upgrade part 1	To achieve a 20 per cent increase in capacity/reduce journey times by 18%.	Transport for London - TfL Business Plan 2011/12 - 2014/15	2014	
Northern Line upgrade part 2	To achieve a further 20 per cent increase in capacity.	Transport for London - TfL Business Plan 2011/12 - 2014/15	2020	TfL Business Plan
Northern Line extension to Nine Elms and Battersea	To enable and support development and growth within the Vauxhall Nine Elms Battersea Area	Transport for London - TfL Business Plan 2011/12 - 2014/15	2019	LBL contribution through Existing S 106/CIL
Vauxhall underground congestion relief and step free access to station	Required capacity increase to meet enhanced demand	TfL /LUL capital programme	2015/6	Transport for London - TfL Business Plan 2011/12 - 2014/15
Vauxhall over-ground station platform improvements	To increase the length of platforms 7 and 8 from eight to ten cars.	Network Rail – South West Mainline investment	2014	Network Rail – South West Mainline RUS 2006
Vauxhall gyratory and interchange improvements	To support the implementation of the strategy for the Vauxhall, Nine Elms, Battersea Opportunity Area	TfL & LBL	2015/6	TfL & LBL
Nine Elms & Vauxhall Strategic Links	Enhancement to improve pedestrian movement	Developers & highway authorities. LBL, TfL	2026	Developers & highway authorities. LBL, TfL
Cycle Docking Stations	To extend cycle hire scheme to Brixton and Loughborough Junction – and provide extra capacity in north Lambeth	TfL	2016	TfL developer financial contributions
Cycle Super Hub at Waterloo	To investigate and develop a cycle super -hub for the storage of bicycles and location for Cycle Docking Stations in the vicinity of Waterloo Station	Transport for London, LB Lambeth and Network Rail	N/A	TfL, Network Rail and developer contributions
Cycle route – Quietways	Development of high quality cycle routes across the borough.	TfL & LBL	2020	TfL Business Plan

Source- adapted from the Infrastructure Delivery Plan (2013) London Borough of Lambeth using the TfL Business Plan 2011/12 to 2014/15, TfL Investment Programme 2009/10-2017/18 and the Vauxhall Nine Elms Battersea Opportunity Area Planning Framework.

5.3.4 Effect of Tall Buildings on Transport

This map shows the areas likely to be affected by increased transport demand due to the increased residential and employment population of the new proposed developments.



6. Implications of the new developments

Population

The development of the tall buildings cluster has a number of implications for the NF area. Analysis has identified significant population growth from both the introduction of further residential units and employment space.

- The projected population growth from residential units is 14,028, of which 2,376 are children (mid estimate).
- The anticipated full time job creation from employment space is 5,327 at the higher estimate and 2,942 at the lower estimate.

Social infrastructure implications

Schools

- Lambeth aims to provide school places for 80% of the children residing in the borough.
- We would expect to see between 2376.8 (sub-regional estimation) and 1680.9 (Lambeth estimation) additional children from the proposed developments. This equates to the need for an additional 1901.5 to 1345 school places which will need to be found in accommodate the increased population.

GP Surgeries

- The catchment area of each GP surgery located within the NF area has been identified. All areas of the NF area are covered by at least one GP surgery.
- This part of the study hit a dead end, as no GP surgeries would give out any information regarding how many patients they have on their books, or the capacity they have for future patients.
- At present the NHS is in charge of securing healthcare provision for patients in Lambeth, and so further research would need to be conducted to provide a strong evidence base for this section of the report.

Transport infrastructure implications

- The increased growth in population and employment will be reflected by an increase in demand for public transport both for those who will live in the new developments and for those who it will employ.
- This study has highlighted the area already has an excellent PTAL rating throughout and the precise location of the cluster is ideally situated within the 6b zone (the highest possible PTAL zone).
- Analysis has shown a number of different public transport options are available within the NF area and also identifies two areas which have good, but relatively lower, PTAL ratings than the rest of the site. Future investment could be targeted here.
- The forthcoming transport infrastructure developments relevant to the NF have also been presented and the developments will increase accessibility to transport as well as its capacity. This investment and continued investment is vital to enable the area to cope with the increased pressure from these new developments.

7. Section 106 Case Study - Sky Gardens

Section 106 case study- Sky Gardens education contribution

We can directly compare Section 106 contributions with the expected child yield from a development in the case of Sky Gardens.

Sky Gardens was approved in 2009, so would not have been subject to CIL, and therefore the only contribution it made towards education in the area was the £375,114 through Section 106 (see table in appendix). The development was expected to contribute 52.6 children of primary school age and 28.8 children of secondary school age see table on population yield in appendix.

PRIMARY CALCULATION

Primary (children 0-9) = 42 (number of children schooled in Lambeth) x £14,831 (cost of primary school place per child) = £624,088.48

SECONDARY CALCULATION

Secondary (children 10-18) = 23.04 (number of children schooled in Lambeth) x £22,348 (cost of secondary school place per child) = £514,897.92

This gives a total cost to the borough of £1,138,986.40 for providing education to these children, as compared to the £375,114 that the developers actually contributed.

Therefore developers that have contributed to the educational system have not contributed anywhere near enough.

Sky Gardens by day



Sky Gardens by night



8. Community Infrastructure Levy and KOVF

1) CIL and neighbourhood planning

- In Lambeth, the percentage of CIL used to support neighbourhood projects is 25%. Lambeth Council ask that communities lead the identification of proposals and priorities for the allocation of CIL funds.
- There is therefore an opportunity for KOVF to be involved in this process, and shape the projects CIL contributes towards.
- As part of the neighbourhood planning process, KOVF will need to solicit community input on projects that may be important to local people and which may be suitable to receive CIL funding.

2) Proposed Methodology for CIL neighbourhood projects

St James Exeter

The St James Exeter neighbourhood plan collected a list of ideas for all projects suggested by the local community. The neighbourhood forum then asked local residents to rank each project in order of its importance to them. The results were then gathered and averaged, and each project was prioritised according to the results. Exeter St James neighbourhood plan is available to view here: <http://www.exeter.gov.uk/CHttpHandler.ashx?id=18581&p=0>

3) Recommendations for community uses of CIL

We would also recommend based on our research that KOVF push for investment in schools and community facilities.

Some CIL available to KOVF could be used for the purpose of strengthening social infrastructure in the area. KOV 3 have spent time investigating urban greening deficiencies, and based on our population projections we would recommend that some of the money gained through CIL would be spent combating some of the deficiencies identified.

9. The Oval Gas Holder Site

A Development Opportunity

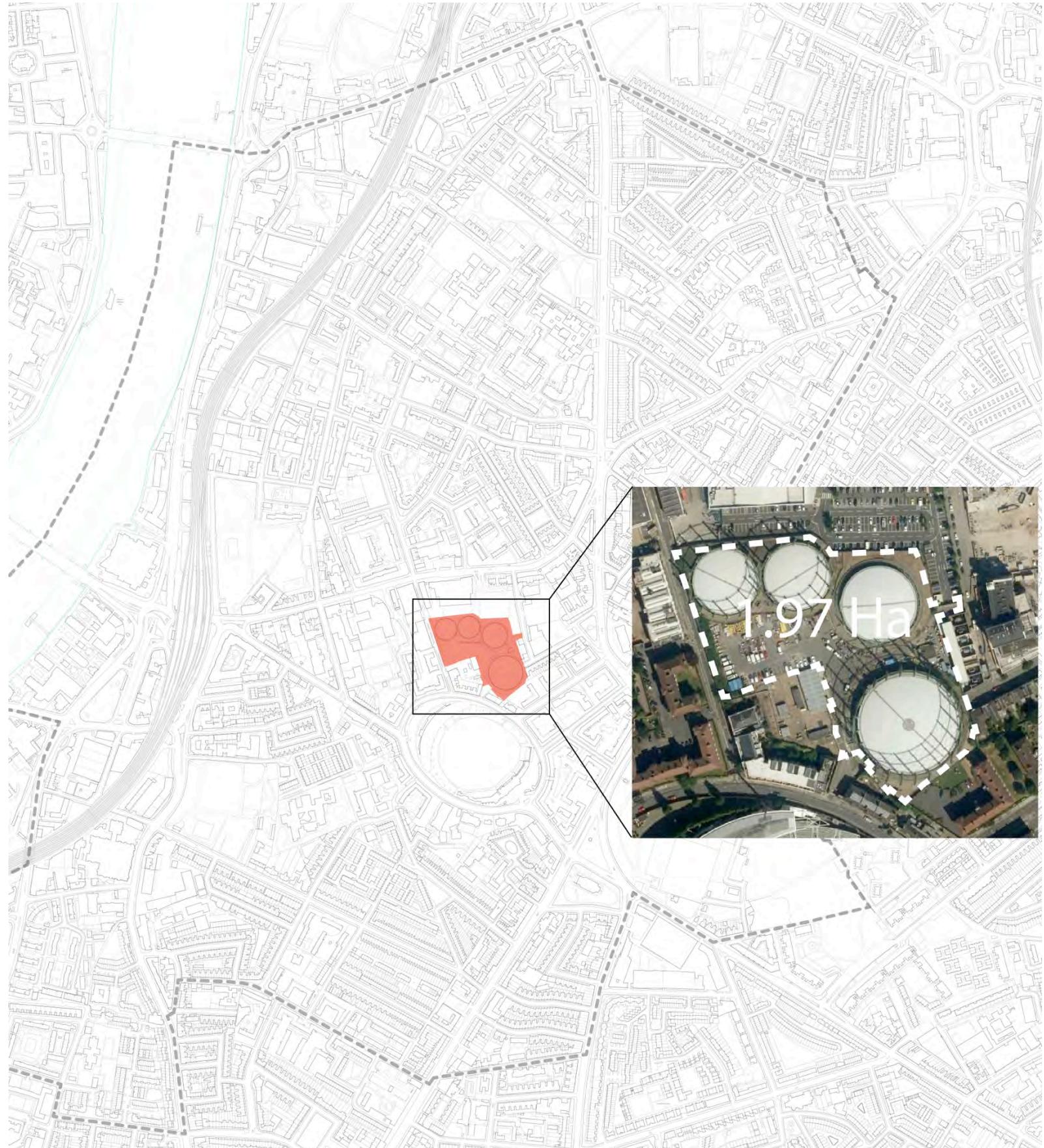
The decommissioning of the Oval Gas Holders frees for development a site of nearly two hectares, on the edge of Zone 1 and with excellent public transport links.

The site currently forms part of the Montford Place Key Industrial and Business Area (KIBA). For redevelopment into more profitable uses to occur, the site would have to have its KIBA status removed by Lambeth Council.

Lambeth Council is restricted in the amount of KIBA land that it is allowed to de-designate. However, Lambeth have recognised that the need to offset the substantial remediation costs for the site, together with the unsuitability of the access roads for goods vehicles, make the site a candidate for de-designation.

Oval and Kennington Development Area

The site's owner, SGN, has entered into an arrangement with Berkeley Homes to promote the site. Berkeley Homes, in conjunction with Lambeth Council, is undertaking a master-planning exercise covering most of the Montford Place KIBA and some adjoining non-KIBA land. The master plan area is referred to as the Oval and Kennington Development Area (OAKDA).



9.1 Industrial Heritage (1)



Source:
<http://mininghistory.thehumanjourney.net/edu/OvalGasHolder.shtml>

Successful comparative case studies

Vienna Gasometers (Austria)

The gas holders in the district of Simmering were constructed in the late 19th century and were functional as part of the municipal gas works of the time. In the 70s, as part of the shift from town gas to natural gas, the gas holders were decommissioned. An innovative redevelopment of the gas holders was completed between 1999 and 2001 and saw the gas holders reused as residential towers creating a 'city within a city' so to speak and have been hailed as successful architectural and social experiments. They serve as residential units with a variety of ancillary services and complementary functions.



Source:
en.wikipedia.org

Source:
en.wikipedia.org

History, heritage and identity

Built in the 1870s, the Oval gas holders are some of the older structures standing in the neighbourhood, predating the adjacent Surrey Cricket Club pavilion. The gas holders are witness to the dynamic urban transformations of London and have stood the test of time; however they have become technologically obsolete and are therefore being decommissioned. Their architecture is unique to an era of prosperity, urbanization and technological revolution of the 19th century, and as such, the group feels that they are an integral part of the identity, heritage and overall urban fabric of the neighbourhood.

Kings Cross Gasholder Park (UK)

As part of a greater urban regeneration project in the area, the gas holders at King's Cross were decommissioned, dismantled, and repaired and reconstructed for reuse in York by a specialist engineering firm. The gas holders are listed structures and have dominated the skyline for approximately 150 years, the same duration as the Oval gas holders. The gas holders will find new use in the park that is being built in the area. It has been regarded as a successful project overall and is seen as an asset for the future of the area, as it has historical significance and architectural appeal, by its incorporation into a modern landscaped park.



Source: <http://londonist.com/2014/08/kings-cross-gasholder-park-plans-approved.php>

9.1 Industrial Heritage (2)

Further examples of successful gasholder redevelopments



Source:
www.thejournal.ie

Alliance Gasworks Dublin (Ireland)
Note: diameter approximately the same as with Oval gasholder no.1 (65m), 9 storeys high, 210 dwellings, 16,400 m²



Source: <http://omparchitects.com/en/projects/the-gasworks/>



Source:
www.au.timeout.com

Brisbane Gasworks (Australia)



Source: <http://www.i30ownersclub.com/forum/index.php?topic=26168.0>



Source: <http://www.westergasfabriek.nl/zakelijk/locaties>

Westergasfabriek (Netherlands)



Source: <http://www.westergasfabriek.nl/zakelijk/locaties>

9.2 Local Housing Density

A Clear Fell?

Not everyone is attached to the gas holders, with some local residents expressing a preference for the demolition of the gas holders to make way for housing in keeping with the existing local housing stock.

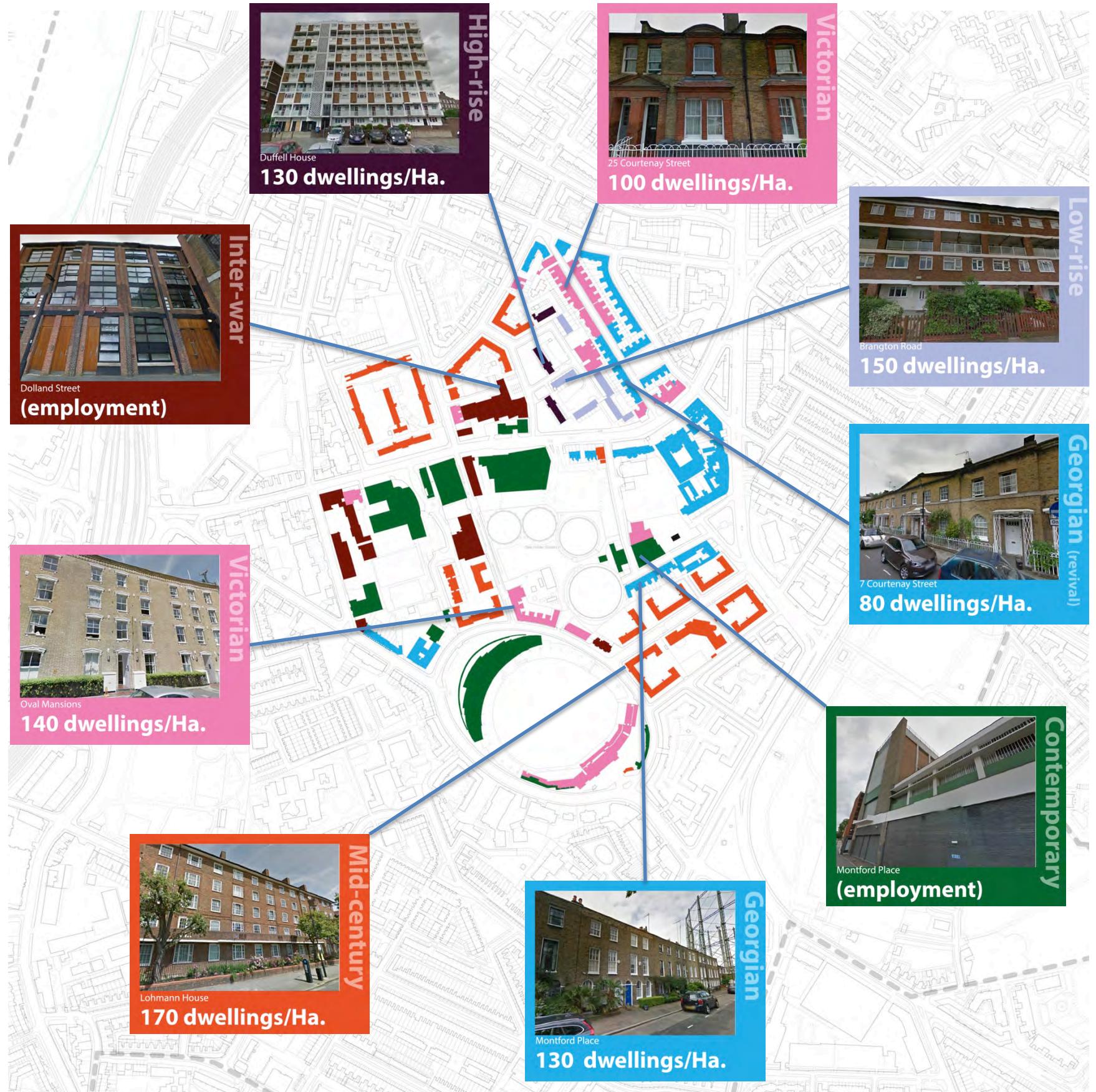
Our density calculations for the predominant local housing types show that they fall below the densities typically sought in contemporary developments.

Methodology

Gross Floor Area (GFA) was calculated by measuring the building footprint from aerial views and multiplying by the number of floors. Dwelling numbers were arrived at by dividing GFA by 100. For measuring purposes, plots were taken to include half the width of any adjoining streets (see below).



Source: Google Earth



Address	Footprint (m ²)	Storeys	Plot size (m ²)	Dwellings/Ha.
20 Courtenay St	66	2	130	102
7 Courtenay Sq.	45	2	110	82
Oval Mansions	697	4	2000	139
Duffell House	385	11	3300	128
Lohmann House	1720	5	5080	169
Brangton Road	348	4	945	147

9.3 The Public Realm (1)

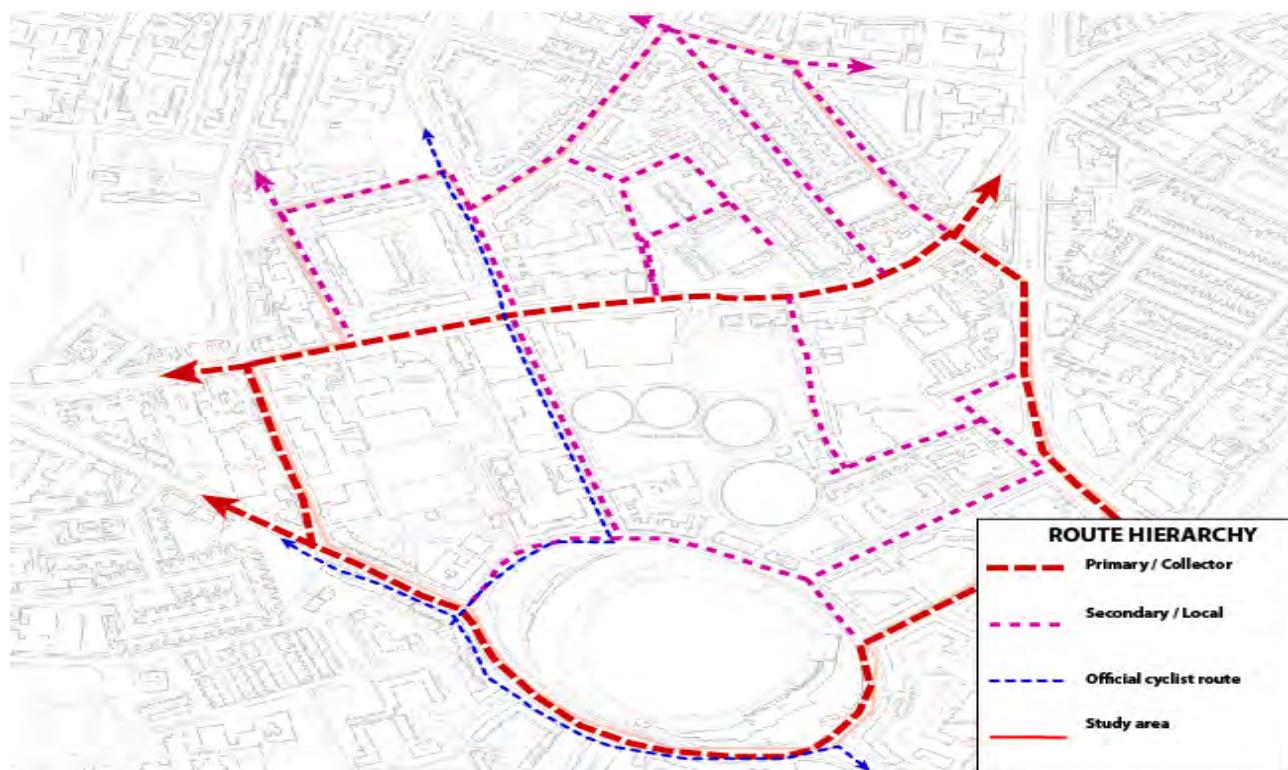
Methodology

Through site visits and observational work, our group conducted an orthodox urban analysis following urban design principles. Analyses of the legibility, permeability and townscape of the gasholder opportunity site were carried out with respect its surroundings and general character of the neighbourhood.

Permeability Analysis

“Permeability is best defined as accessibility, both in terms of visual and physical accessibility” (PDA, 2012)

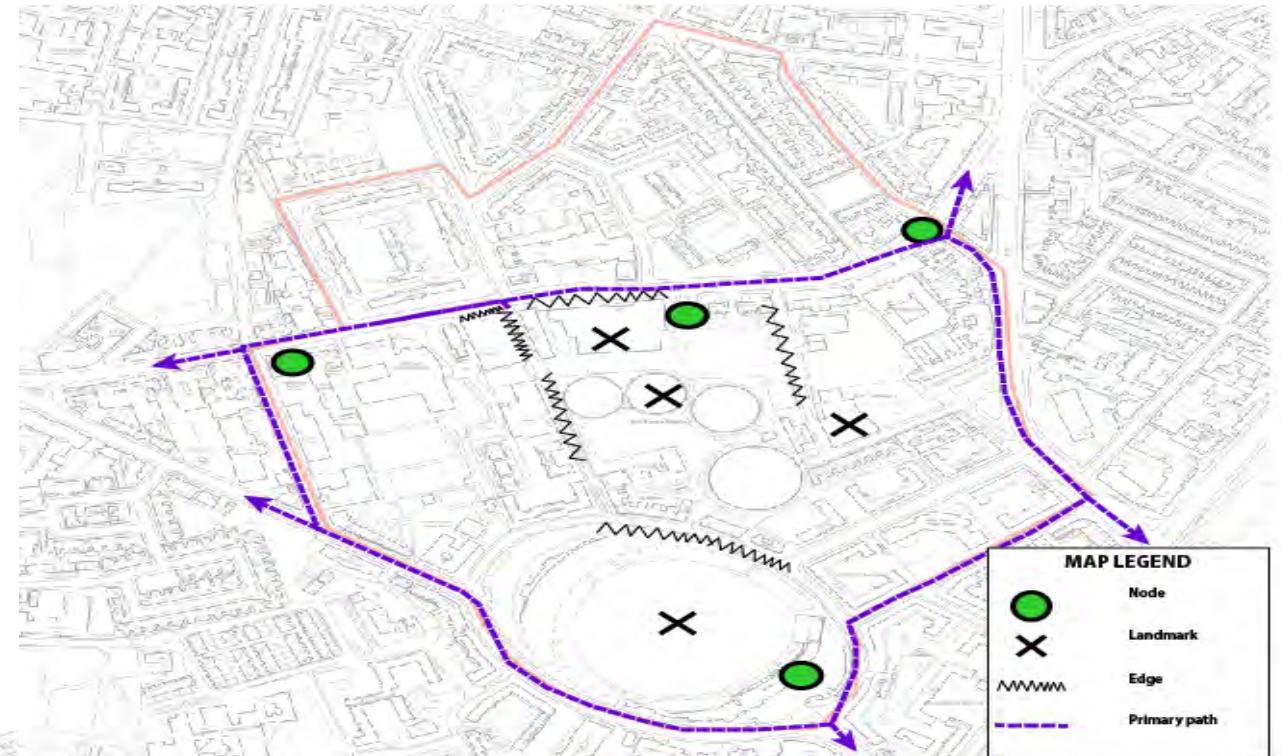
This map shows the primary and secondary pedestrian and cycle routes. One can observe how new routes through the site would facilitate the walkability and ease of movement through the neighbourhood.



Legibility Analysis

“Legibility is defined as how the built environment makes a place understandable” (PDA, 2012)

The legibility analysis expresses the navigability of the neighbourhood around the gasholder site with particular reference to landmarks.



Results

As displayed graphically in the maps above, the legibility and permeability of the site fare poorly in relation to the site's surroundings. The site is closed off from the public eye on street level; it is surrounded by high walls that are both aesthetically discouraging and impractical as they restrict the accessibility of the site.

9.3 The Public Realm (2)

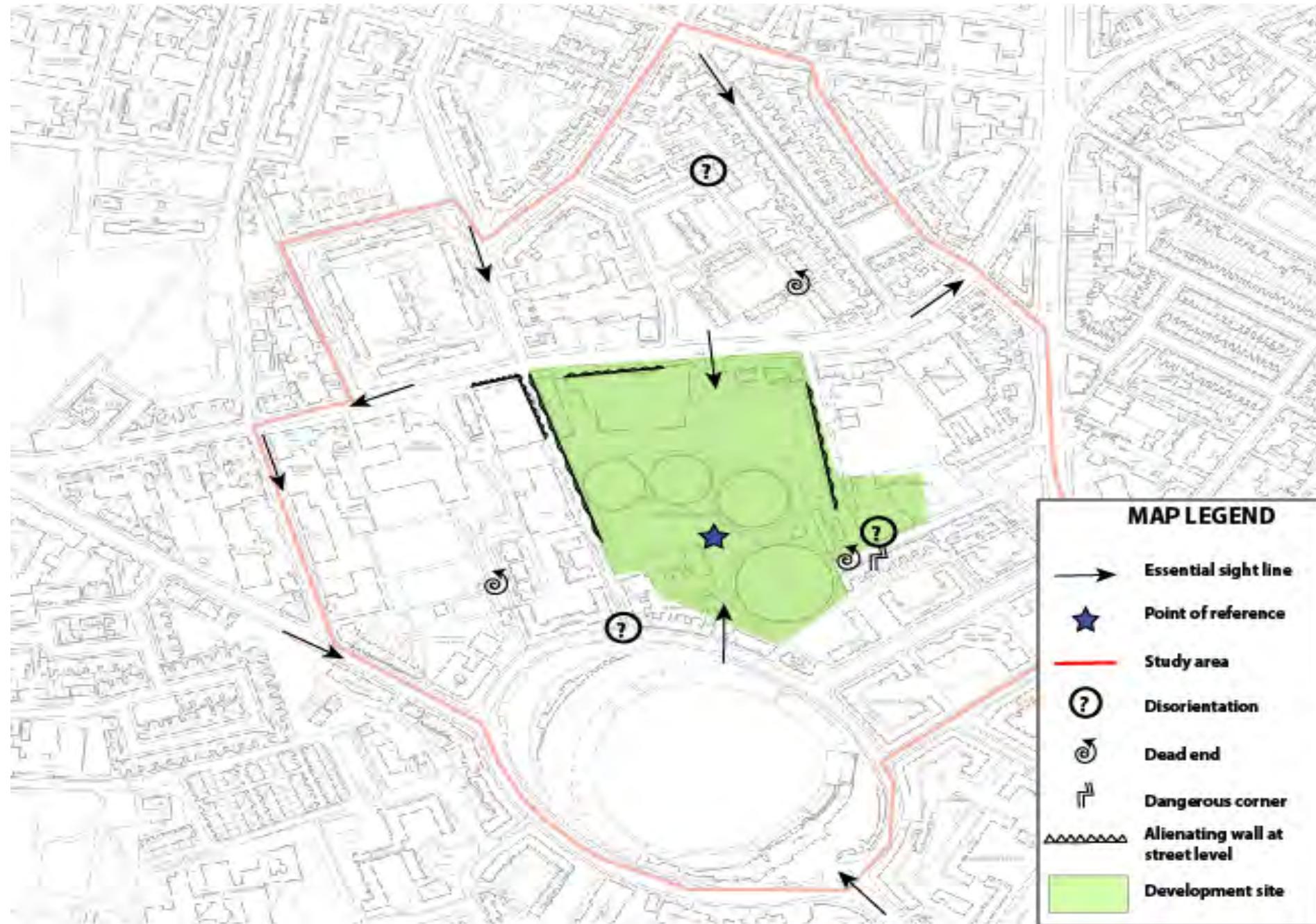
Cullen townscape analysis map

“Townscape is defined as the combination of buildings and the spaces between them and how they relate to one another to form the familiar and cherished local places within the town and its wider context” (SKDC, 2014)

The Cullen townscape analysis, named after the architect George Cullen who pioneered its use, attempts to express the subjective experience of walking through a neighbourhood.

Results

At street level it is easy for one to get disoriented when walking around the site, despite its proximity to nodes such as Tesco and the Oval cricket grounds, the gasholders are blocked off from these nodes. Hard edges dominate the boundaries of the site, and at night time the perimeter streets can be discouraging to walk through. Existing accesses to the site are mostly hidden from the public eye.



9.4 Emerging intentions



Source: Grid Architects
(2013)



Source: Grid Architects
(2013)

The conceptual images to the left were drafted by Grid Architects in 2013 as a vision of what the development of the gasholder site could potentially look like. From the consultation documents published in February 2015 (Berkeley Homes, 2015) it is clear that Berkeley Homes would prefer to knock down gasholders nos. 4 and 5.

Our group would argue that preservation of those gasholders does not negate the development potential of the site as implied by the Berkeley Homes document. On the contrary their iconic nature could prove an asset in serving as a landmark that can improve the social and economic viability of the immediate area.

Having considered the alternative of replacing the gas holders with housing in keeping with the existing stock, the group considers that the most effective way of maintaining and enhancing the character of the area would be by retaining all three historic gasholders in the context of a contemporary-style development., delivering similar housing numbers while also delivering improvements on a number of other fronts.

9.5 The KIBA and the OAKDA

Berkeley Homes argue that the Gas Holder site should be de-designated as Key Industrial and Business land, due to issues of access and the demand for housing in the borough.

An important limitation on the master-planning exercise is that the Tesco site is not under the control of Berkeley Homes. Tesco Plc have not so far shown interest in the redevelopment of their site, which is highly valuable in its current use.

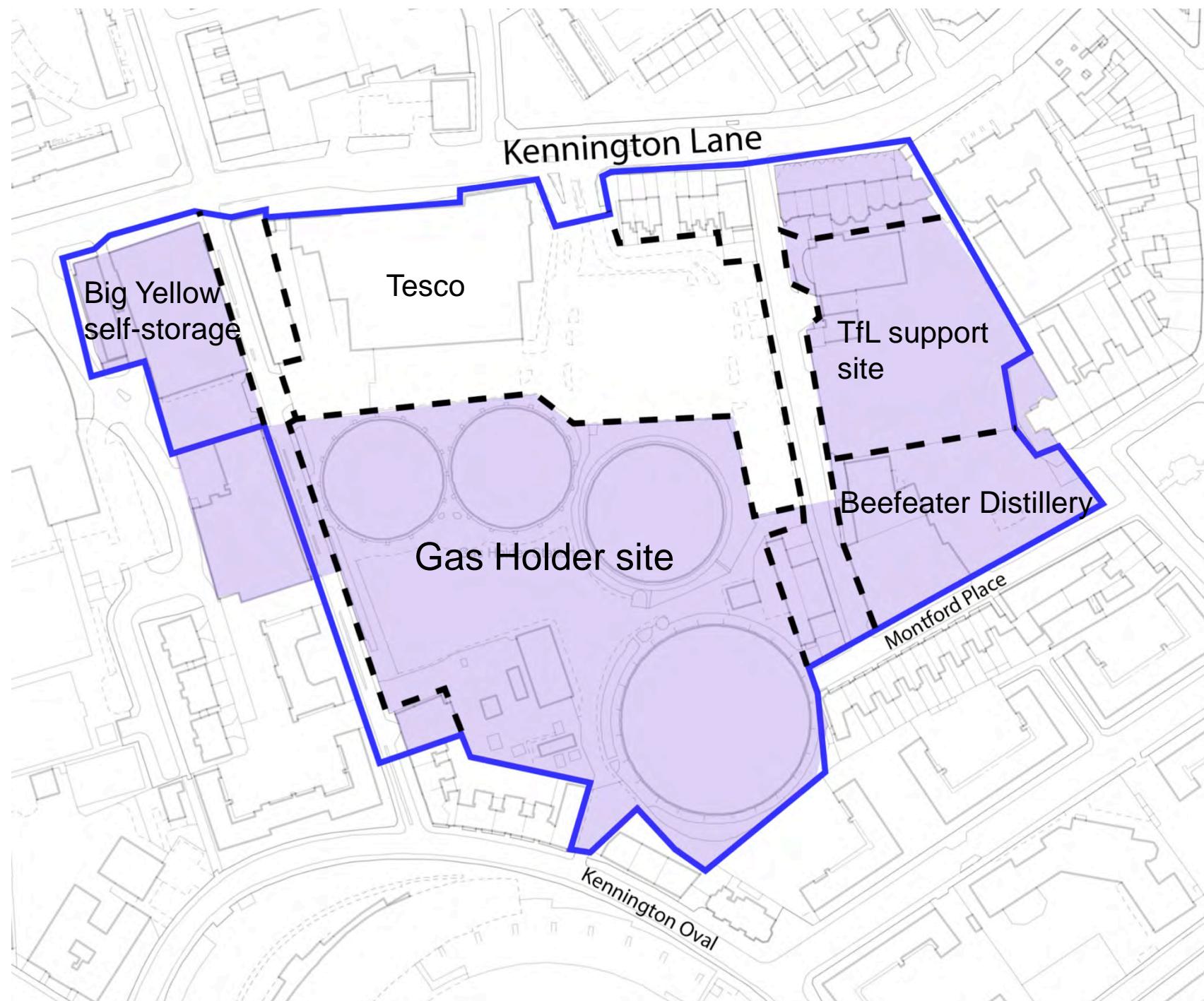
An alternative proposal

The de-designation as Key Industrial and Business Area of the gas holder site would lead to the loss of 2 Ha. of industrial land. We suggest that this loss could be mitigated by the designation of the current Tesco site as KIBA land, as part of a comprehensive redevelopment of the master plan area.

This “swap” of KIBA land would restrict the net loss of industrial land to approx. 1 Ha, would locate the employment uses on Kennington Lane for improved access, and would result in a substantial net gain in “B-class” employment.

Such a proposal could achieve almost complete segregation of vehicles from pedestrians and cyclists, with consequent improvements in safety and subjective quality of the new public space.

Key to the deliverability of this proposal is the construction of a new superstore on the gas holder site prior to the

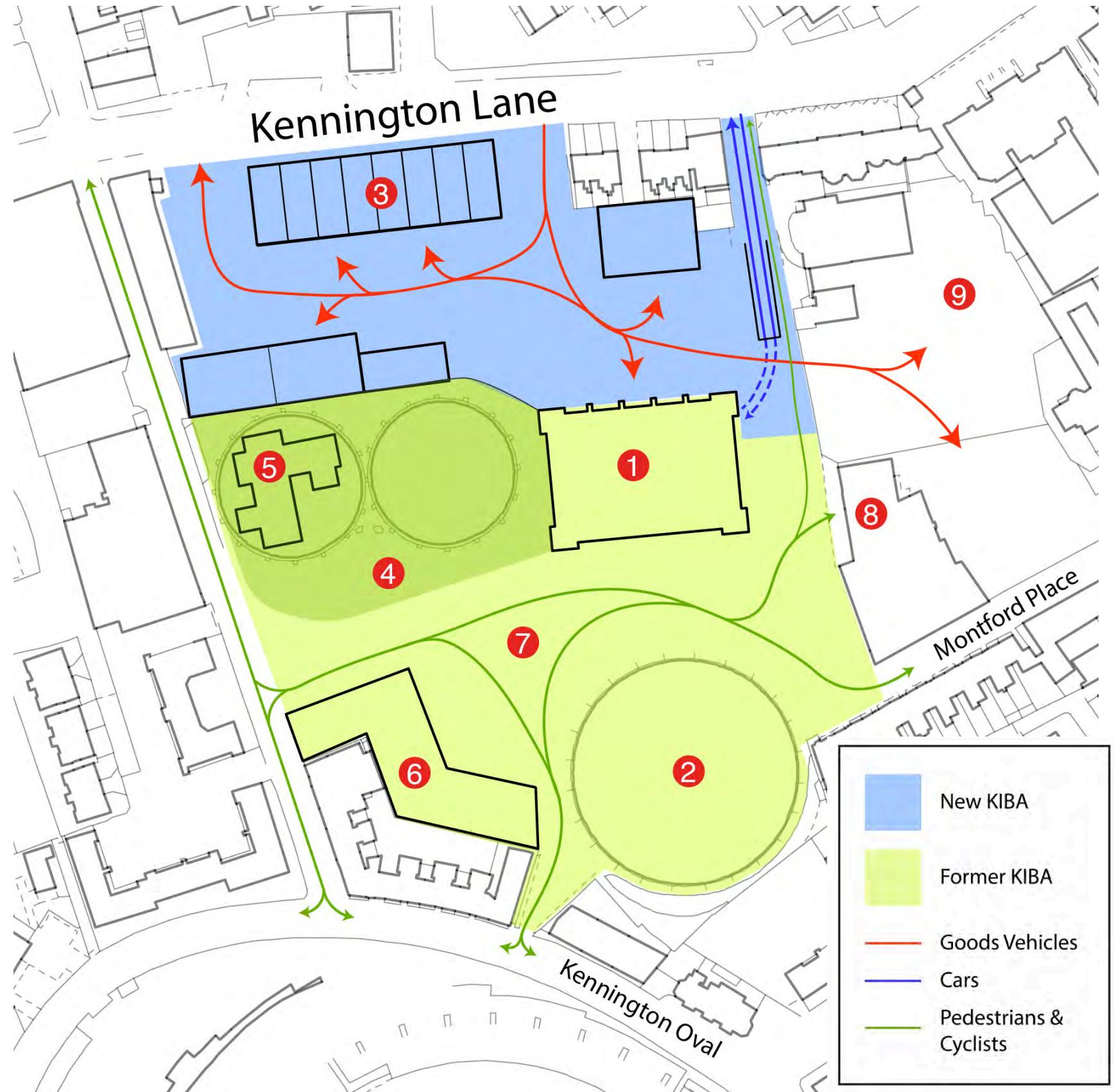


9.6 The KIBA "Swap"

Elements of the design

- 1 The new superstore, with residential use on the upper floors, and parking for the entire site underneath. Building height could be greater on this part of the site.
- 2 A signature, high-value residential redevelopment of Gas Holder no. 1, with commercial or leisure uses on the ground floor.
- 3 Employment floorspace.
- 4 A community garden incorporating Gas Holder no. 5.
 - A nursery and community centre built into Gas Holder no. 4.
- 5
 - Low-rise leisure and retail units, preserving sunlight penetration into the site.
- 6 A new public square.
- 7 The Beefeater distillery and museum.
- 8
 - The TfL site, likely to become available for redevelopment from 2020.

NB Site layout and suggested uses are purely indicative.



10. Recommendations

The tall buildings study has identified a significant increase in population and employment numbers for the KOVF area. This has uncovered several deficiencies with regard to social and transport infrastructure. However, KOVF will need to build on this work in order to identify specific priorities for investment.

The gasholder study has highlighted a number of opportunities with regards to the redevelopment of the site.

Our recommendations are as follows:

- That KOVF engage with the community in order to identify social and transport infrastructure investments which would most benefit local people;
- That KOVF push for the retention of all three gas holders as the most effective way of preserving local character;
- That KOVF push for a comprehensive plan for the OAKDA which maximises B-class employment land, along the lines of our KIBA “swap” proposal.



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12. Appendix 1- Section 106

School Places and Section 106

School Places

Policy 26 (D) of the UDP requires contributions towards improving community facilities where the development creates or exacerbates an existing shortage of community facilities, such as by increasing the residential population.

More information on this policy can be found here:

<http://www.lambeth.gov.uk/sites/default/files/pl-unitary-development-plan.pdf>

Application

a) Child Yield

3.2.7 Child yield is the term used for the number of children likely to be accommodated in dwellings of various sizes. This guidance uses figures from the Greater London Authority analysis of the London Household Survey 2002 in the DMAG Briefing 2005/25 on Child Yield. The figures used are for the 0-15 age group for the inner London area for the owner occupied, social rented and private rented tenures.

3.2.8 The child yield from existing residential buildings should be deducted to give the net increase.

Table 2: Child yield for Inner London (source: GLA briefing 2005/25)

	Age	1 bed (unit)	2 bed	3 bed	4 +	Total
Owner occupied	0-4	0.04	0.08	0.15	0.23	0.13
	5-10	0.01	0.08	0.21	0.35	0.17
	11-15	0.00	0.06	0.14	0.28	0.12
Social rented	0-4	0.06	0.24	0.25	0.27	0.18
	5-10	0.03	0.31	0.41	0.43	0.24
	11-15	0.02	0.16	0.46	0.46	0.20
Private rented	0-4	0.03	0.09	0.13	0.06	0.08
	5-10	0.01	0.03	0.07	0.13	0.04
	11-15	0.01	0.04	0.03	0.05	0.03

Source: Available from: http://www.lambeth.gov.uk/sites/default/files/pl-S106-planning-obligations-policy_0.pdf

School cost figures for Lambeth (as of January 2009) are estimated at £14,831 for a primary school place and £22,348 for a secondary school place. It is estimated that 80% of children living in Lambeth will also attend school within the borough. Lambeth intends to maintain this capacity.

The following calculation is used to calculate the contribution for a proposed scheme:
 Number of children (child yield x number of units) x 80% (educated in Lambeth Schools) x cost of new school place = Contribution per dwelling

However, we must take into account that any applications post 1 October 2014 in Lambeth and post 11th July 2012 in Wandsworth were liable for CIL charge, which would mean that contributions for healthcare/educational and green space facilities were collected through CIL instead of via Section 106. This will have an impact on the level of Section 106 contributions shown to be made in the calculations above.

Sky Gardens Comparison

Despite this, we can calculate the cost extracted JUST from the Sky Gardens development to use as a comparison. Sky Gardens was approved in 2009, so would not have been subject to CIL, and therefore the only contribution it made towards education in the area was the £375,114 through Section 106.

The development was expected to contribute 52.6 children of primary school age and 28.8 children of secondary school age.

PRIMARY CALCULATION

PRIMARY (children 0-9) = 42 (number of children schooled in Lambeth) x £14,831 (cost of primary school place per child) = £624,088.48

SECONDARY CALCULATION

SECONDARY (children 10-18) = 23.04 (number of children schooled in Lambeth) x £22,348 (cost of secondary school place per child) = £514,897.92

This gives a total cost to the borough of £1,138,986.40 for providing education to these children, as compared to the £375,114 that the developers contributed.

Therefore even though there are some flaws in the above system due to the amount of information that we can gather and the introduction of CIL, even developers that have contributed to the educational system have not contributed anywhere near enough.

13. Appendix 2 - CIL

Construction Infrastructure Levy (CIL)

Lambeth

Lambeth CIL charge implemented April 2014. Any developments proposed after this date will be liable to pay CIL on the following terms:

Development type	Zone A - Waterloo and Vauxhall	Zone B - Kennington, Oval and Clapham	Zone C - Streatham, West Norwood, Streatham Hill, Tulse Hill, Brixton and Herne Hill
Residential	£265	£150	£50
Hotel	£100	Nil	Nil
Office	£125	Nil	Nil
Industrial	Nil	Nil	Nil
Large Retail Development *	£115	£115	£115
Other Retail	Nil	Nil	Nil
Student accommodation	£215	£215	£215
All other uses not identified above	Nil	Nil	Nil

Source: Available from: <http://www.lambeth.gov.uk/planning-and-building-control/planning-applications-and-policies/community-infrastructure-levy-cil>

Regulation 123 lists detail the developments which CIL contributes towards. In Lambeth CIL is sought for the following developments:

Education Facilities: The provision, improvement, replacement, operation or maintenance of new and existing public education facilities (excluding, identified primary school site provision to be secured through planning obligations *)

Community facilities: The provision, improvement, replacement, operation or maintenance of new and existing community facilities including:

- Health Care Facilities
- Library Facilities
- Indoor Sport & Leisure Facilities (defined as publically owned or controlled leisure centres, sports halls and game courts, swimming pools)
- Cultural Facilities (defined as publically owned or controlled theatres, cultural /arts centres, including the Southbank Centre)
- Recycling facilities
- Community or Youth facilities.

Public Realm Improvements: The provision, improvement, replacement, operation or maintenance of specific public realm projects in Town Centre or area based public realm streetscape schemes/programmes, and improvements and maintenance of existing parks and public open space.

Transport: The provision, improvement, replacement, operation or maintenance of strategic public transport initiatives (excluding site specific transport interchange schemes), programmed highway and traffic management improvements (Lambeth and TFL), sustainable transport initiatives including cycling and pedestrian routes.

(* specific primary school site identified being New Park Road, Clapham Park, and new Vauxhall Primary school, Keybridge House site)

Source: http://www.lambeth.gov.uk/sites/default/files/pl_Regulation123ListV2.pdf

Community facilities: The provision, improvement, replacement, operation or maintenance of new and existing community facilities including:

- Health Care Facilities
- Library Facilities
- Indoor Sport & Leisure Facilities (defined as publically owned or controlled leisure centres, sports halls and game courts, swimming pools)
- Cultural Facilities (defined as publically owned or controlled theatres, cultural /arts centres, including the Southbank Centre)
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(* specific primary school site identified being New Park Road, Clapham Park, and new Vauxhall Primary school, Keybridge House site)

Source: http://www.lambeth.gov.uk/sites/default/files/pl_Regulation123ListV2.pdf

In Lambeth, the percentage of CIL used to support neighbourhood projects is 25%. As part of this it is identified by Lambeth council that communities will lead the identification of proposals and priorities for the allocation of CIL funds. There is therefore a large opportunity for KOV to be involved in this process, and shape the projects CIL invests in.

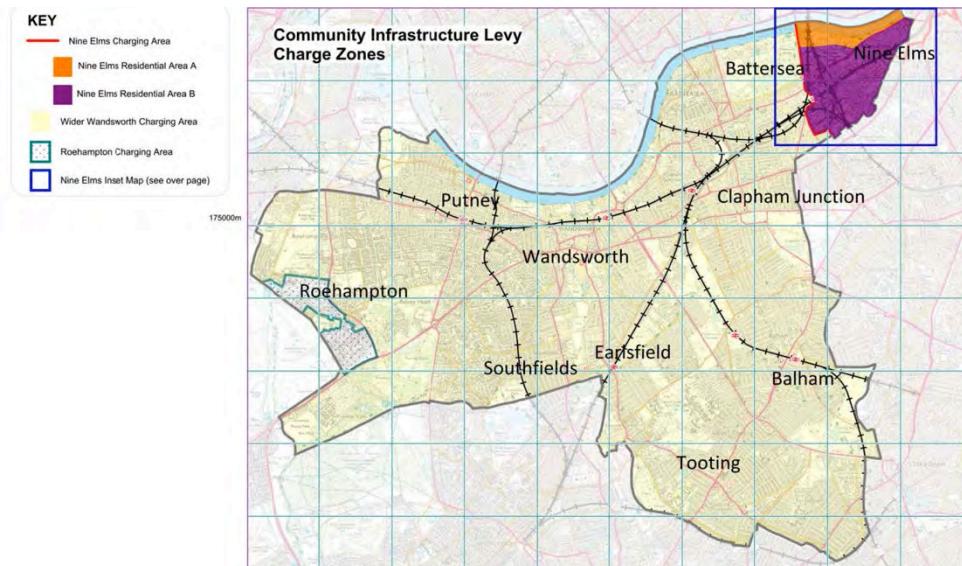
14. Appendix 2 - CIL

Wandsworth

Any developments proposed after 1 November 2012 in Wandsworth were subject to CIL. Wandsworth charges the following for CIL contributions:

Nine Elms residential area A	Cost
Residential (per square meter)	£575
Office (per square meter)	£100
Nine Elms Residential Area B	Cost
Residential (per square meter)	£265
Office (per square meter)	£100

The following map sets out the CIL charging areas for Wandsworth



Source: Available from:

http://www.wandsworth.gov.uk/downloads/file/6315/community_infrastructure_levy_cil_charging_schedule/

Mayoral CIL

The mayor of London also charges for CIL on developments. However, this is not relevant to funds that could be allocated to the local community and was not covered in this study. If you did require further information on Mayoral CIL in the future information can be found here:

<https://www.london.gov.uk/priorities/planning/mayoral-community-infrastructure-levy>

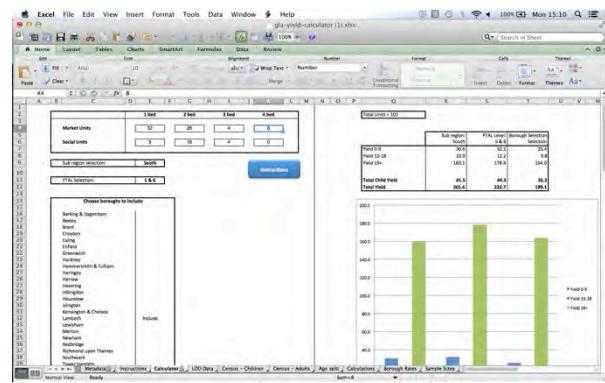
15. Appendix 3 – Detailed Methodology – Tall Buildings

- Our brief was to investigate the impact of tall buildings on their environment.
- To do this we undertook a snapshot study of future proposed tall developments situated in the Kennington, Oval and Vauxhall (KOV) study area. Some tall building developments in the Nine Elms area are situated next to the KOV boundary in the borough of Wandsworth so these were included whenever applicable.
- We collected quantitative data in the form of an excel spreadsheet.
- Tall buildings were defined using the definition in the Lambeth 2011 Core Strategy: ***“4.46 Tall buildings are defined as over 25 metres adjacent to the River Thames and over 30 metres elsewhere in the borough.” (Lambeth, 2011)***
- This was a ‘snapshot’ study as we collected data between the dates of 29th February and 1st March 2015. This means that the status and information on some proposals may change in the future.
- We chose 17 new tall building developments and collected data from the planning applications and statements submitted by developers to the council planning departments. These were publicly available on the relevant planning authority’s website and we have specified the planning reference where necessary.
- Data on residential unit type was collected and broken down by number of bedrooms.
- Planning applications tended not to make the distinction between intermediate and social housing in their affordable housing allocations. For this reason we have assumed that the affordable housing units are social units for the purpose of this task.
- The data on unit type was input into the Greater London Authority Yield Calculator. This was done by development to ensure that we could plot the increase spatially.
- The calculator allows population estimates for one bedroom; two bedroom; three bedroom and four bedroom units. Where our tall building data included studio and five bedroom apartments, they were added to the one bedroom and four bedroom unit types respectively.
- The calculator gave a higher (PTAL rating informed), medium (area informed) and lower (borough informed) estimates for each development. The middle estimate was chosen for mapping purposes.
- Definitions and notes for the excel spreadsheet has been provided in a further appendix.

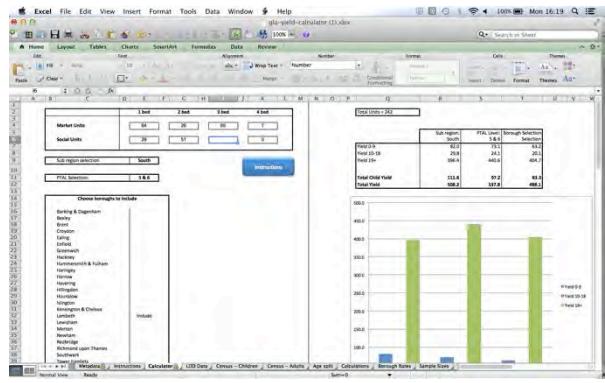
16. Appendix 4 – GLA Yield Calculator - Residential

The Greater London Authorities Development Yield Calculator was used to calculate the estimated population yield from the tall building developments in the snapshot study. The exact results follow for each development.

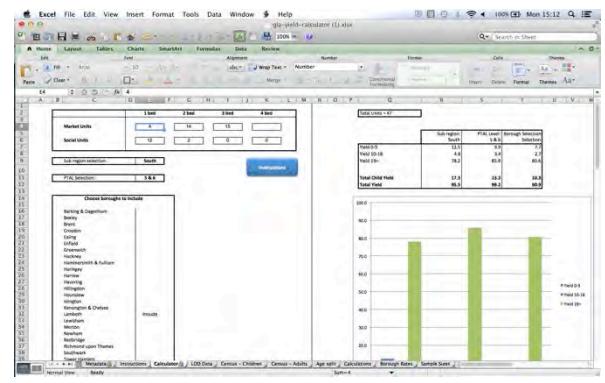
1. Parliament House



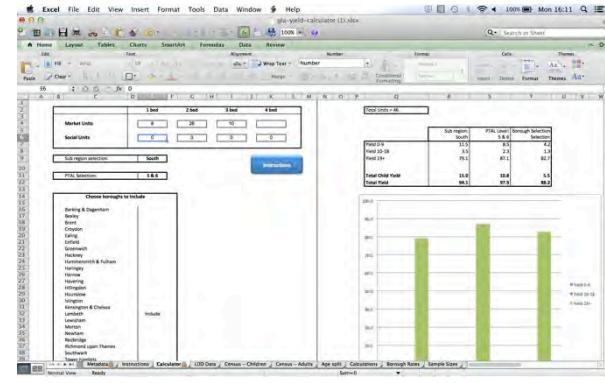
2. The Corniche



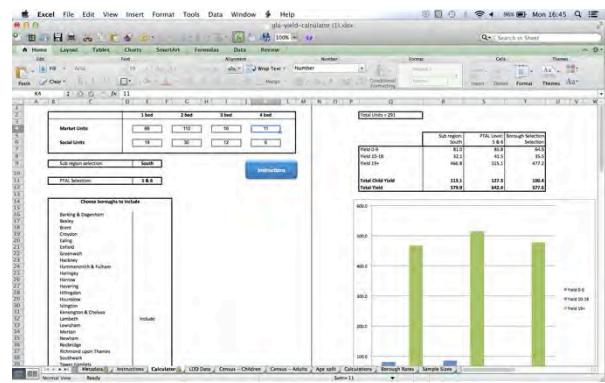
3. Prince Consort House



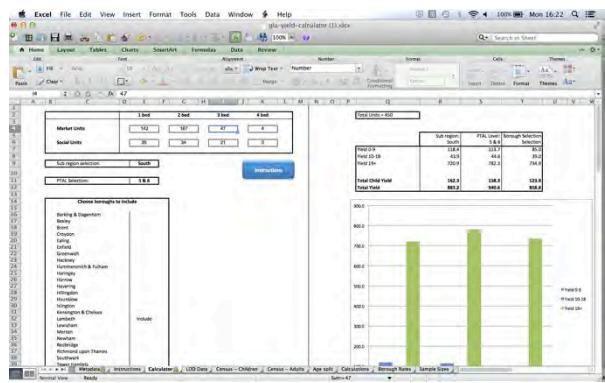
4. Merano



5. Vauxhall Cross Island Towers

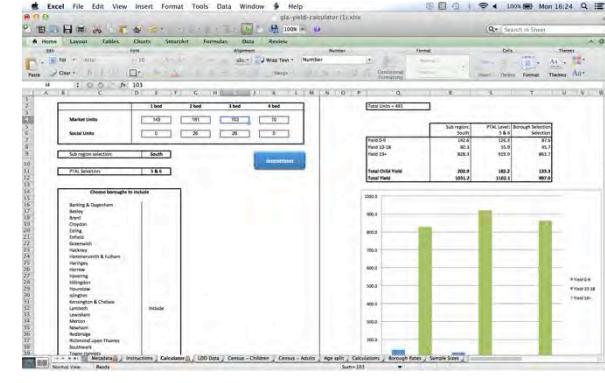


6. New Bondway

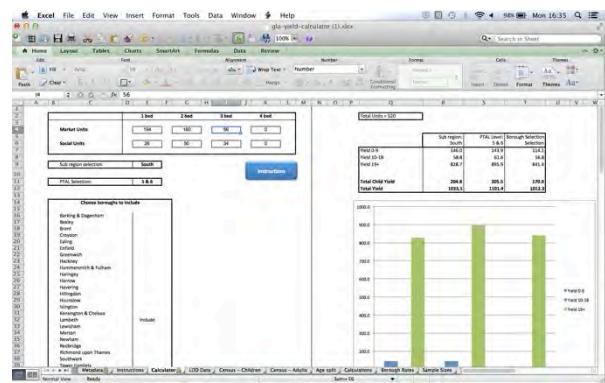


7. The Atlas – Not applicable.
Development contains only student units which are considered to yield one adult person per unit.

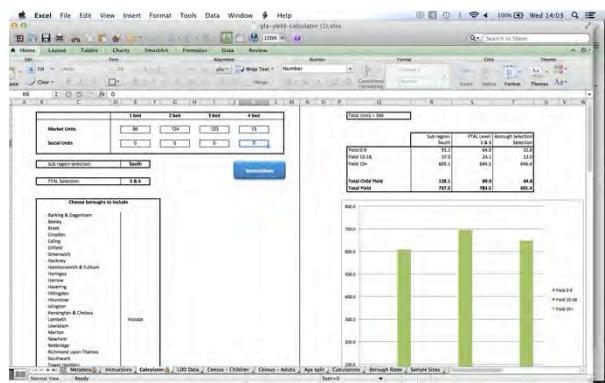
8. One Nine Elms



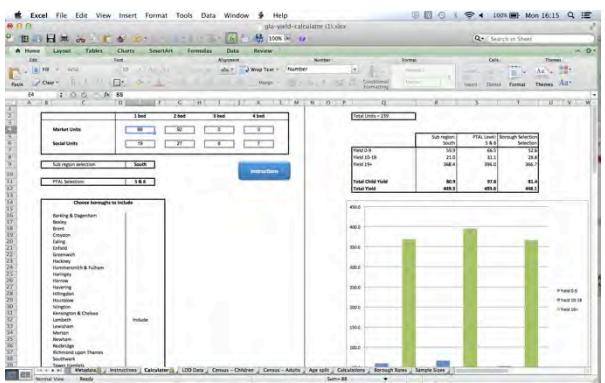
9. Vauxhall Square



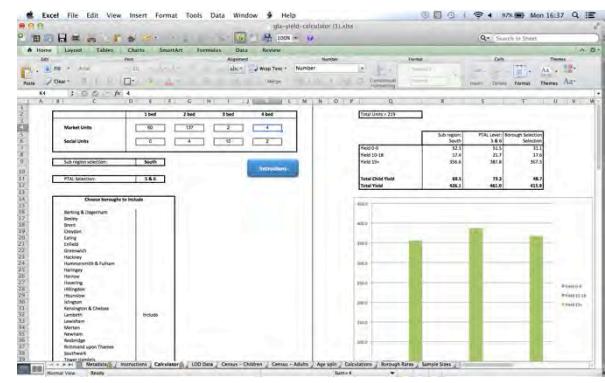
10. Building N8, New Covent Garden Market



11. Sky Gardens



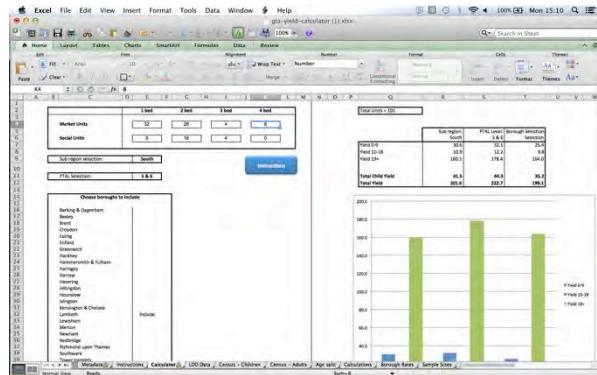
12. 12-20 Wyvil Road



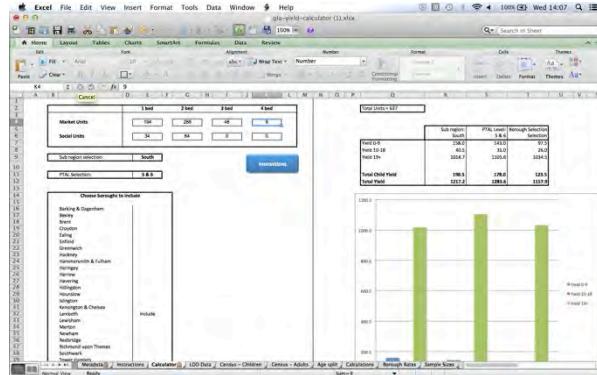
16. Appendix 4 – GLA Yield Calculator - Residential

The Greater London Authorities Development Yield Calculator was used to calculate the estimated population yield from the tall building developments in the snapshot study. The exact results follow for each development.

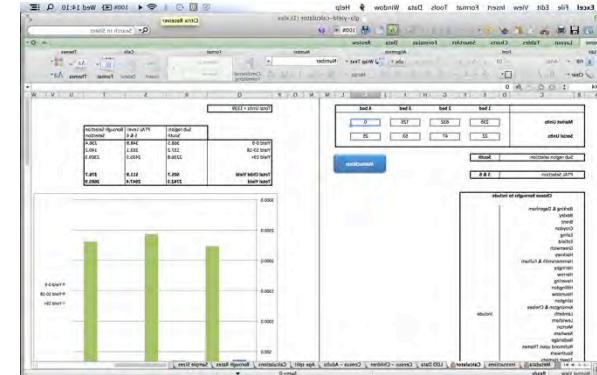
13. Keybridge House



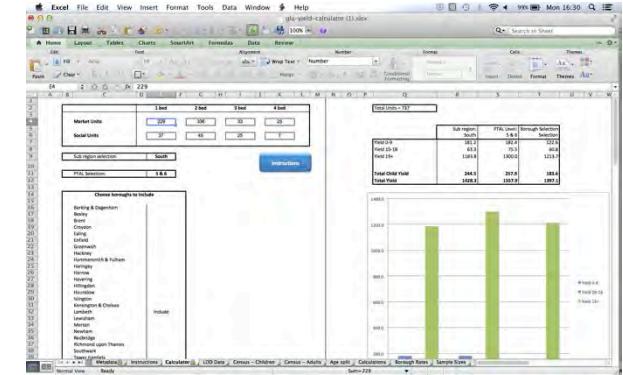
14. Phase 1 Embassy Gardens



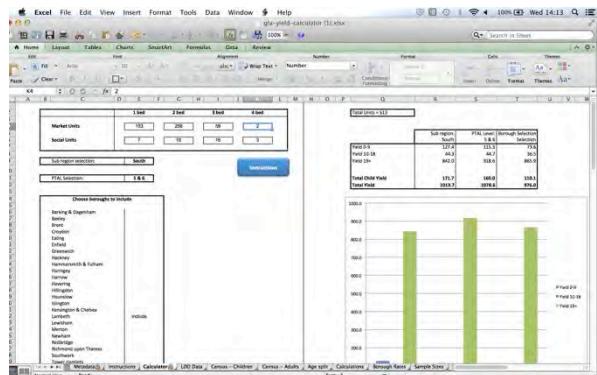
15. Phase 2 Embassy Gardens



16. Sainsbury's Nine Elms



17. Christie's Building



Notes to GLA calculator estimates:

The calculator breaks down the population estimate by market and social units. For the purposes of this study we assumed that all affordable housing provided by developments would be occupied at their full capacity and therefore these were input into the 'social unit' category.

17. Appendix 5 – Tall Buildings Figures

These tables show the figures that informed our tall buildings snapshot study findings. The complete spreadsheet can be found with the supporting material provided to the KOV neighborhood forum.

Lambeth Proposed Tall Buildings					Tallest Tower	Tallest Tower	
Name of Development [also known as in brackets]	Borough	Planning ref	Planning Status (of 1st March)	Location	Height (m) (± Completion Date)	Floors (above)	No. of units
Parliament House	Lambeth	08/04454/FUL	Under construction	81 Black Prince Road	73 2015+	23	101
Prince Consort House	Lambeth	14/04757/FUL	Approved	27-29 Albert Embankment	87 2016+	27	47
The Atlas, Nine Elms	Lambeth	14/03213/NMC	Under construction	30 - 60 South Lambeth Road, SW	97 2016+	32	344
Nine Elms Merano [Eastbury House]	Lambeth	12/01768/FUL	Under construction	30-34 Albert Embankment	86 2017+	28	48
Sky Gardens	Lambeth	09/04322/FUL	Under construction	143-161 Wandsworth Road	130 2017+	36	235
The Corniche 1-3 [Hampton House]	Lambeth	07/04264/FUL	Under construction	20 Albert Embankment	85 2017+	26	242
New Bondway	Lambeth	14/00601/FUL	Proposed	69-71 Bondway, London SW8	168 2018+	50	450
One Nine Elms [Market Towers]	Wandsworth	2014/0871	Approved	Lambeth SW8 5NQ	200 2018+	58	491
Nine Elms Point Sainsbury's Development	Lambeth	13/05116/DET	Under construction	62 Wandsworth Road, Lambeth	129 2019+	37	737
Vauxhall Square	Lambeth	11/04428/FUL	Approved	5 Miles Street, London SW8	168 2020+	50	520
12 - 20 Wyvil Road Development	Lambeth	14/03701/FUL	Proposed	12 - 20 Wyvil Road London SW8	114 2020+	35	215
Keybridge House Development	Lambeth	13/03935/OU	Approved	80 South Lambeth Road, SW8 1F	128 2020+	36	415
Vauxhall Cross Island Towers	Lambeth	10/02060/FUL	Approved		140 2020+	41	291
New Covent Garden Market - Building N8	Wandsworth	2014/2810	Approved	Nine Elms lane	180 2020+	53	346
Embassy Gardens - Building Plots A09, A10, A11 or PHASE 1	Wandsworth	2013/5239	Approved	12 Ponton road	79 2020+	23	637
Embassy Gardens - Building Plots A01-A07 or PHASE 2	Wandsworth	2013/5239	Approved	12 Ponton road	2020+	23	1335
Christie's Building	Wandsworth	2014/0614	Approved	40-42 Ponton road	70 2020+	19	515

Lambeth Proposed Tall Buildings	Housing Unit Breakdown							notes	Social Inf
	STUDENT	Studio	1Bed	2Bed	3bed	4bed	5bed		
Parliament House	0	0	41	44	8	4	4 Affordable housing 1b(9) 2b(18) 3b(4)		
Prince Consort House	0	4	12	16	15	0	0 Affordable St(4) 1b(8) 2b(2)		
The Atlas, Nine Elms	344	0	0	0	0	0	0 n/a	SWIMMING	
Nine Elms Merano [Eastbury House]	0	0	8	28	10	0	0 not avail 12 units		
Sky Gardens	0	0	107	119	6	7	0 Affordable 1b(19) 2b(27) 3b(6) 4b(7)		
The Corniche 1-3 [Hampton House]	0	0	93	77	65	7	0 Affordable housing 1b(29) 2b(51)		
New Bondway	0	28	149	201	68	4	0 Affordable 1b(35) 2b(34) 3b(21)		
One Nine Elms [Market Towers]	0	0	145	207	129	10	0 Affordable 1b(26) 2b(26)		
Nine Elms Point Sainsbury's Development	0	31	235	381	58	32	0 Affordable 1b(37) 2b(45) 3b(25) 4b(7)		
Vauxhall Square	454	24	196	210	90	0	0 Affordable housing 1b(26) 2b(50) 3b(34)		
12 - 20 Wyvil Road Development	0	0	60	141	12	6	0 Affordable 2b(4) 3b(10) 4b(2)		
Keybridge House Development	0	30	139	195	51	0	0 Affordable 2b(6) 3b(4)	PRIMARY	
Vauxhall Cross Island Towers	0	0	106	140	28	17	0 Affordable 1b(18) 2b(30) 3b(12) 4b(6)		
New Covent Garden Market - Building N8	0	0	86	124	123	13	0 n/a		
Embassy Gardens - Building Plots A09, A10, A11 or PHASE 1	0	36	192	352	48	9	Affordable 1b(34) 2b(64)		
Embassy Gardens - Building Plots A01-A07 or PHASE 2	0	57	200	879	178	18	7 Affordable 1b(22) 2b(47) 3b(53) 4b(18) 5b(7)		
Christie's Building	0	0	160	274	74	5	0 Affordable 1b(7) 2b(18) 3b(16) 4b(3)		

Lambeth Proposed Tall Buildings	PROJECTED POPULATION												
	Student	Sub region				PTAL rating				Borough		Lambeth	
		Total	Children 0-9	Children 10-18	ALL CHILDREN	Total	Children 0-9	Children 10-18	ALL CHILDREN	Total	Children 0-9	Children 10-18	ALL CHILDREN
Parliament House	0	201.6	30.6	10.9	41.5	222.7	32.1	12.2	44.3	199.1	25.4	9.8	35.2
Prince Consort House	0	95.5	12.5	4.8	17.3	99.2	9.9	3.4	13.3	90.2	7.7	2.7	10.4
The Atlas, Nine Elms	344	344	0	0	0	344	0	0	0	344	0	0	0
Nine Elms Merano [Eastbury House]	0	94.1	11.5	3.5	15	97.9	8.5	2.3	10.8	88.2	4.2	1.3	5.5
Sky Gardens	0	449.3	59.9	21	80.9	493.6	66.5	31.1	97.6	448.1	52.6	28.8	81.4
The Corniche 1-3 [Hampton House]	0	508.2	82	29.9	111.9	537.8	73.1	24.1	97.2	488.1	63.2	20.1	83.3
New Bondway	0	883.2	118.4	43.9	162.3	940.6	113.7	44.6	158.3	858.8	85	39	124
One Nine Elms [Market Towers]	0	1031.2	142.6	60.3	202.9	1102.1	126.3	55.9	182.2	997	87.6	45.7	133.3
Nine Elms Point Sainsbury's Development	0	1428.3	181.2	63.3	244.5	1557.9	182.4	75.5	257.9	1397.1	122.6	60.8	183.4
Vauxhall Square	464	1497.5	146	58.8	204.8	1565.4	143.9	61.6	205.5	1476.3	114.1	56.8	170.9
12 - 20 Wyvil Road Development	0	426.1	52.1	17.4	69.5	461	51.5	21.7	73.2	415.9	31.1	17.6	48.7
Keybridge House Development	0	778.9	84.9	24.2	109.1	820.3	71.4	19	90.4	734.1	36.5	12.9	49.4
Vauxhall Cross Island Towers	0	579.9	81	32.1	113.1	642.4	85.8	41.5	127.3	577.6	64.9	35.5	100.4
New Covent Garden Market - Building N8	0	737.2	91.1	37	128.1	783.5	64.9	24.1	89	691.4	31.8	13	44.8
Embassy Gardens - Building Plots A09, A10, A11 or PHASE 1	0	1217.2	158	40.5	198.5	1283.6	143	35	178	1157.9	97.5	26	123.5
Embassy Gardens - Building Plots A01-A07 or PHASE 2	0	2742.5	368.5	137.2	505.7	2947.4	348.8	163.1	511.9	2685.9	236.4	140.2	376.6
Christie's Building	0	1013.7	127.4	44.3	171.7	1078.6	115.3	44.7	160	976	73.6	36.5	110.1
TOTALS		14028.4	1747.7	629.1	2376.8	14978	1637.1	659.8	2296.9	13625.7	1134.2	546.7	1680.9
MID ESTIMATE													

Projection notes: Projections calculated using the Greater London Authority development population yield calculator. Estimates are given based on three options: the development's PTAL rating, the development's Sub-region or the development's Borough (Lambeth).

17. Appendix 6 – Tall Buildings Notes

This table shows the Notes and Definitions used in the tall building cataloguing study

NOTES and DEFINITIONS	
General Information	
Table Headings	Description
Name of development	The new development name. The site's previous name is indicated in italics. Where a development is constructed in phases, or detailed planning permission only sought for part of the development, we have specified the exact buildings or plots.
Mapping reference	This refers to the key on the maps.
Borough	The borough in which planning permission is sought
Planning Reference	The borough's planning reference identifier
Planning Status (Approved/Proposed)	Whether the development is approved or proposed as of 1st March 2015
Location	The proposed location of the building(s)
Tallest tower height	The approximate height of the tallest tower. Taken from submitted planning statement or site proposal maps
Tallest tower (floors)	The approximate number of floors in the tallest tower per development. Taken from planning statement or proposed site maps
Estimated completion date	The earliest date when the development would be constructed. Taken from planning statement. If no date available then timescale of 2020+ used.
Number of Units	The number of residential units in the development. Taken from planning statement

Housing Unit Breakdown	
Table Headings	Description
Bedroom breakdowns	Data on unit breakdown taken directly from the planning statement
Affordable Housing	This comprises social rented, intermediate and affordable housing. For the purpose of data collection, affordable housing numbers are taken exactly how the developer presents them. This means affordable housing will contain a mixture of the above.
Social Infrastructure	This is any additional social infrastructure proposed by developments.

Population Projection	
Table Headings	Description
Student units	Students units are defined as yielding one adult (18+) per unit
Residential units	Projections calculated using the Greater London Authority development population yield calculator. Estimates are given based on three options: the development's PTAL rating, the development's Sub-region or the development's Borough (Lambeth) We chose the middle estimate to inform our study because it is in the middle of the higher and lower figures.

