

Old Oak North Development Framework Principles Addendum

March 2019



MAYOR OF LONDON

Old Oak North

Development Framework Principles

Addendum

March 2019

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1 | Introduction

1.1 Overview of the Old Oak North Development Framework Principles (DFP) Addendum

1.1.1 Overview of the Old Oak North DFP Addendum

This addendum to the Old Oak North DFP supports OPDC's Local Plan independent examination by outlining how additional work undertaken as part of the Old Oak Masterplan has built upon the principles set out in the original DFP document.

A key element of the additional work that has been undertaken has been to further demonstrate the deliverability of OPDC's draft Local Plan requirements within Old Oak North. This includes further evidence for how identified homes and jobs capacity can be delivered whilst meeting or exceeding other policy requirements relating environmental performance and quality of place. Key among these are the requirements to deliver 30% publicly accessible open space, necessary utilities infrastructure and improved levels of amenity.

The addendum also provides supplementary information which further demonstrates deliverability of Local Plan policies for Old Oak North through an assessment of a number of relevant London based precedent developments. The precedent analysis further demonstrates that delivery of similar densities in Old Oak can be delivered in a London context while achieving a high quality of place and exemplar environmental standards.

1.1.2 Housing Infrastructure Fund

In Autumn 2018, OPDC submitted a bid to the Governments Housing Infrastructure Fund (HIF) for public investment in infrastructure to support delivery of development in Old Oak. In March 2019, Government announced that OPDC has been successful in its bid with £250 million allocated kick start development at Old Oak.

HIF funding will be a major catalyst to enable development within in Old Oak North as set out in the Old Oak North DFP and OPDC's Local Plan. Specifically, it will allow OPDC to design and deliver the new key route of Park Road (to be named Union Way) including associated utilities infrastructure, SuDs, a new energy centre and an electricity switch station.





2

Further Information to Development Framework Principles

2.1 Connectivity

Further Information for the Old Oak North Movement Network

(Principles PR1, PR2, PR3, PR4)

Park Road will be a key corridor in enabling the early delivery of development in Old Oak North by unlocking development of adjacent sites. As well as its function as a movement corridor, Park Road will also support delivery of essential utilities infrastructure, including energy, telecoms, water and SuDS, necessary to support development.

Further assessment undertaken as part of the Old Oak Masterplan has identified how widening sections of Park Road from 20 metres to 24 metres will ensure the delivery of related principles for urban greening and utilities infrastructure. It will provide more space for pedestrians and cyclists to support high quality connections to surrounding areas.

Further assessment of the deliverability across the other corridors in Old Oak North, including Old Oak Street, Hythe Road, Haul Road and Local Streets has also been undertaken. Old Oak Street is now envisaged be delivered between 25 to 27 metres in width, with Hythe Road delivered at 20 metres, and other Local Streets at 18 metres.

The cross sections in figures 2, 3, 6 and 7 demonstrate how different widths will enable delivery of all nessecary requirements.

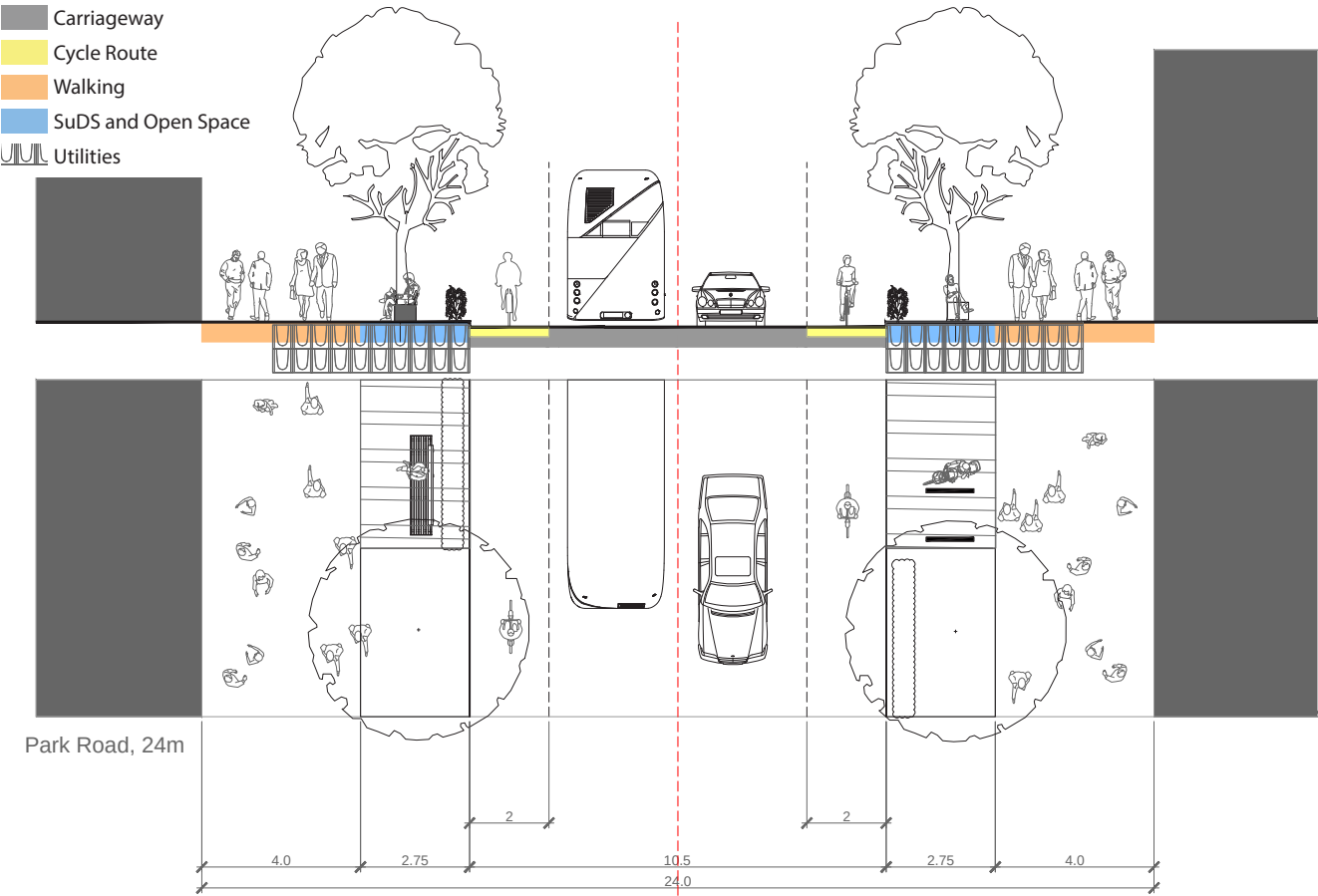
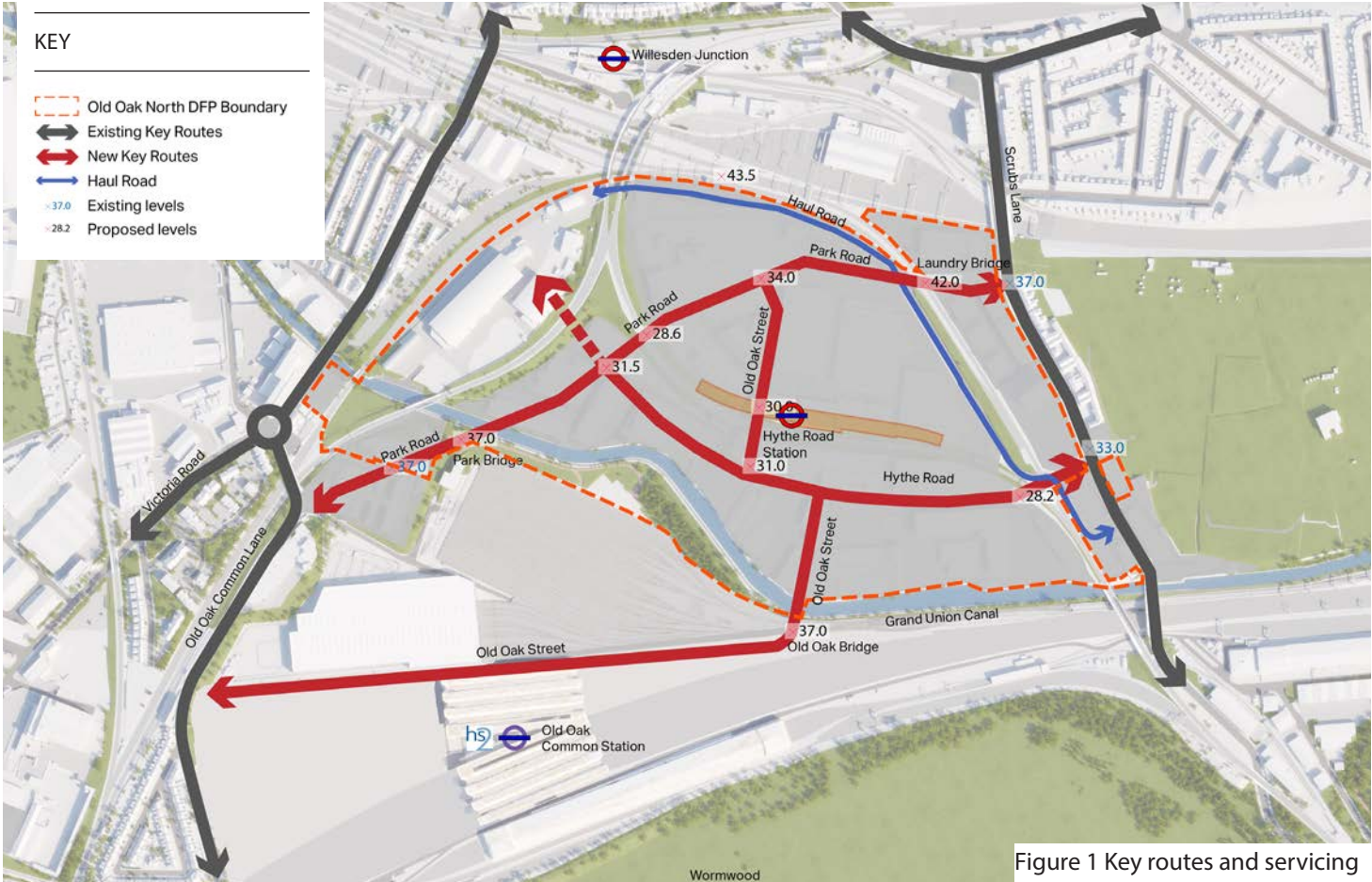


Figure 2 Indicative cross section of Park Road

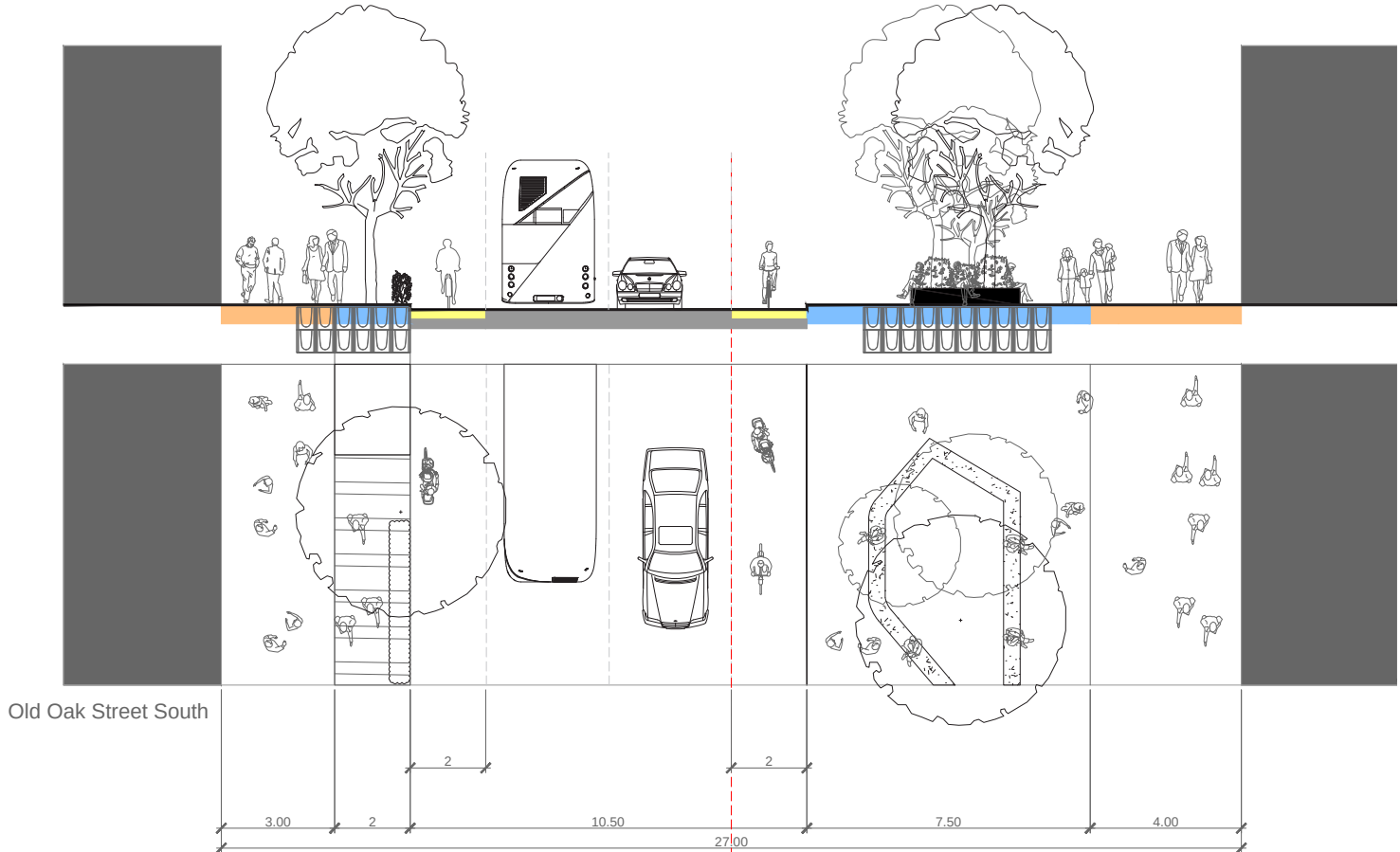
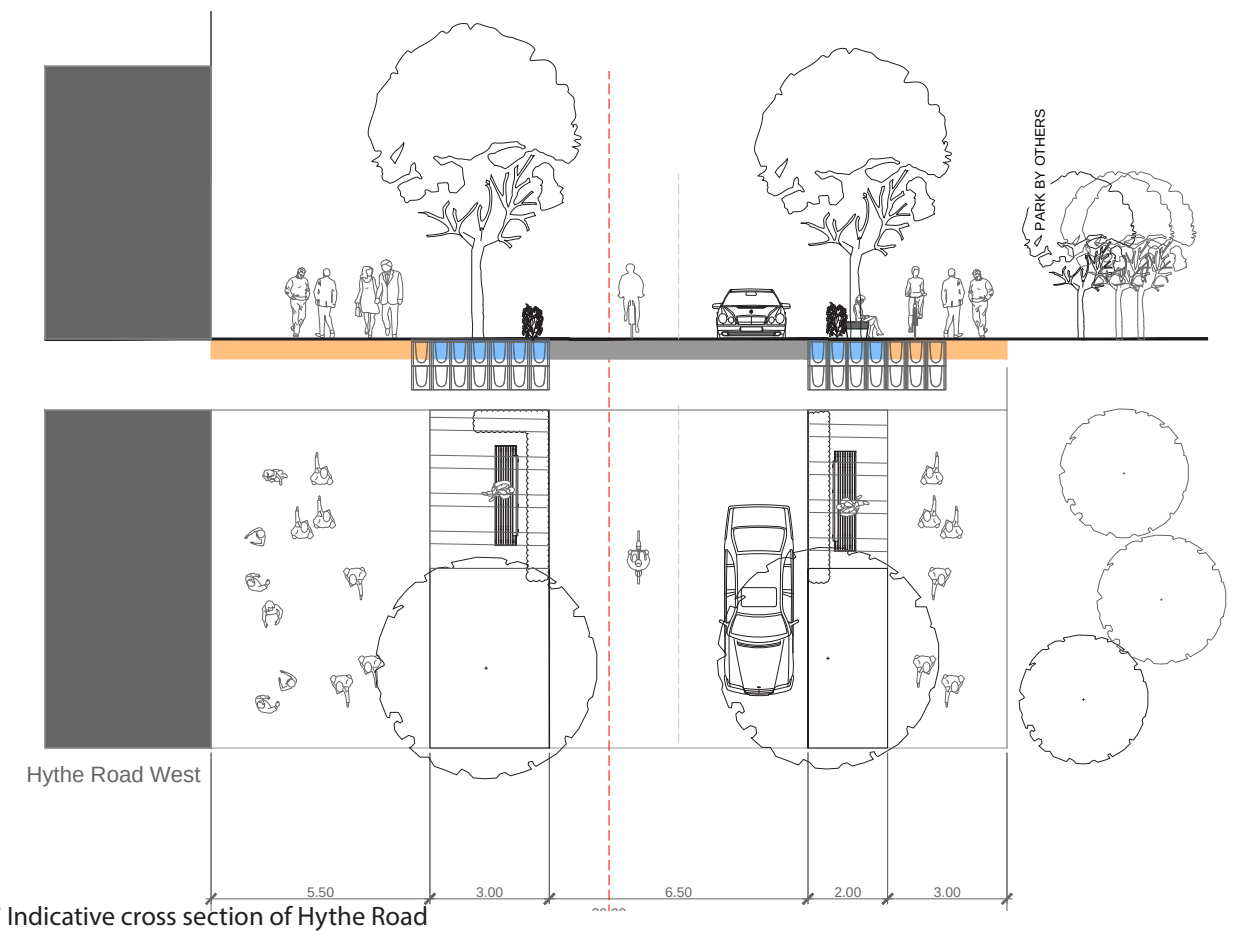
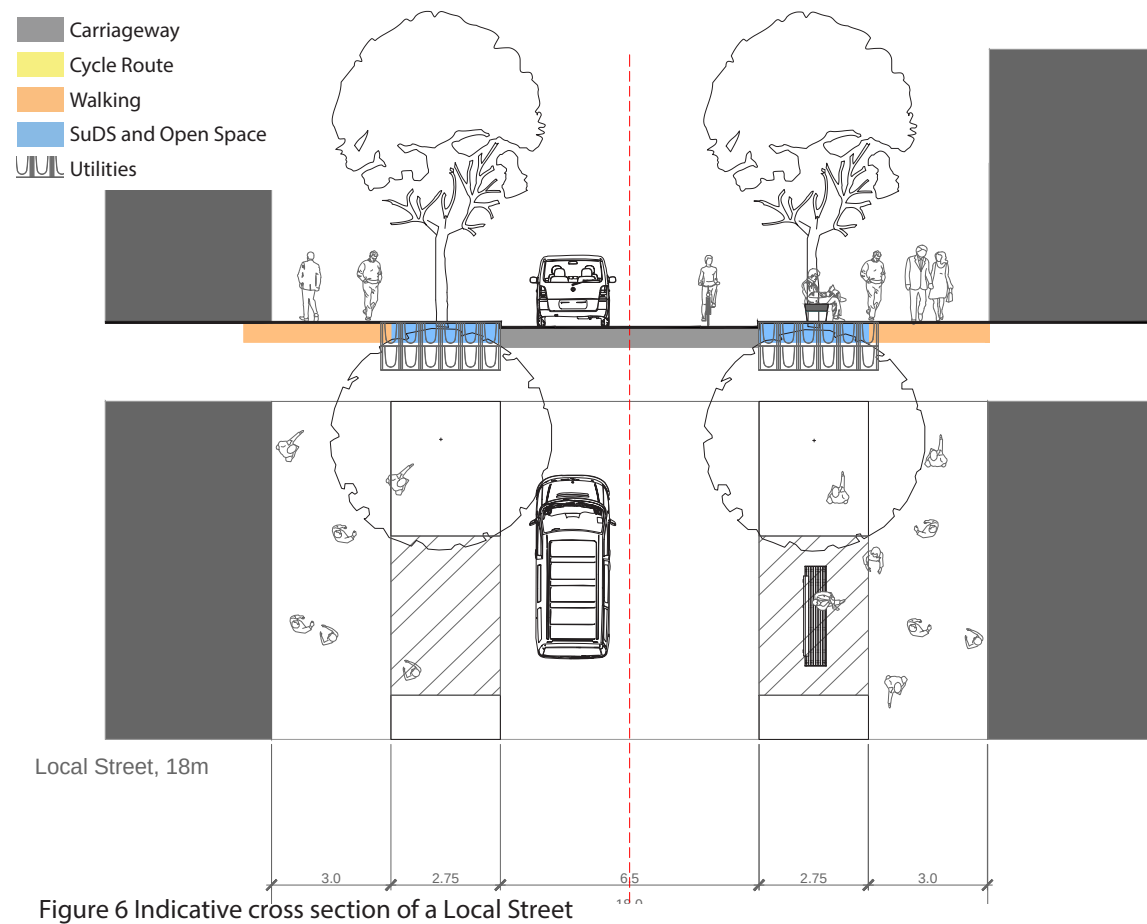
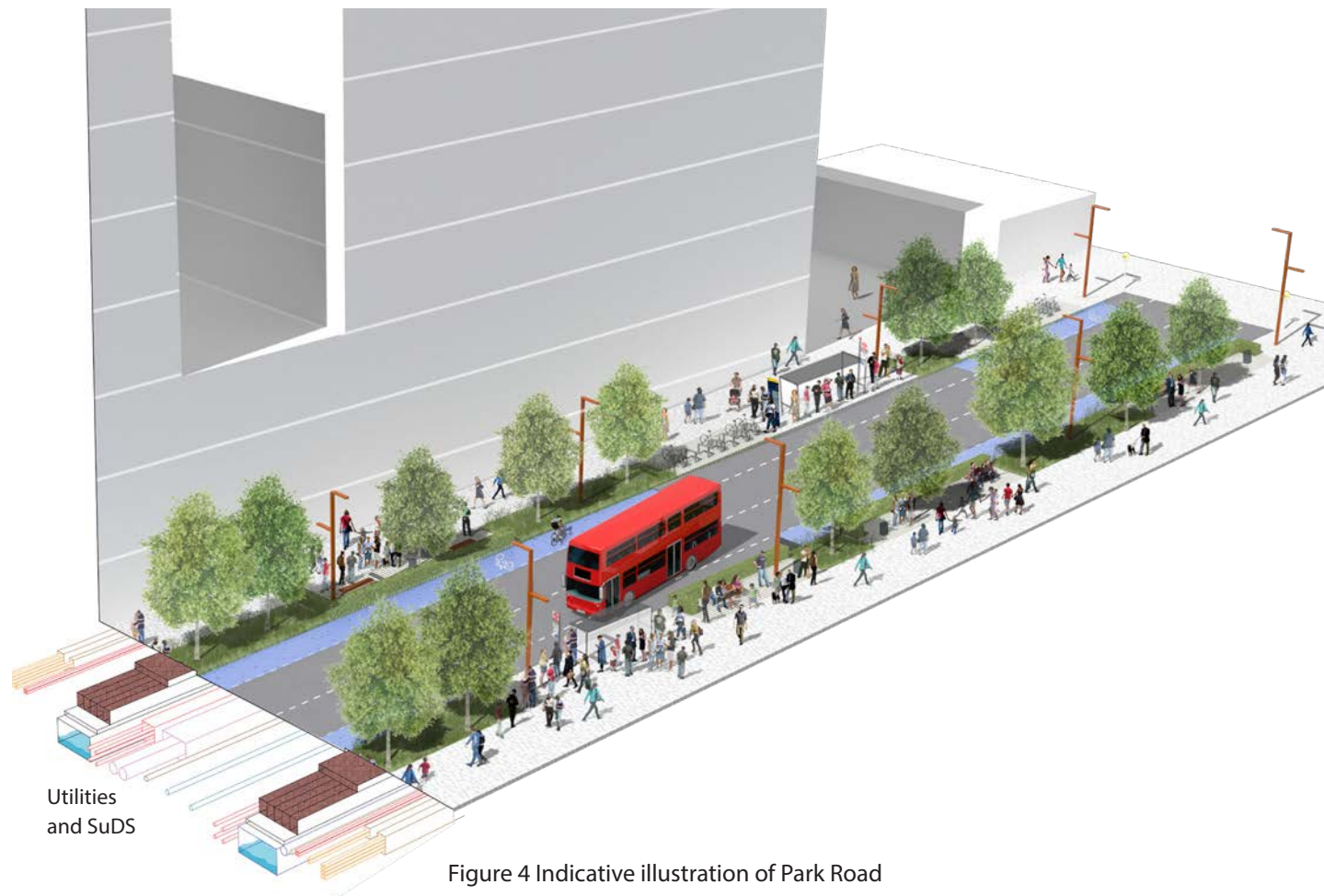


Figure 3 Indicative cross section of Old Oak Street



2.2 Green Infrastructure

Further Information for Green Infrastructure

(Principles PR6 and PR7)

Green infrastructure will deliver tangible environmental, social and economic benefits for the new community at Old Oak North. Proposals will support this by contributing towards the delivery of a series of connected and integrated open spaces and biodiversity rich habitats.

Further work undertaken as part of OPDC's masterplan process has demonstrated that the delivery of 30% publicly accessible open space is deliverable, with no reduction in proposed numbers of homes and jobs. The 30% provision will be comprised of the Old Oak North and Grand Union Canal Local Parks, the Rolls Royce Yard open space, and a series of smaller spaces and green streets shown in figure 8.

The masterplan process has also assessed how development may be optimised to address key environmental policies in OPDC's Local Plan relating to SuDS, amenity and micro climate at the proposed densities envisioned at Old Oak North.

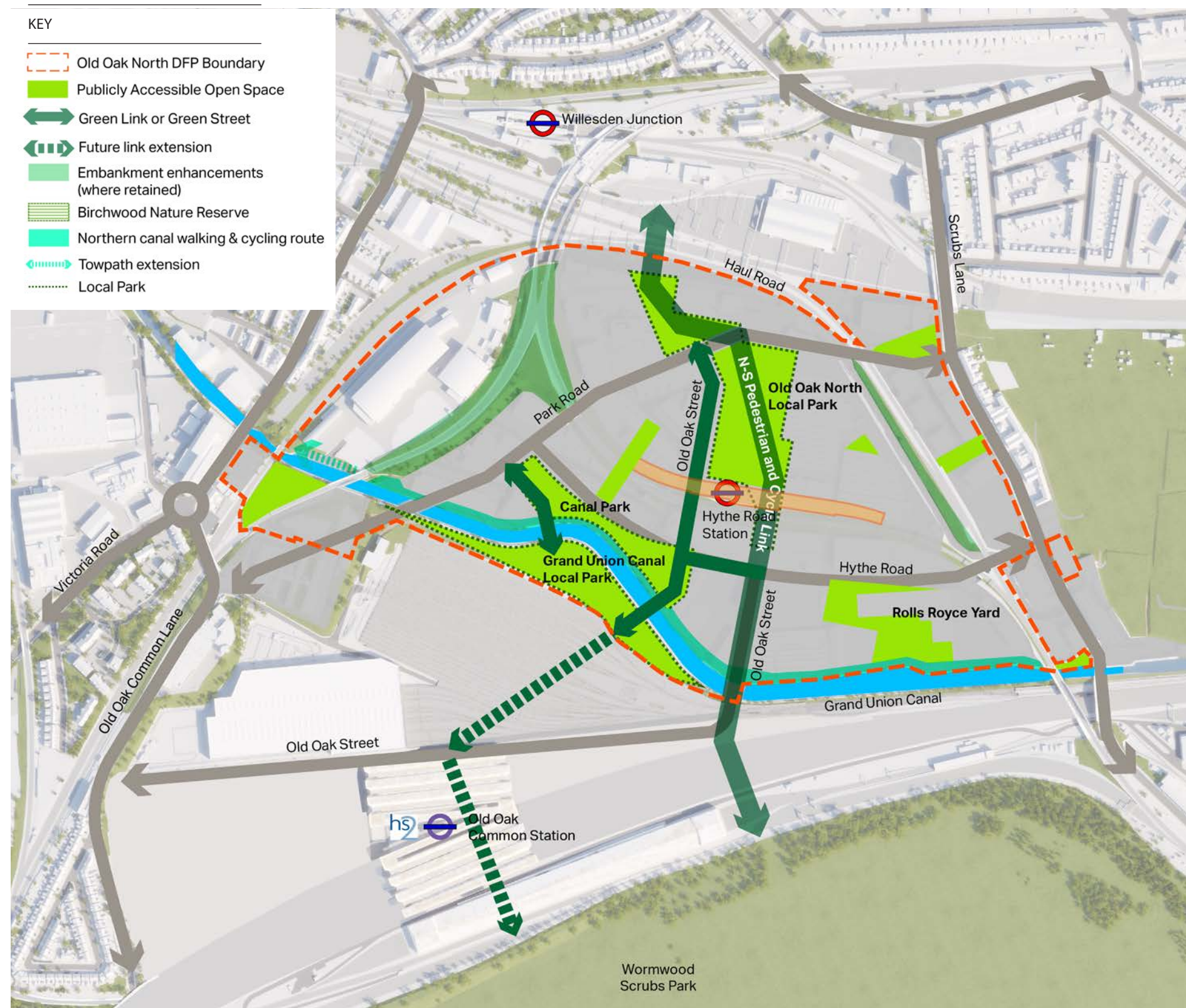


Figure 8 Green Infrastructure and publicly accessible open space in Old Oak North

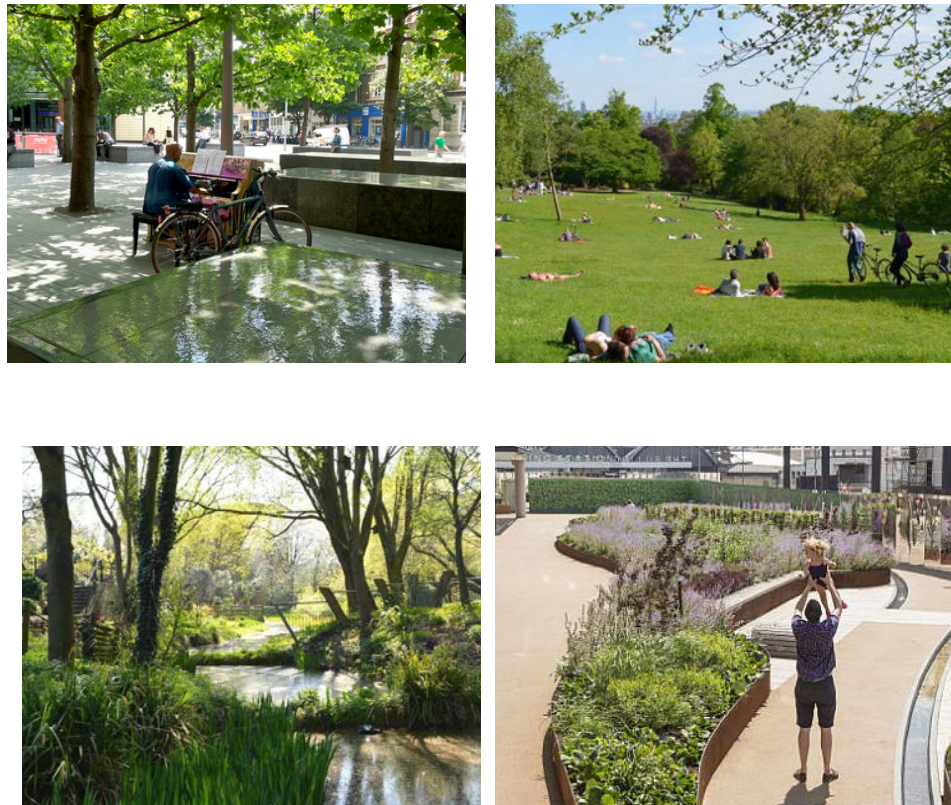


Figure 9 Green Infrastructure Precedents



Figure 12 Indicative illustration of Grand Union Canal Local Park

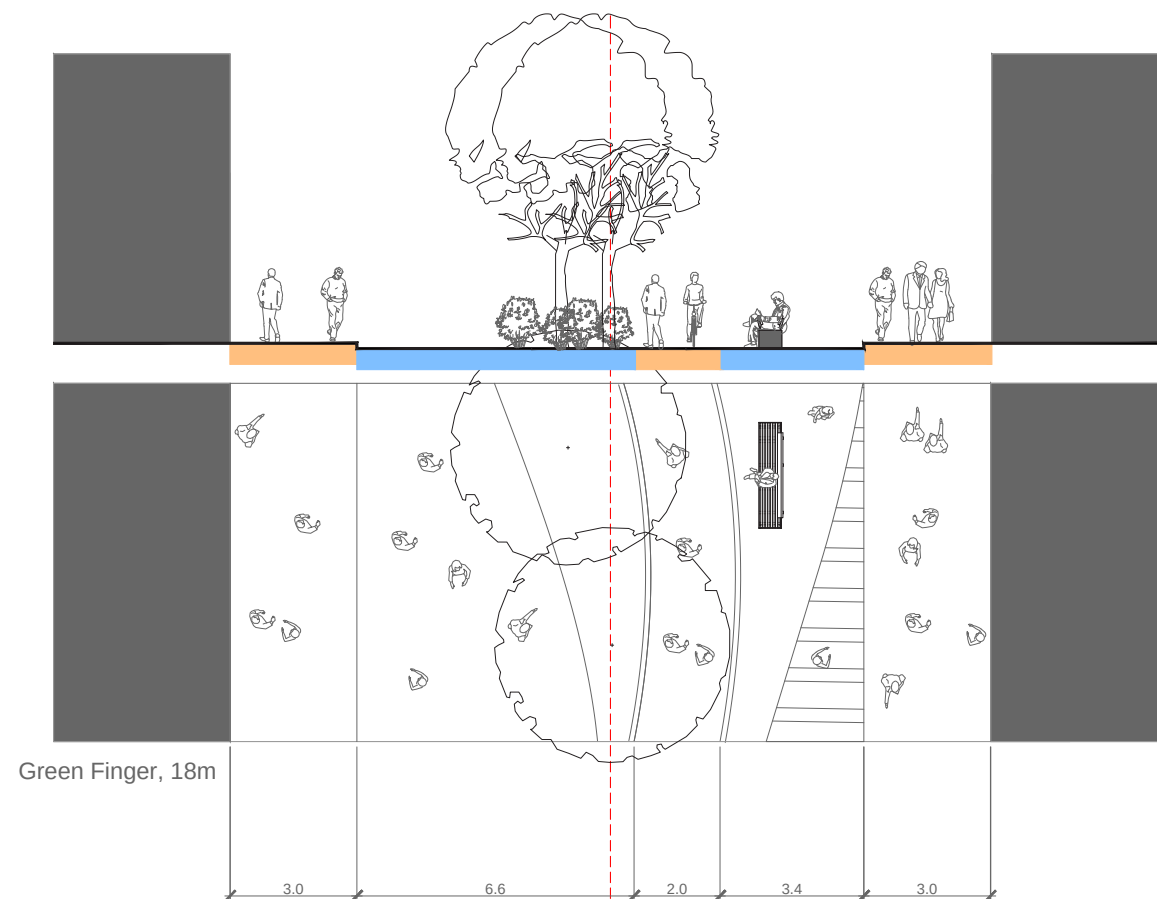


Figure 10 Indicative cross section of a green street



Figure 11 Indicative illustration of publicly accessible open spaces and green infrastructure integrated within the wider public realm

2.3 Utilities Infrastructure

Further Information for Utilities Infrastructure

(Principle PR12)

A coordinated utilities network will be essential to support development in Old Oak North. Key routes including Park Road, Hythe Road and Old Oak Street will be essential utilities corridors as well as movement corridors, and utilities infrastructure should form an integral part of their delivery. Further assessment has been undertaken to demonstrate how the requirements for utilities infrastructure can be properly accommodated within the key routes.

This assessment has determined appropriate widths for key routes and other streets to ensure the necessary utilities infrastructure can be accommodated for district heating networks, electricity and gas networks, potable water and storm water drainage. These are illustrated in figures 2-7, 11, 12, and 15-17.

The integration of SuDS within the streetscape and wider public realm has also been subject to more detailed assessment, demonstrating how the necessary water attenuation may be achieved and the additional benefits this provides for place making and green infrastructure.

Previous investigation into the requirements of the electricity network in Old Oak North considered that a new sub station was required to support development. Further assessment has determined that a sub station is not required, and that instead a transfer station will provide be sufficient to address network requirements.

It has also been determined that the Scrubs Lane energy centre should be located further south, to better enable potential heat extraction from the Grand Union Canal.



Figure 13 Key routes and indicative locations of utilities infrastructure

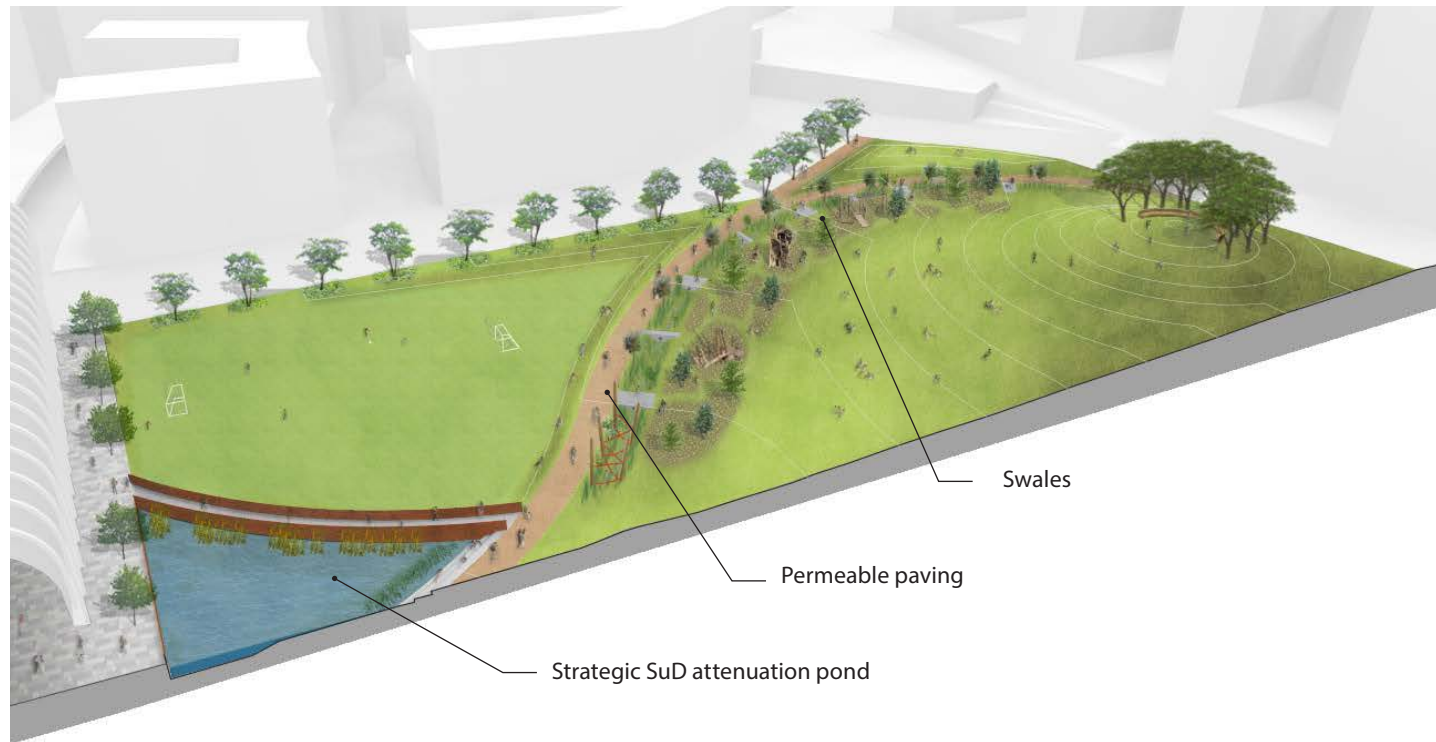


Figure 15 Indicative illustration of SuDS integrated into the Old Oak North Local Park

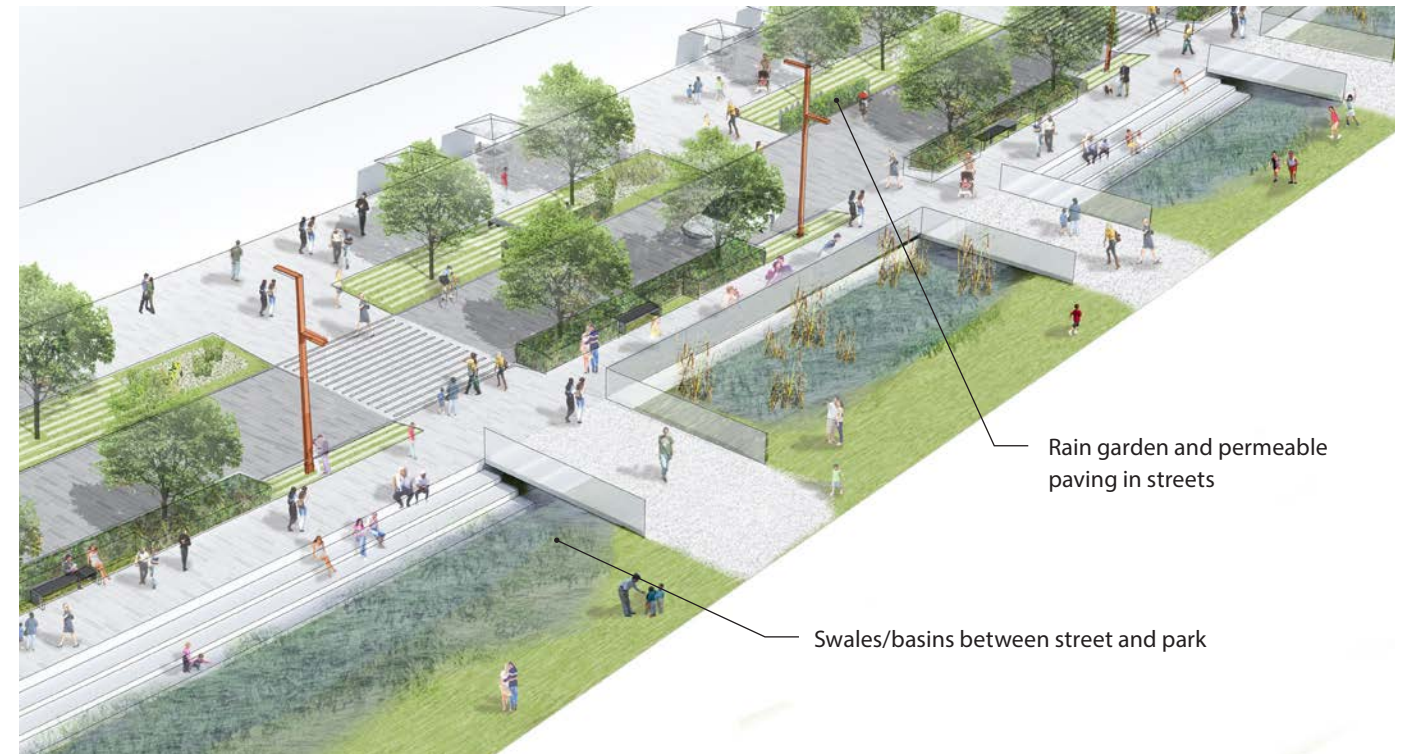


Figure 17 Indicative illustration of SuDS integrated into streets and public spaces along the northern edge of the Canal Park



Figure 14 Portlands Lake, East Village

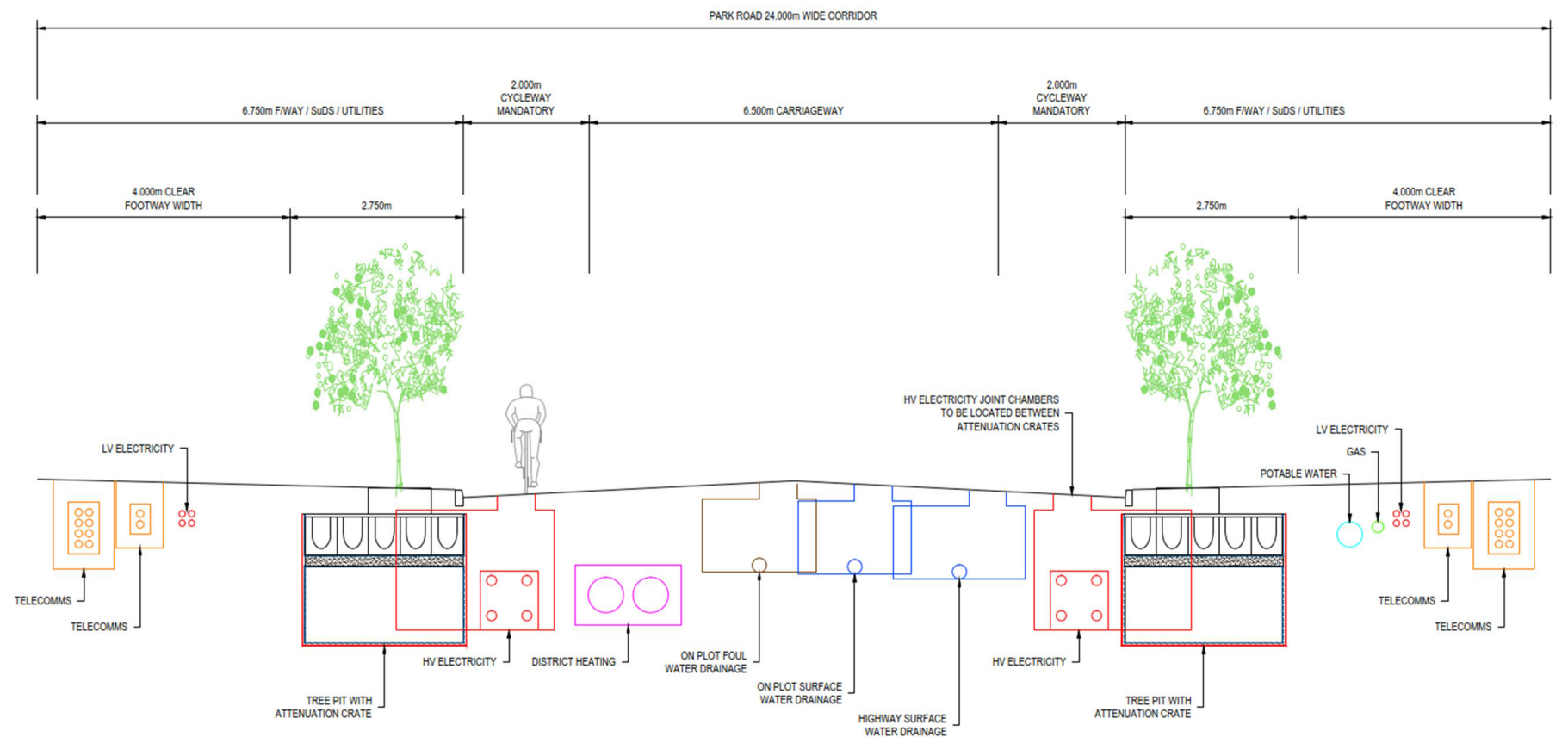


Figure 16 Indicative cross section of Park Road showing how utilities infrastructure may be delivered

2.4 Character, Capacity and Building Heights

Further Information for Character, Capacity and Building Heights

(Principles PR11, PR13, PR14)

Through the Old Oak masterplan process, OPDC has undertaken a rigorous assessment of the number of homes and jobs that can be accommodated to ensure development is optimised and meets the targets set out in the Mayor's London Plan. Through this, it has been determined that Old Oak North has the capacity to deliver 7,300 new homes and 3,900 new jobs, at an average net density of 600 dwellings per hectare (dph).

Development of the projected number of homes and jobs in Old Oak North must deliver on all other principles in this document, and related policies in OPDC's Local Plan and the Mayor's London Plan, relating to high quality of place. Additional work undertaken as part of the Old Oak masterplan has further demonstrated that, by optimising the massing of the development, principles in this document and related Local Plan and London Plan policies can be delivered.

This includes:

- delivery of 30% publicly accessible open space
- appropriate levels of daylight and sunlight in the public realm
- appropriate levels of wind distress
- achieving requirements for Sustainable urban Drainage Systems (SuDS)

The average net density of 600 dph does not include areas of publicly accessible open space. Therefore there is a direct relationship between the net density of development and the requirement for 30% publicly accessible open space to be provided across Old Oak North.

Section 3 of this addendum outlines a series of precedents which demonstrate that the densities proposed within Old Oak North have been delivered across London and can result in a high quality of place.

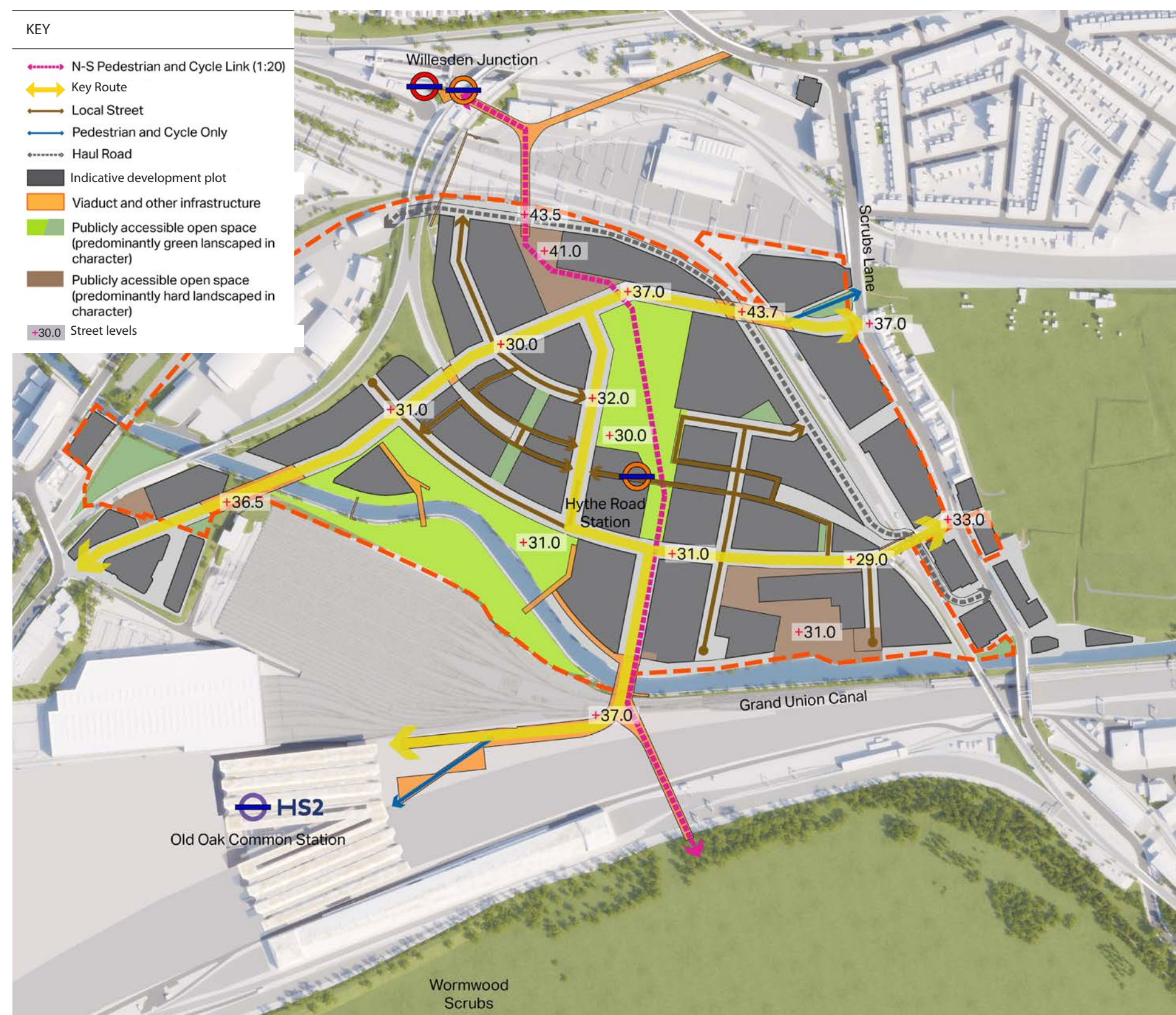


Figure 18 Development plots



Figure 21 Kings Cross

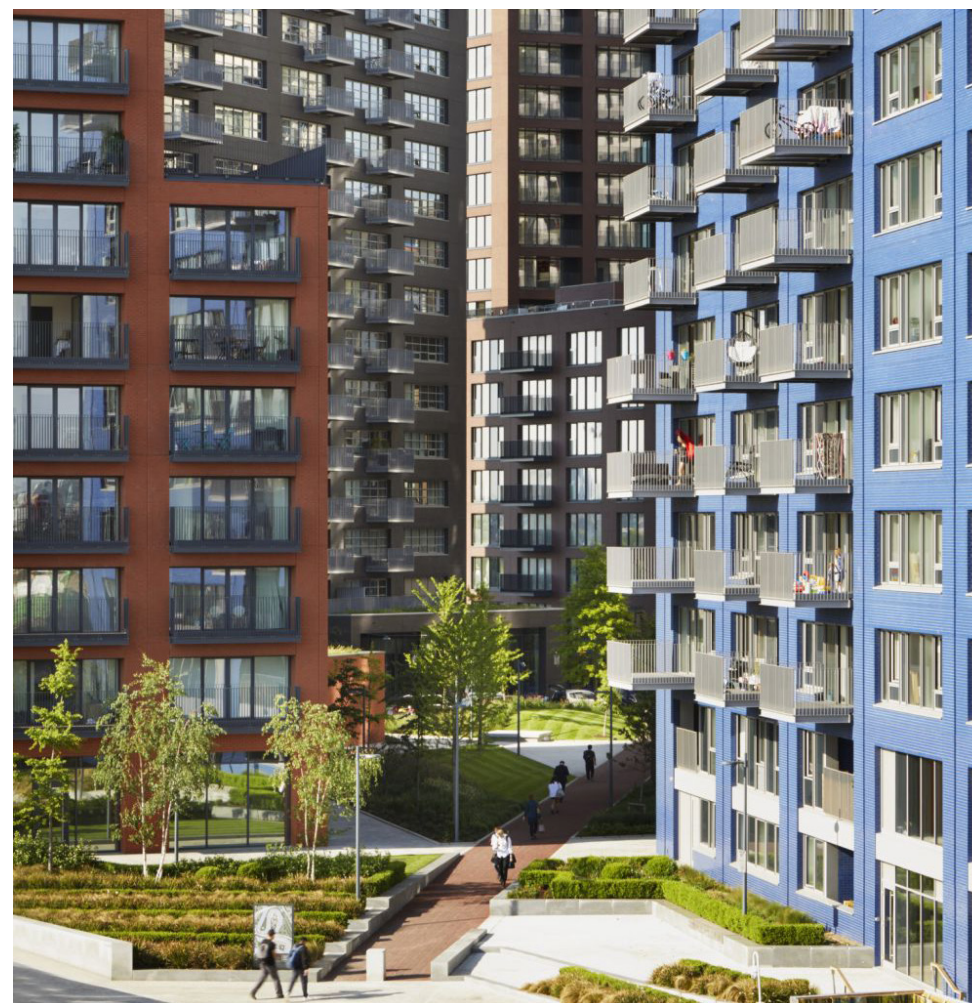


Figure 22 City Island, Leamouth

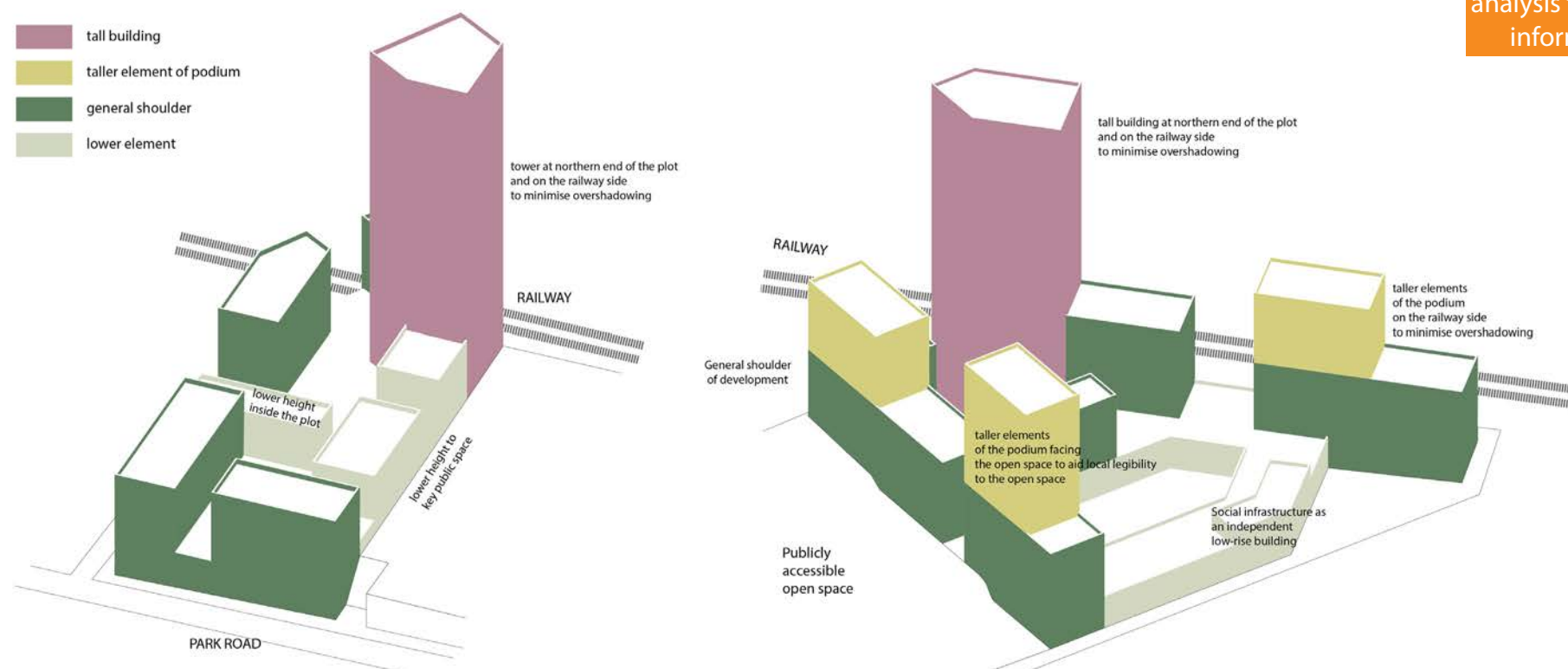


Figure 19 Illustration of how densities and building heights could be delivered on indicative development plots.



Figure 20 Aldgate Place



3 | Precedent Analysis

3.1 Introduction

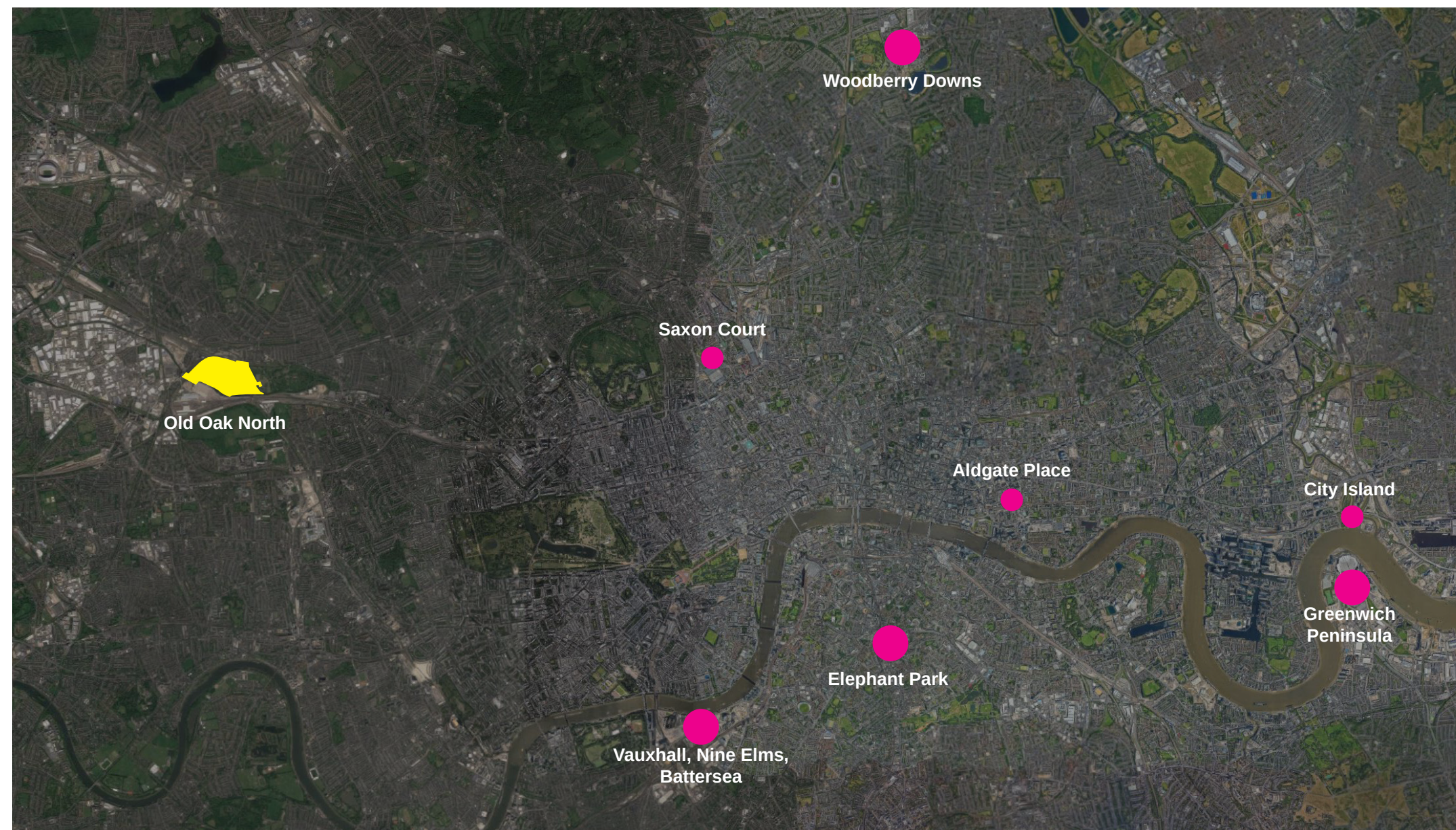
3.4.1 Overview

This section provides an overview of a series of precedent schemes from around London, delivered at densities similar or higher to those planned for Old Oak North which deliver a high quality place.

The precedent analysis helps to demonstrate the different ways in which a similar scale and density of development to that proposed in Old Oak North may be delivered in a London context. Crucially, it demonstrates how this can be delivered while achieving a high quality of place and exemplar environmental standards required by the Old Oak North DFP, OPDC's Local Plan and the London Plan.

Some of the schemes are recently completed, or are large scale regeneration sites set to be delivered over multiple years. As such, these will provide an opportunity for on-going learning for those bringing forward new development proposals in Old Oak North.

The density presented represents the net density of the schemes. This has been calculated by deducting public open space, primary road space and other non developable areas from the site area. The net density of development in Old Oak North will be an average of 600 dph.



Elephant Park

Elephant and Castle, London Borough of Southwark

2017 - Ongoing

Density: 741 dwellings per hectare (net)

The regeneration of Elephant and Castle is a major project by Southwark to provide a key element of which is the regeneration of the former Heygate Estate and Elephant and Castle Shopping Centre to provide 4,590 new homes and a new town centre hub for this inner London neighbourhood. A significant portion of the residential element of the regeneration has now been completed.

The regeneration area is surrounded by Victorian and Edwardian neighbourhoods of predominantly three-storey houses. To respond to this, the denser elements of the scheme have been focused towards the centre, with lower building heights and town house typologies to the edges.

A large new open space has been provided in the centre of the scheme, helping it deliver 25% publicly accessible open space. Buildings are set back from the street, which helps prevent a canyon effect and supports higher levels of daylight at street level.

The scheme demonstrates how the design of high density development can deliver a high quality place by responding to existing character and deliver a high level of amenity and environmental performance.



Saxon Court/Roseberry Mansion

Kings Cross, London Borough of Camden

2018

Density: 647 dwellings per hectare (net)

Saxon Court, Roseberry Mansion and Fenman House form a block of residential development within the broader King's Cross Central Masterplan. The block is located on the north eastern corner of the Kings Cross site where the majority of new homes are to be delivered, with employment and town centre uses focused towards the southern end of Kings Cross adjacent to Kings Cross and St. Pancras Stations.

The buildings are seen as a family of blocks, each subtly different but within a common approach to architecture and massing. The three buildings each deliver different tenures, but good design and shared communal spaces ensured this is achieved in a tenure blind approach. Saxon Court provides shared ownership apartments in the upper levels with social rented homes focused at lower levels. Roseberry Mansions provides extra care flats for residents aged 55 and over.

The buildings are designed around a central courtyard. Together the buildings feature a shoulder height of eight storeys with towers rising above; a 16 storey tower in Saxon Court and 14 in Fenman House. The taller elements have been located to reflect proximity, maximize aspect, allow more sunlight, and reinforce key views and public spaces at ground level. The design responds to the adjacent public green space by providing positive residential frontages which help to gently animate the space.

The scheme demonstrates how residential plots in Old Oak North can achieve high quality at high density, with a mix of tenures, and help to deliver lifetime neighbourhoods.



Aldgate Place

Whitechapel, London Borough of Tower Hamlets

2018 (Phase 1)

Density: 780 dwellings per hectare (net)

Aldgate Place is a residential led mixed use development located at a key gateway between the City of London and Aldgate. The scheme provides 463 homes, in addition to a new hotel and conference facility and town centres uses. The first phase of development was completed in 2018.

Tall buildings are an important part of delivering high density, with three towers between 21 to 25 storeys in height. The design responds to the surrounds this urban area, while inset balconies to southern facades help guard against overheating.

The majority of the ground level has been provided as publicly accessible open space in the form of a pedestrianised green street which is animated by active town centre frontages.

The scheme demonstrates how high density development can be delivered along key routes in Old Oak North along with town centre uses, and shows how tall buildings can be clustered at important focus points.



Woodberry Downs

London Borough of Hackney

2010 to 2030

Density: 648 dwellings per hectare (net)

Woodberry Downs is an estate regeneration project in the London Borough of Hackney, where a post war estate of 1,981 homes is be redeveloped to provide 5,561 new homes, along with new community, leisure and commercial uses. The regeneration programme is set to be delivered over 20 years, but significant amounts have already been completed.

The site adjoins the Stoke Newington reservoirs and the historic New River. The plan capitalises on its location by drawing the landscape deep into the site, increasing the amount of public space by more than 30% and creating new public spaces, streets and buildings that complement and extend the amenity of its location. This is supported by the delivery of lower building heights where the development fronts onto the reservoir, and helps to increase levels of amenity within the scheme.

The high residential density is achieved by some elements that are significant taller than the average shoulder heights across the development.

Woodberry Downs provides an appropriate precedent for development at Old Oak North, in particular for how proposals should respond to important assets such as the Grand Union Canal, Birchwood Nature Reserve, Wormwood Scrubs and Kensal Cemetery.



London City Island

Leamouth, London Borough of Tower Hamlets

2017 - 2020

Density: 631 dwellings per hectare (net)

London City Island has seen the redevelopment of previously industrial island/peninsula site, bounded by the River Lea and a network of road infrastructure. The development includes 1,600 residential units and 20,000 square metres of office space. The English National Ballet's new home helps to provide a cultural catalyst for the area, while a new footbridge connects the Island to the Canning Town station across the River Lea.

The irregular form of development responds to the constrained nature of the site, and includes a range building heights, but high densities are achieved without any individual prominent tall buildings. A large central open space provides high levels of amenity throughout, while the variety of uses at ground helps to ensure a vibrant and well used space.

The scheme is an appropriate precedent for development at Old Oak, in particular for how design can respond to a constrained site. It also demonstrates how a new community to be delivered on a previously isolated site and how cultural uses can successfully be integrated in high density development.



Vauxhall, Nine Elms and Battersea

London Borough of Wandsworth

2010 - 2025

Density: 912 dwellings per hectare (net)

Extending from Lambeth Bridge to Battersea Power Station, the Vauxhall, Nine Elms, Battersea Opportunity Area is the largest regeneration site in central London. The opportunity area is being delivered across a number of land holdings, with key catalysts in the new US Embassy buildings, and the redeveloped Battersea Power Station which is currently under development. Over two decades the area is set to provide over 18,000 new homes and over 700,000 sqm of commercial floor space. Development is enabling delivery of the extension of the Northern Line and new stations at Vauxhall, Nine Elms and Battersea.

A range of development typologies and design approaches are being used across the different schemes. Some schemes such as Riverlight utilise steel and glass as the primary materials and expose building elements in a brutalist manner. The Embassy Gardens and Residence developments however utilise traditional materials such as brick and respond to the interwar architectural character of some surrounding residential areas.

The net density of residential development in Nine Elms is significantly higher than that planned for Old Oak North, though this allows for large amounts of public open space and has enabled the delivery of the US Embassy and redevelopment of Battersea Power Station. This scheme demonstrates that providing active residential frontages at ground level, and clustering front doors at upper levels, helps to create a sense of community where residents can interact.



Greenwich Peninsula

Royal Borough of Greenwich

2010 - 2030

Density: 564 dwellings per hectare (net)

Greenwich Peninsula is one of the largest regeneration projects in London, delivering 13,900 new homes and over 300,000 sqm commercial floorspace. The predominantly residential scheme consists of a number of large blocks with very tall buildings and no standard shoulder height. The non-residential uses are largely provided as film studios, with the iconic O2 events centre to the north of the development area.

The high density of development at Greenwich Peninsula is supported by the site being surrounded by the Thames and by the provision of a large central park and other public spaces. This provides for a high percentage of open space and high levels of amenity throughout the public realm. The tallest buildings are focused to the northern portion of the peninsula, adjacent to the O2 arena and Greenwich station, and responding to the prominent cluster of tall buildings across the Thames at Canary Wharf. This area is also the focus for the majority of commercial uses, with residential neighbourhoods to the south.

Greenwich Peninsula is an appropriate precedent for Old Oak North, in particular how approaches to massing and tall buildings can respond to different types of settings and land uses, and how similar densities can respond to different areas of character. Public realm and green infrastructure provision also demonstrates a similar design and layout to that proposed at Old Oak North.

Please note this is a CGI



