Planning, Design and Access Statement

In support of a planning application for the installation of a Barclays Cycle Hire docking station on the carriageway on:

The eastern and western side of Duke's Road, south of the junction with Euston Road, London, WC1H, in the London Borough of Camden

Date: March 2013

TfL reference: 02/615506

MAYOR OF LONDON

Transport for London

Executive Summary

Transport for London (TfL) has coordinated the implementation of a comprehensive cycle hire scheme in London on behalf of the Mayor of London. Barclays Cycle Hire was launched by the Mayor in July 2010 and by the end of September 2012 over 16.7 million journeys had been made.

The scheme provides safe and convenient public access to cycles for short trips, especially for those who do not usually cycle or own a bicycle. It promotes the Mayor's vision for a sustainable and low emission transport system within London by actively encouraging cycling. Barclays Cycle Hire is set out in the Mayor's cycling strategy (Cycling Revolution London, 2010), along with other TfL initiatives, which will bring significant social, environmental, health and financial benefits to the Capital.

Building on the success of the scheme to date with 8,000 bicycles operating from 587 docking stations, the Mayor has announced his intention to expand the scheme westwards, to cover the London Borough of Hammersmith and Fulham and the London Borough of Wandsworth. In addition to expanding the scheme area, TfL is also currently intensifying the number of docking points in the existing zone.

This Statement incorporates a Design and Access Statement as well as providing an appraisal of relevant planning policy. It demonstrates how TfL, along with its partners, has had special regard for the design and location of the docking stations. The design of the street furniture, in particular the terminal design, has evolved through consultation with the host boroughs, the Royal Parks, and access groups. This collaborative process has led to a high quality docking station design which is adaptable to and visually appropriate in a variety of locations across London.

This Statement is provided in support of a full planning application for the installation of a Barclays Cycle Hire docking station on the eastern and western side of the carriageway on Dukes Road, south of the junction with Euston Road, WC1.

This Statement concludes that the proposal is supported by, and is consistent with, the relevant planning policy and guidance within national and local development plans and strategies. The docking station will be appropriate within the existing local environment and as part of the wider Barclays Cycle Hire scheme will contribute to an innovative and sustainable transport system in London.

Contents

Barclays Cycle Hire docking stations (clockwise from top left):

- *on a footway build out in London Borough of Camden;*
- *on the carriageway in Royal Borough of Kensington and Chelsea;*
- *on the carriageway in City of Westminster; and*
- *in Hyde Park, in City of Westminster.*

1. Barclays Cycle Hire

1.1 Statement Overview

This Statement is provided in support of an application for the installation of a Barclays Cycle Hire [inset foundation] docking station on the eastern and western side of the carriageway on Dukes Road, south of the junction with Euston Road, WC1, in the London Borough of Camden. The docking station forms part of the Barclays Cycle Hire scheme (the scheme).

Figure 1.1 shows an existing site before and after the installation of a Barclays Cycle Hire docking station.

Part 1 of this Statement provides background to the scheme, details of the docking stations and information regarding the implementation of the proposal. Part 2 explains the design principles for the scheme. Part 3 is an access statement which explains how mobility and access issues have been addressed. Part 4 provides a review of planning policy and guidance. Part 5 describes the planning application at this location.

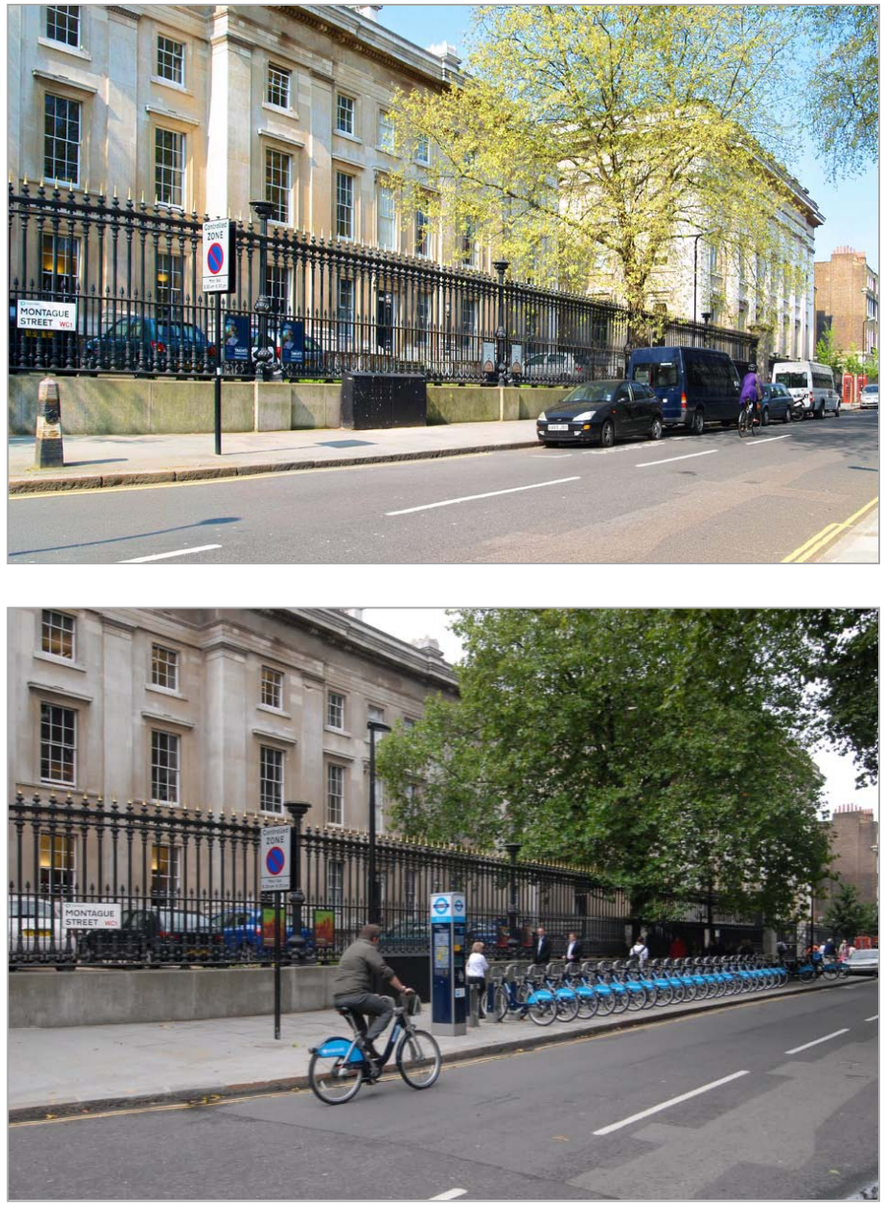


Figure 1.1: An existing site before and after installation of a Barclays Cycle Hire docking station

1.2 The Barclays Cycle Hire Scheme

Cycling within London is experiencing rapid growth. It is estimated that there has been an 117 percent increase in the number of cycling trips on London's major roads since the year 2000, with around half a million cycle trips currently taking place in London every day. The Mayor has set a target to increase the number of cycling trips within London by 400 percent by 2026, and more generally, improve conditions for cyclists.

To help achieve this growth TfL was tasked with implementing the Barclays Cycle Hire scheme within London in 2010. The scheme allows people to hire a cycle from a docking station, and return it to either the same or another docking station. To ensure the adequate availability of docking points and cycles for those hiring and returning cycles, docking points outnumber bicycles by 70-80%.

The scheme was developed in collaboration with the Royal Parks and the following nine London Boroughs:

- London Borough of Camden;
- London Borough of Hackney;
- London Borough of Islington;
- Royal Borough of Kensington and Chelsea;
- London Borough of Lambeth;
- City of London;
- London Borough of Southwark;
- London Borough of Tower Hamlets; and
- City of Westminster.

The scheme was launched in July 2010, and, following the delivery of phase 2 , there are now over 8,000 cycles across 587 docking stations. By February 2012, over 10 million cycle journeys have been made.

A survey of the scheme conducted in 2010 (*Barclays Cycle Hire Behaviour Change and Customer Satisfaction Survey,* TfL, 2010. Base 1,350 respondents) indicates high levels of customer satisfaction, in which 71% rated the scheme as 7 or more out of 10, and most would recommend it to a friend. Most journeys have been under 30 minutes in duration and are typically for commuting to and from work. Most users carry out a journey at least once a week. More than half of those using the scheme in 2010 did not usually cycle prior to Cycle Hire, indicating that the scheme has been successful in spreading the benefits of cycling to a new group of people and increasing the number of cycling trips in London.

Building on the success of the scheme to date, the Mayor has announced a commitment to expand the zone westwards to include the London Borough of Hammersmith and Fulham and the London Borough of Wandsworth. In addition to expanding the scheme area, TfL is also engaged in intensifying the number of docking points in the existing scheme area to meet the additional demand generated by the expansion.

TfL is to expand and intensify the scheme in 2012 and 2013. The Barclays Cycle Hire scheme will cover the area shown in Figure 1.2, and will deliver approximately 230 additional docking stations with 6,500 docking points.

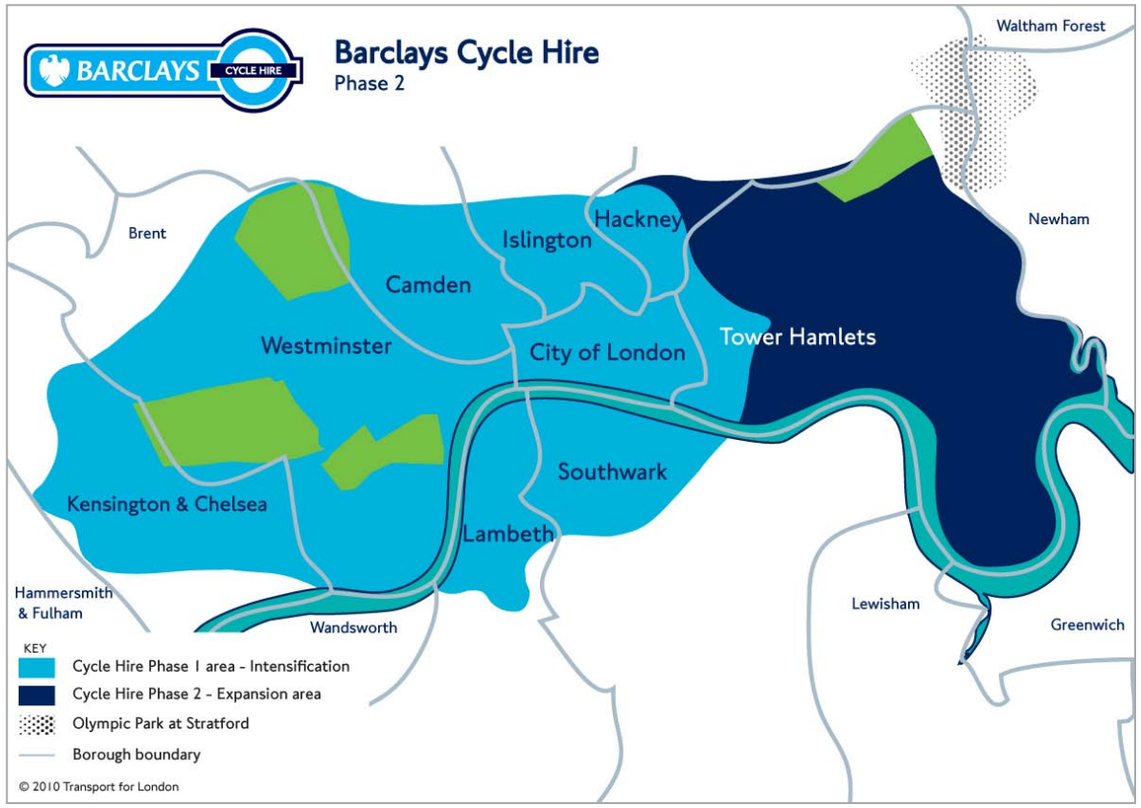


Figure 1.2: Barclays Cycle Hire scheme area

In preparing for the expansion and intensification of the scheme, TfL has worked closely with the associated London Boroughs.

Serco Group Plc (Serco) was appointed as the Scheme Operator in 2009. They worked with the Public Bike System Company (Montreal) to develop the Barclays Cycle Hire scheme in London, based upon the 'BIXI' System which successfully operates in Montreal (Figure 1.3). Serco design and build sites, and operate and maintain the scheme on TfL's behalf. Their contract includes the following:

- design and implementation of business support operations and maintenance processes;
- maintenance of assets;
- re-distribution of cycles around the scheme area; and
- customer service centre including the website and user communications.

Figure 1.3: BIXI docking station, Montreal

Scheme Benefits

Scheme benefits, both existing and anticipated long term benefits, include the following:

- a modal shift from other forms of transport to cycling. In the 2010 survey of Barclays Cycle Hire users, 35% of the journeys by scheme cycles were undertaken previously by London Underground. Other modes include 29% by walking, 23% by bus, 5% by private bicycle, 3% by taxi, 2% by train, and 1% by private motor vehicle;
- encouraging additional cycle trips in London, and greater uptake of cycling in general. The 2010 survey shows the scheme is attracting those who did not previously cycle, where six in ten started cycling in the three months previous to scheme launch;
- reduced journey times for users. In the 2010 survey, this reason was given most often for switching to the scheme, reported by 67% of respondents;
- improved health of users. This was the second most popular reason for switching in the 2010 survey, given by 62% of users;
- encourage a broader cross-section of the population to try cycling and experience the benefits of low-cost and active travel; and
- helps to remove a number of perceived and real barriers to cycling uptake, such as the expense of buying a bicycle, the fear of bicycle theft, the difficulty of storing bicycles, the lack of opportunities to try cycling for the first time or to improve cycling skills, and the difficulty of finding secure places to park bicycles.

The scheme also:

- allows a greater choice of public transport options;
- provides the fastest option for many short journeys;
- provides a transport mode that is available 24 hours a day, 365 days a year;
- encourages local trips within London by bicycle;
- offers a sustainable and low emission form of transport;
- offers a way to keep fit and lose weight;
- provides a good way to get to know one's neighbourhood better; and
- provides an inexpensive transport option.

1.3 Site Selection Criteria

A detailed site search to select appropriate sites for docking stations in London has been undertaken by TfL and the host boroughs, based on site selection criteria developed in collaboration with the scheme partners. The criteria take into account relevant local planning policies, supplementary design guidance, and TfL's own standards and design guidance. The key criteria include:

- no loss of trees and avoidance of grassed areas;
- minimal relocation of existing street furniture, including existing cycle stands;
- sufficient space to maintain clear pedestrian/vehicular paths/access;
- safe and secure areas with good natural surveillance, street lighting and/or where appropriate, close circuit television cameras (CCTV);
- close proximity to where people live and work, and attractors such as tourist destinations, and community and leisure facilities;
- avoidance of areas of high pedestrian congestion and areas known to be unsuitable for cyclists; and
- a presumption against sites where the docking station would have a detrimental impact on sensitive townscapes and/or the setting of heritage assets.

Each site is assessed on its merits having regard to its location and the surroundings. Not all of the above criteria are relevant to every site.

(The London Borough of Camden has developed additional site selection criteria as follows:
•the use of carriageways where there are single or double yellow lines;

•generally no loss of residents parking bays or specially designated parking bays - disabled, doctors, car clubs, electric vehicle;

•a location on, or near to, existing London Cycle Network cycling routes and/or cycling lanes;

•a location on, or close to, junctions to provide visibility to docking stations and consistency with Legible London design principles, particularly to make way-finding mapping on terminals as useful as possible; and

•the carriageway locations to allow for the construction of a footway build-out that creates a cohesive streetscape appearance.

The identification of sites on borough land in the London Borough of Camden that best met the site selection process involved officers from the transport planning, culture and environment teams within the borough.

1.4 Docking Station Design

Each Barclays Cycle Hire docking station comprises a terminal and docking points (Figure 1.4). The layout of each docking station and number of docking points is tailored to each site, depending on the available space, the proximity to buildings, the presence of street furniture and other relevant criteria listed above. Docking stations are located on footways, carriageways and other hard-standing areas.

The Terminal

The terminal (Figure 1.5) controls the locking and release of scheme cycles, enables payment of user tariffs, allows print out of journey records, provides information about the scheme and provides way-finding mapping of the local area and the location of other docking stations.

The terminal is four sided with a maximum height of 2.4m. Two faces of the terminal have a maximum width of 0.5m and the other faces have a maximum width of 0.35m. The TfL cycle hire logo (roundel) is located at the top of each face of the terminal, along with the docking station name. The 0.5m wide faces of the terminal each comprise way-finding maps and information panels (Faces A and C as shown in Figure 1.6).

Depending on the expected usage of the docking station, and whether it is located on the carriageway or footway, one (Face B) or two (Faces B and D1) of the 0.35m wide terminal faces will comprise a screen, keypad, and membership key reader. Where only one face of the terminal is used for payment, the remaining face will display additional information (Face D2). The face of the terminal that is orientated toward the carriageway (Face D1 or D2) will incorporate traffic regulations signage to avoid the need for a separate traffic sign.

The terminal colour palette comprises:

- body - dark blue (Pantone 296c);
- base, trim and cap – silver grey (RAL 9007);
- roundel circle - cyan blue (Process Cyan C100) ; and
- roundel bar - blue (Pantone 2767).

Figure 1.4: Barclays Cycle Hire docking station

Figure 1.5: The four sides of the terminal

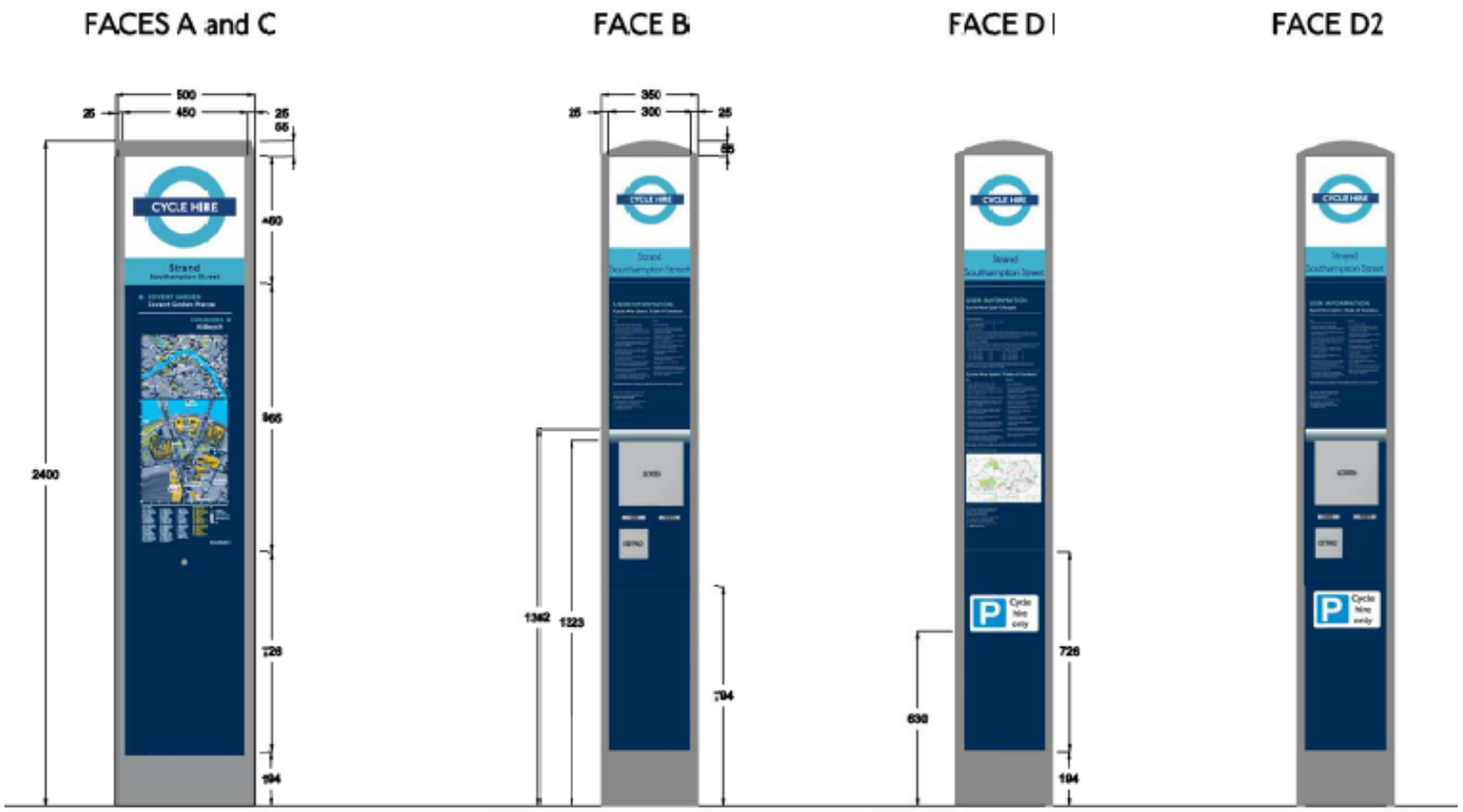


Figure 1.6: Terminal design

The terminal is constructed from the following materials:

- top cap, housing and main panels – cast aluminium with powder coat finish and a clear graffiti resistant coating; and
- information panels - toughened glass.

The TfL roundel is not illuminated. The way-finding maps and information panel can be illuminated on demand to improve visibility for users in poor light conditions.

The top of the terminal is curved to mitigate the collection of litter. It has also been designed to enable later installation of a solar panel if solar technology improves and sufficient power could be produced to operate the docking station.

The footprint of the terminal and its associated circulation area is generally a minimum of 2.0 metres by 2.0 metres, allowing ample space for people to use the terminal without causing obstruction to pedestrians. The exact location of the terminal within the circulation area is dependent on site characteristics, access to the required connection to electricity, and the need to retain clear pedestrian paths.

The Docking Points

The docking points (Figure 1.7) for the docking of scheme cycles, will be contained within a defined area (or areas) adjacent to the terminal. The dimensions of the docking point area(s) will vary between docking stations depending on the number of cycle docking points, the way in which they are laid out and the site constraints and characteristics.

The docking points each secure one cycle (Figure 1.7) and are laid out to provide a minimum of 0.75 metres between the centre point of the cycles once docked. The docking points area will be designed so that the cycles will be angled at either 45 or 90 degrees within the site. The cycle will be wheeled into the docking point where it will slot firmly into a secure locking cassette. Each locking cassette has a membership key reader to allow quick release of cycles for Barclays Cycle Hire members (refer Section 1.6).

Figure 1.7: The docking point, with one scheme cycle

The docking points each have a maximum height of 0.8 metres and maximum dimensions of 0.3 x 0.3 metres (Figure 1.8). The tops of the docking points are sloped to avoid litter accumulation and allow rain water to drain.

The docking points mirror the terminal in colour, being predominantly dark blue with silver inner panels, locking cassette and base, as outlined below:

- body – dark blue (Pantone 296c);
- inner panels, locking cassette, and base – silver grey (RAL 9007); and
- roundel – cyan blue (Process Cyan C100) .

The docking points are constructed from cast aluminium with a powder coated finish and a clear graffiti resistant coating.

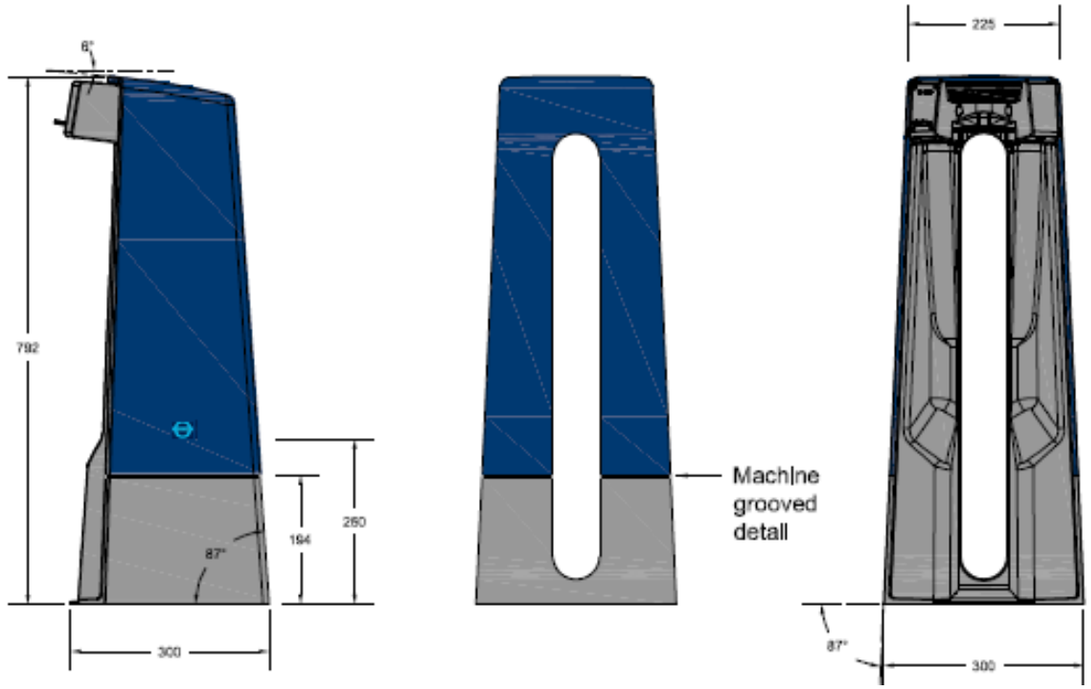


Figure 1.8: Docking point design

Foundations

The terminal foundations have a maximum depth of 0.45m (including the surfacing) and a maximum sub-surface plan area of 0.8 x 0.8 metres. The terminal is secured to a square foundation box.

The docking point foundations are 0.225 deep and 0.7 metres wide, and are constructed as a trench extending the length of the docking points area. Excavation will not exceed a depth of 0.318 metres from finished ground level. Figure 1.9 provides a cross section for a footway site. The docking points are each secured to a square foundation box (Figure 1.9), and its corners will be visible around the edges of the docking points (Figure 1.10). The cover of the foundation box will be finished to a high standard with a non-slip surface.

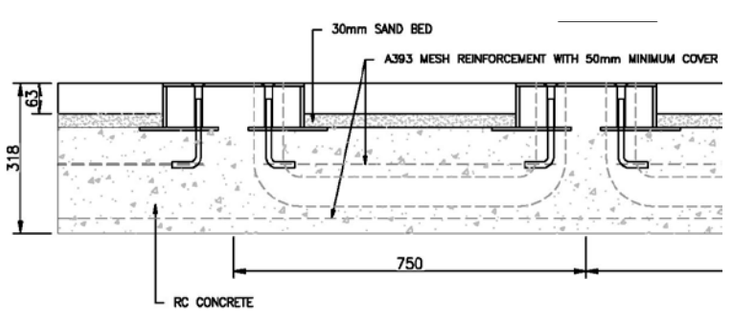


Figure 1.9: Cross-section of docking point foundations (not to scale)

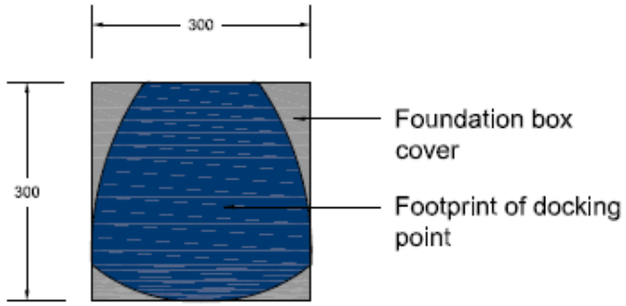


Figure 1.10: Footprint of docking point at base (not to scale)

1.5 Implementation

In addition to planning permission, other consents and orders, including a Traffic Regulation Order, will be sought for all docking stations. All preparatory works, including the installation of ducting to provide power and communications, will be undertaken prior to the installation of the docking station. Where the site is not located on part of the TfL road network, the works will be undertaken with the agreement of the relevant borough or other land owner.

Construction will normally take place over approximately 8-10 working days, and a 10 day New Roads and Streetworks Act permit will be sought to allow for site set-up and appropriate reinstatement.

Since the foundation depth for the terminal and docking point structures will be a maximum of 0.45 metres (including surfacing), the duration of excavation activities will be limited.

Within the 8-10 working days, the street furniture (terminal and docking points) is also installed and the equipment tested. This involves connecting the electrical cables and bolting the street furniture to the foundations. These are relatively quiet operations .

1.6 Operation

The docking station will be available for use 24 hours a day, seven days a week, with the main periods of use during weekday mornings and early evenings. The majority of patrons using the docking station are members who do not need to be at the station for long as they simply insert their membership key into a docking point to release a cycle. Casual users will register at the terminal and receive a cycle release code which they will enter using the touch sensitive numbered pad located above the key slot on the docking point (Figure 1.11).

The noise level associated with using the terminal is comparable to bus patrons using a ticket machine located at a bus stop, or to people viewing Legible London way-finding maps. The locking mechanism used to secure cycles to the docking points utilises innovative technology developed for the Public Bike System in Montreal. The design has been carefully optimised to ensure that the risk of cycles being stolen is minimised. The docking point has been designed to guide the user to wheel the cycle into the correct position to easily engage the locking mechanism.

The locking mechanism is contained within the docking point and the progress of locking and unlocking of cycles is indicated by discrete lights on the locking cassette (Figure 1.11). The release and re-docking of the cycles is expected to occur without any discernable noise. These design features all provide a streamlined system of releasing and locking cycles that is quick, easy, and efficient.

Contractual arrangements between TfL and the Scheme Operator regarding maintenance, repair and replacement ensure the appearance of the docking station meets appropriate standards. A key objective has been to minimise the physical depreciation of the street furniture through design by, for instance, the use of curved edges on equipment and the selection of robust materials and finishes that are easy to maintain.

Figure 1.11: Using the Barclays Cycle Hire docking station:

a using a membership key to release a cycle at the docking point;
b using the terminal for registration and/or information;
c printing out the release code from the terminal;
d entering release code at the docking point;
e re-docking the cycle at the docking point; and
f locking the cycle into the locking cassette.

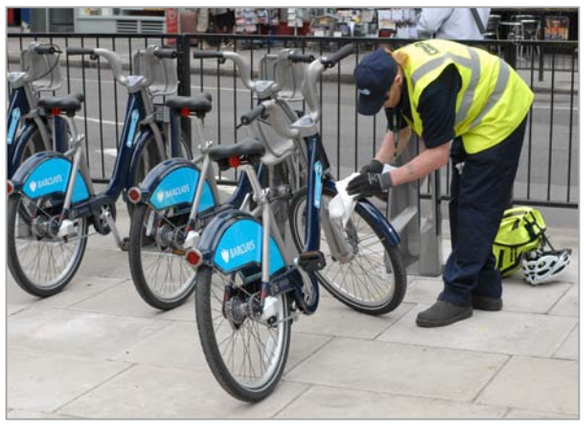


Figure 1.12: Maintenance and cleaning of the docking stations

Each docking station is inspected by maintenance staff a minimum of every 14 days to ensure all equipment is fully functional and a high standard of station cleanliness is maintained. Any damage identified during this visit is repaired on site where possible or reported for follow-up action. This inspection usually occurs during daytime hours when visibility is best and by a single member of staff on a scheme cycle (Figure 1.12). The noise generated by these activities is not anticipated to cause any disturbance.

In addition, docking stations are also visited when faults or damage is reported by users or following an inspection. The visit is usually by a single staff member on a scheme cycle who will assess the fault and if possible resolve it on site. Where this is not possible, an operational vehicle is directed to the station to collect and remove the equipment to the maintenance depot for repair (Figure 1.12).

The Scheme Operator maintains painted and treated surfaces, and repairs or re-applies treatments as required so as to retain the original finish and quality of the docking station equipment. All graffiti and vandalism is removed / repaired within 24 hours of it being reported.

The success of the scheme relies on the appropriate distribution of cycles across the network and availability of vacant docking points at the end of each hire. The scheme network has therefore been designed to maximise the natural redistribution of cycles.

As the scheme develops and the Scheme Operator continues to learn more about customer patterns of use, redistribution models will be revised. Furthermore, the network will be adjusted where possible to minimise the need for the redistribution of cycles, such as through intensification within the existing scheme area.

2. Design Statement

2.1 Overview

This section demonstrates how the design of the docking station evolved and explains how the scheme discourages crime and supports sustainability.
From the feasibility stage, TfL looked at operational cycle hire schemes in cities around the world, in particular the Paris (Vélib') and Barcelona (Bicing) schemes. The successes and shortcomings of these schemes have informed the design of the Barclays Cycle Hire scheme in London.

TfL developed the design in partnership with the host boroughs, the Royal Parks and other key stakeholders. This included working closely with English Heritage, Design for London, and access and inclusivity groups to produce a design appropriate for London. The final design, materials, finishes and livery were developed in close consultation with TfL's design standards team, who have extensive experience in the development and maintenance of street furniture in the London street context.

The result is high quality contemporary design, with detailing and finishes that are robust, sustainable and functional in the context of London. The final design complements and enhances the public realm in London, is equally appropriate in both traditional and modern townscape settings, and meets the requirements of users and stakeholders.

2.2 Case Studies

This section looks at the operational bicycle hire schemes in Paris and Barcelona and discusses how these schemes have influenced the Barclays Cycle Hire scheme.

Vélib': Paris, France
In 2007 Paris implemented a self-service bicycle system (Vélib') to promote sustainable travel and improve mobility and the quality of life in the city. After 18 months of operation, the scheme recorded between 80,000 to 100,000 users every day, 41 million users (in total), and 238,000 long term subscribers

The main characteristics of the Paris scheme are as follows (Figure 2.1):

- **The terminal** is oval in plan with dimensions of 2.1 metres (height) by 0.5 metres (width), with one main functional panel incorporating a payment point, Vélib' top-up card point and mapping;
- **The docking points** are for a single bike and are approximately 0.8 metres in height;
- **Bicycle release** from the docking points for subscribers is controlled by a swipe card system at either the terminal or a docking point;
- **Advertisement panels** are located in the vicinity of the site as the scheme is funded in part by advertisements;
- **The colour scheme** comprises grey terminal, docking points and scheme bicycles; and
- **The docking stations** are located on streets, pavements, parks and public squares.

Figure 2.1: Clockwise from top left: Vélib' Bicycle Docking Points, Vélib' Terminal, and Vélib' Advertising Panels

Bicing: Barcelona, Spain

The Barcelona scheme (Bicing) was implemented in 2007 and comprises 200 docking stations with 3,000 bicycles located approximately every 300 to 400 metres.

The main characteristics of the scheme are as follows (Figure 2.2):

- **The terminal** comprises a flat rectangular column that is approximately 2.5 metres in height and contains a payment point, a touch screen display and a small local area map;
- **The docking points** are connected to the terminal and comprise a single horizontal bar with upright supports;
- **Bicycle release** from the docking points for subscribers is controlled by a swipe card system at the terminal;
- **Advertising** does not form part of the scheme;
- **The colour scheme** comprises red, black and white bicycles, and a red and black docking point and terminal; and
- **The docking stations** are located on streets, pavements and public squares/plazas.

Figure 2.2 Left: Bicing Docking Point; and right: Bicing Terminal with Docking Station

A Design for London

The design of the London Barclays Cycle Hire docking stations has been influenced by the Paris and Barcelona experiences as follows:

Terminal - the height of the London terminal is similar to that of the Vélib‘ and Bicing schemes. This is considered appropriate in relation to the docking points and other street furniture. The images in Figure 2.2 demonstrate that the height is appropriate in the context of the centre of a large European city.

Docking points - the Bicing design features a horizontal bar with the docking points attached. The London scheme uses individual docking points to provide for pedestrian circulation between the docking points when cycles are not docked.

Bicycle release - the Vélib‘ scheme enables release of bicycles by way of a smart card system at either a docking point or the terminal. The London scheme also operates in this manner.

Logo/ Colour scheme - the Vélib', Bicing and London schemes have incorporated their own individual colour scheme and logo. The grey colour scheme of the Vélib‘ scheme makes it difficult to locate the docking stations from a distance. The London scheme incorporates a roundel and a predominantly dark blue colour scheme to ensure that the docking stations are visible and instantly recognisable to users.

Advertising - unlike the Vélib‘ scheme, the London scheme is not financed by advertising.

Location of docking stations - as discussed in Section 1.3 the docking station locations for the London scheme have been selected by TfL, the host boroughs and the Royal Parks using similar criteria as the Vélib' and Bicing schemes. They are, as far as is reasonably practicable, located in easily accessible locations on streets within convenient walking distance from prominent landmarks, attractions, public transport nodes and in commercial and residential areas where they will be in most demand.

Figure 2.3: Stage 1 – Design Conception Artists Impression

Figure 2.4: Stage 2 – Design Development Artists Impression

Figure 2.5: Stage 3 – Design Development Artists Impression

2.3 Design Evolution

This section explains how and why the docking station design has evolved during the design development process.

Stage 1: Design Conception
A preliminary design (Figure 2.3) was prepared to illustrate how the scheme may look and operate to initiate discussions with the host boroughs, the Royal Parks, interested local parties and design and access groups.

The terminal was shown with no cycle hire branding and was mainly designed to accord with relevant cycling standards and guidance.

Stage 2: Design Development (after initial consultation)
After discussion with the host boroughs and the Royal Parks the docking station design evolved to integrate more comprehensively with existing street furniture and in particular Legible London way-finding mapping and information. The TfL branding was omitted and the equipment was finished in colours from the Legible London colour palette (Figure 2.4).

Enhanced way-finding mapping was incorporated to give the terminal a dual function. The dark blue (near black) colour scheme was adopted to be consistent with the streetscape guidance standards adopted by many host boroughs. The yellow from the Legible London palette was incorporated on the advice of highways officers that this would be more visible to motorists.

Stage 3: Design Refinement (after further consultation)
The terminal and docking point designs were further reviewed following discussions with Design for London, English Heritage, the host boroughs and Royal Parks.

A three-sided triangular terminal structure was developed (Figure 2.5) as it minimised the space required to accommodate it, had no blank panels that could be subject to graffiti, and minimised opportunities for people to hide/ loiter behind.

The yellow colour was omitted from the colour palette as many of those consulted considered yellow to be inappropriate for London's more sensitive historic areas and the Royal Parks. The Cycle Hire roundel was incorporated into the design of the terminal (Figure 2.5).

A light green / turquoise colour was selected from a range of four colours available at the time in the approved TfL colour palette. This was considered appropriate given the nature of the scheme as a sustainable form of transport and the best fit with the proposed colour scheme for the terminal and docking points.

Figure 2.6: Stage 4 – Design Resolution Artist's Impression

Figure 2.7: BIXI docking station design

Figure 2.8: Barclays Cycle Hire docking station

Stage 4: Design Resolution

Following feedback from the boroughs and other stakeholders the terminal shape was changed from a three-sided to a four-sided rectangular design (Figure 2.6). The rectangular design offers the following benefits:

- traffic regulation signs can be displayed on the side facing the carriageway to negate the need for separate traffic signs and minimise street clutter;
- payment functions can be provided on the smaller faces of the terminal whilst providing way-finding information on the larger sides; and
- the way-finding maps and information can be displayed in the same orientation as Legible London mapping (i.e. perpendicular to the carriageway) to provide a clear form of mapping that maintains consistency with the appearance and functionality of Legible London mapping.

Stage 5: The Final Design

With the award of the contract to the Scheme Operator Serco, the final form of the street furniture was developed. The system is based on the 'BIXI' Public Bike System in Montreal which has received a number of international design awards (Figure 2.7).

The docking point is an innovative design by Michel Dallaire, the internationally renowned industrial designer. Rather than the side locking system visualised in the indicative docking point design, the design utilises a cassette type locking system that accommodates the front wheel of the cycle within the docking point.

The cycle is wheeled into the docking point and secured into the cassette by a locking triangle on the front fork of the frame. This provides a robust docking and locking system which is simple to use and avoids the locking faults experienced by other schemes.

Due to the climate in Montreal, the BIXI scheme is not operational during the winter and the docking stations are removed from the street. Transport for London has worked with the contractor and designer to develop the street docking point and terminal design to be suitable for the London context as a permanent addition to the public realm.

The materials, livery and finish have been the subject of careful consideration and as a result, the use of cast aluminium with powder coated finish and a clear graffiti resistant coating was selected, along with toughened glass for the mapping, information and roundel panels. The materials and finish achieve a robust and high quality appearance that suits the function, location and usage of the street furniture. The livery remains very similar to the previous design iteration but has been refined as part of the design process (Figure 2.8).

In finalising the functionality and operation of the terminal, there were some minor changes to the layout of information, many resulting from stakeholder comments. These included docking station naming to provide both the locality and street, and directional information moved to the top of the mapping panels to improve visibility. The details of the traffic regulation signage on the terminal were agreed by the Department of Transport and a smaller plate was incorporated on the elevation facing the carriageway at a higher position to improve visibility (Figure 2.9).

In February 2011, the scheme won the transport category in the Brit Insurance Design Awards, which showcases the most innovative and forward thinking designs from around the world. Londoners and visitors to London have praised the cycles for their reliability, convenience, ease of use, and value for money. The Design Awards recognises them for their style as well.

Mayor of London, Boris Johnson, said: "I need no convincing that London's blue bikes are simply the best way to travel. With the backing of the aficionados of the design world I hope this is the first sign of the bikes becoming a design classic like London's iconic red bus or black cab.“

An outline of all design development changes are shown in the table in Figure 2.10.

Figure 2.9: Docking point and terminal (left), Police call box (middle), and Red phone box (right)

Summary

The docking station is easily identifiable - clear image which is easily seen and distinct. The TfL roundel makes it recognisable as a transport scheme, consistent with other modes of public transport in London (Figure 2.10).

The design is compatible with London streetscapes - the dark blue colour is consistent with Legible London and the black livery colour scheme used on most street furniture. The roundel is common place on London streets and the cyan blue colour is compatible with a variety of sensitive environments, including the Royal Parks. The scheme continues the London tradition of four-sided street furniture, such as the police call box and red telephone box (Figure 2.9).

The docking station minimises street clutter - it has been designed to incorporate way-finding mapping and traffic regulation signs, removing the need for separate structures in the street.

The docking station is visible and maintains clear paths - the terminal and docking points have been designed to be noticeable to pedestrians in terms of their height, material and colours. They are located where there is sufficient space to accommodate the street furniture without causing an obstruction.

The design is adaptable and functional - the terminal can be tailored to provide 1 or 2 faces with registration/payment functionality, depending on the demands of the location.

Component	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5: Final Design
Terminal	Oval shape Approximately 2.0 m in height Payment and registration facilities Basic mapping	Terminal height increased to 2.4 m Enhanced way-finding mapping and information	Triangular design Width of each side max. of 0.5 m Docking station location name incorporated Large way-finding mapping panel(s) Screen lowered to comply with equality and inclusion standards	Four-sided rectangular design Max. footprint of 0.5 x 0.35 m Larger faces for way-finding mapping One or two smaller side(s) for payment and registration Traffic regulation signage facing carriageway	New station locality and street naming convention Improved layout of information on the terminal to improve usability Traffic regulatory signage reduced in size
Docking Points	Stand alone docking points Cycles at each docking point 0.75 m apart Single or double row arrangement Orientation at 45 or 90 degree angle to kerb	Design refined to better reflect docking station functions	Top sloped to prevent litter accumulation and allow rain water to drain	No change	Service Operator's design Cycle wheeled into docking point and locked by a secure cassette locking system
Branding and colour	Blue TfL roundel Grey terminal and docking points Red cycles	No TfL roundel Dark blue, yellow and silver terminal and docking points Yellow and dark blue cycles	Illuminated turquoise TfL roundel on terminal Miniature roundel on each docking point Borough, Mayor and TfL logos on terminal Dark blue and silver terminal and docking points with cycles to match	Roundel panel reduced in size from 450mm to 350mm Roundel panel no longer illuminated No Mayoral logo No change to colour	Cycle Hire roundel changed to cyan blue No other changes
Materials	Not detailed	Brushed stainless steel base Other materials not specified	Base and trim- brushed stainless steel, steel or aluminium Main panels- stainless steel, steel or aluminium sheet with vitreous enamel finish Information panels- toughened glass	No change	Terminal housing and main panels - cast aluminium with powder coat finish; information panels - toughened glass; top cap – thermoplastic moulding Docking Points: cast aluminium with powder coat finish
Location of sites	Site selection criteria under development with host boroughs and Royal Parks. Suitable locations included: - Safe and secure areas - Easily accessible areas, within walking distance of landmarks and attractions	No change	Site selection criteria developed further in consultation with host boroughs and Royal Parks (refer to section 1.3)	No change	No change

Figure 2.10: Summary of the design development changes Stages 1-5

2.4 Designing Out Crime

An early Crime and Disorder Assessment of the scheme was carried out by TfL. Site selection has been informed by this assessment and the following measures have been included in design:

- Where possible , docking stations will be located where there is a degree of informal surveillance from pedestrians, other road users and occupiers of nearby buildings;
- In the majority of cases the docking stations are located adjacent to street lighting, and where possible, terminals will be orientated to take advantage of this criteria;
- Some locations within London already have adequate closed-circuit television (CCTV) surveillance, and where appropriate TfL will discuss the realignment of existing CCTV to suit the docking station location;
- The locking mechanism at each docking point is controlled via the terminal or by membership key, thereby reducing the potential for theft of scheme cycles. As discussed in Section 1.6, the docking point and its locking mechanism have been designed to be robust, secure and user friendly to avoid the problems of bicycle theft initially experienced in Paris;
- The terminal will only enable cycle hire by credit and debit card, and membership key, to reduce the potential for theft and crime associated with payment by cash. Anti-skimming devices have been installed in the terminal; and
- A “no return charge” applies to the hire of cycles to deter theft once hired.

Furthermore, the borough’s site selection process involves consultation with local Met Police representatives and crime prevention design officers.

2.5 Sustainability

TfL has carried out sustainability assessments utilising the TfL Sustainability Assessment Toolkit. The Toolkit builds on sustainability principles and requirements as set out by UK legislation and Mayoral policies. It is designed to enable TfL to balance sustainability impacts and influences so as to optimise the benefits it delivers.

The assessment looked at the project’s ability to deliver the core sustainability themes that support the development of London as a sustainable world city. These themes are:

- economic progress;
- climate change;
- the physical environment;
- safety and security;
- health and well being; and
- equality and inclusion.

The project’s contribution towards each sustainability indicator and theme is shown in Figure 2.12. This shows all indicators making a positive enhancement to sustainability.

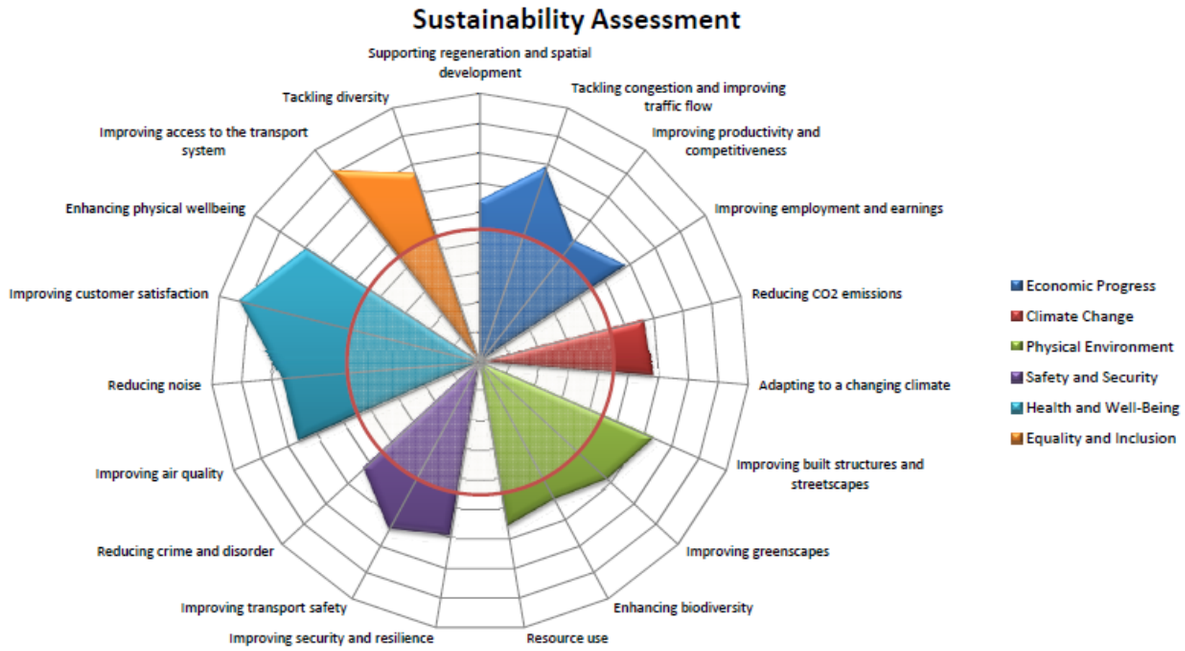


Figure 2.12: Findings of the Barclays Cycle Hire scheme Sustainability Assessment

Economic Progress

The scheme introduced a new transport mode into London. It offers an additional choice to users, improves accessibility within the nine involved London boroughs, and makes some journeys quicker and/or more reliable particularly during peak times. The scheme also increases mode choice by removing barriers such as the cost of bicycle purchase, lack of storage and fear of theft or vandalism. The cost of using Barclays Cycle Hire compares favourably with other modes of transport and provides a cost effective means by which local communities can access employment, education and the other opportunities that London offers.

At the end of 2010, the scheme was generating around 20,000 additional bicycle trips per day, which represents an increase from the average 500,000 daily trips across London. The purposes of the additional trips include travelling to education establishments, for shopping, leisure, and tourism, and approximately 67% of journeys being carried out to travel to and from work.

Furthermore, in 2009, TfL conducted research to assess the economic importance to town centres of the different modes of arrival. The research found that people walking or travelling by bike spent more in local town centres than those travelling to town centres by bus or car (Understanding the Economic Contribution Made by Bus Users to London's Town Centres, TfL, 2009). It found that, on average, cyclists outspent car users by almost £20 a month.

Climate Change

The scheme replaces some existing pay-and-display parking spaces on the carriageway, and provides an alternative form of transport, resulting in some users switching from motorised forms of transport to cycling. The way-finding information displayed on the terminal also encourages walking in the scheme area. As noted in the scheme benefits, there has been a modal shift from other forms of transport to cycling, which makes a contribution to the reduction of CO_2 emissions across London.

The docking stations are maintained and monitored primarily by cycle, and redistribution is carried out by vehicles. Some vehicles use purpose-designed trailers where appropriate to achieve maximum efficiency and reduce the number of trips. All light goods vehicles will produce under 150 grams of CO_2 per kilometre in accordance with TfL's contract specifications.

The terminals are designed to, as far as is practicable, minimise energy consumption. There is potential for the top of the terminal to be fitted with solar panels to trickle feed the power supply if this becomes technologically feasible in the future. The roundel on the terminal is not illuminated. The way-finding maps and information panels are only illuminated on demand to improve visibility for users in poor light conditions.

Physical Environment

Comprehensive site selection criteria (as described in Section 1.3) were developed in consultation with all host boroughs and the Royal Parks and tailored to local circumstances. These criteria have ensured that there will be no detrimental impact on sites of historical, archaeological or cultural value, or on the visual appearance of an area.

Safety and Security

The rate of fatal road accidents involving cyclists has been observed to reduce when additional numbers of cyclists are introduced to the roads This is due to an increased awareness of cyclists, which helps stimulate an increased awareness of cyclist safety. For example, when the Paris (Vélib') scheme was introduced the cycle fatal accident rate decreased by 18%. It is anticipated that a similar reduction will be reflected on London roads following the introduction of the London scheme.

Users are required to accept terms and conditions of use as part of the registration process for the scheme. These terms and conditions require that users abide by the highway code and take reasonable precautions to safeguard their own and other road users' safety. The aim is to minimise conflict between road users and pedestrians. Where users are found to be behaving in an irresponsible or dangerous manner which results in action by the police, sanctions may be imposed by TfL including cancelling user accounts and barring access to the scheme.

As outlined in Section 2.4 the scheme has been the subject of a Crime and Disorder Assessment and a number of measures have been adopted to mitigate crime and provide for a safe and secure scheme. At the end of 2010 there were no fatal accidents or major incidents resulting from the scheme, and this will continue to be monitored in TfL's safety records.

Health and Well-Being
The scheme promotes the use of cycles as a regular mode of transport. The 20,000 additional daily cycle trips generated by the scheme in 2010 represent a significant cultural change for London, promoting exercise on a city-wide basis. As mentioned in the scheme benefits, the scheme has encouraged more people to try cycling, and a key reason to switch from other modes to cycling is to improve fitness. These changes are anticipated to make a contribution to reducing obesity rates and health inequalities.

Equality and Inclusion
The project has worked with TfL's Supplier Skills Team with a view to providing training opportunities for those from disadvantaged groups.

Barclays Cycle Hire provides an alternative low cost mode of transport for Londoners and visitors, increasing access to cycling by overcoming barriers such as access to a bicycle, storage, maintenance, theft and the perceived threat of theft. The scheme supports increased physical activity.

Within the current modal share for cycling, women are less represented than men at 37 percent and 63 percent respectively, as are Black and Minority Ethnic (BAME) men and women (22 percent) compared with White men and women (78 percent) (LTDS 2006/7). Therefore the greatest potential increase in modal share is for BAME women.

Scheme information and transaction support (electronic, printed and oral) will be provided in a wide range of languages, ensuring that non-English speaking residents and visitors find the service easy to understand and use. The terminals provide information in Arabic, Bengali, Chinese, Hindi, English, French, German, Greek, Gujarati, Italian, Polish, Punjabi, Spanish, Turkish, Tamil, Urdu, and Vietnamese. Additionally, a downloadable document is available from the TfL website in non-English languages. All web based information conforms to accessibility guidelines.

Whilst the scheme is expected to reduce the number of pay-and-display parking spaces, there will be no reduction in the number of existing blue badge car parking spaces. This will minimise negative impacts on people with disabilities. A late or no return charge is recoverable for the late or non-return of a scheme cycle. Users need to provide either bank account or credit/ debit card details. In 2006/ 2007, seven percent of households nationwide did not have a bank account. To ensure these people are not excluded from the scheme TfL provides the option for a user with a credit/debit card to add up to 3 additional users to their Cycle Hire account. The primary account holder will then be charged for these users. The scheme also serves youths over 14 years of age, although registration is required by an adult. The scheme is not be available to children below the age of 14.

3. Access Statement

3.1 Inclusive Access

The views of key access groups, including the Royal National Institute for Blind People, the Guide Dogs for the Blind Association and the Disabled Persons Transport Advisory Committee were taken into account in the initial development of a design of the cycle hire street furniture. The resulting docking station design is accessible to all anticipated user groups.

As discussed in Section 1.4 of this Statement the individual docking points are 0.8 metres in height, which is sufficient to ensure that the docking points are visible to passing pedestrians. Individual docking points are usually viewed in the context of a row of other docking points, and in combination with docked cycles and a terminal, which further increases their visibility. The terminal is 2.4 metres high and is easily visible above the level of the cycles and docking points (Figure 3.1).

The way-finding mapping and information on the terminal, including that likely to be of relevance to non-cyclists, is of an appropriate height for most users, including wheelchair users. The mapping has been designed to be clear and easy to read and complies with TfL's accessibility standards. The text on the information panels also meets the appropriate standards with respect to font size and type, as well as colour contrast to background. There is push button illumination of the mapping and information panels.

The terminal incorporates the TfL roundel and a station and locality name to ensure each docking station is easily identifiable and recognisable as a part of the scheme and as a transport mode.

Figure 3.1: Double row docking station on footway

3.2 Pedestrian Circulation

As discussed in Section 1.3 docking station sites have been selected where there is sufficient footway or carriageway width not to cause an obstruction to pedestrians or vehicles.

Docking stations on carriageway sites are usually located against the kerb. Sufficient space has been provided on these sites to enable users to circulate around the terminal and docking points without having to step out into traffic paths.

Docking stations on the footway are usually located within the street furniture zone (see Figure 3.2), or at the back of the footway. In most cases, a minimum of 2.0 metres of clear footway is retained to ensure that the docking station does not impede pedestrian movements.

The docking station is designed to maximise pedestrian circulation within and around the docking points and terminal. There is a gap between individual docking points to allow ease of cycle docking and un-docking, and pedestrian movement between the docking points when they do not contain docked cycles. Depending on site circumstances, the terminal is generally positioned within a 2.0 by 2.0 metre area to provide space for pedestrian circulation and queuing clear of the main traffic flows (Figure 3.3).

Each docking point has a Barclays Cycle Hire scheme membership key reader enabling registered users to hire cycles without interaction with the terminal. In busy locations the terminal may have two payment points, or the docking station may have two terminals. These measures minimise queuing and help to maintain a clear footway.

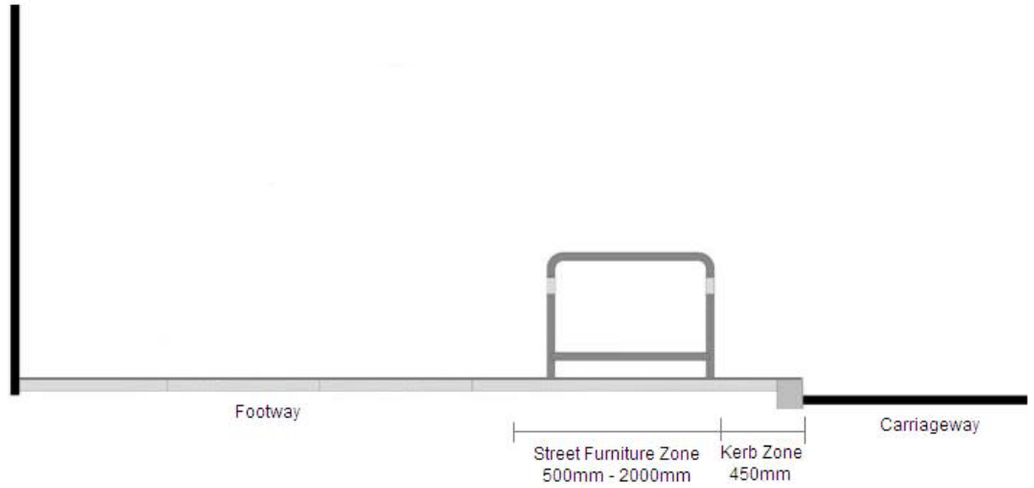


Figure 3.2: Street Furniture Zone

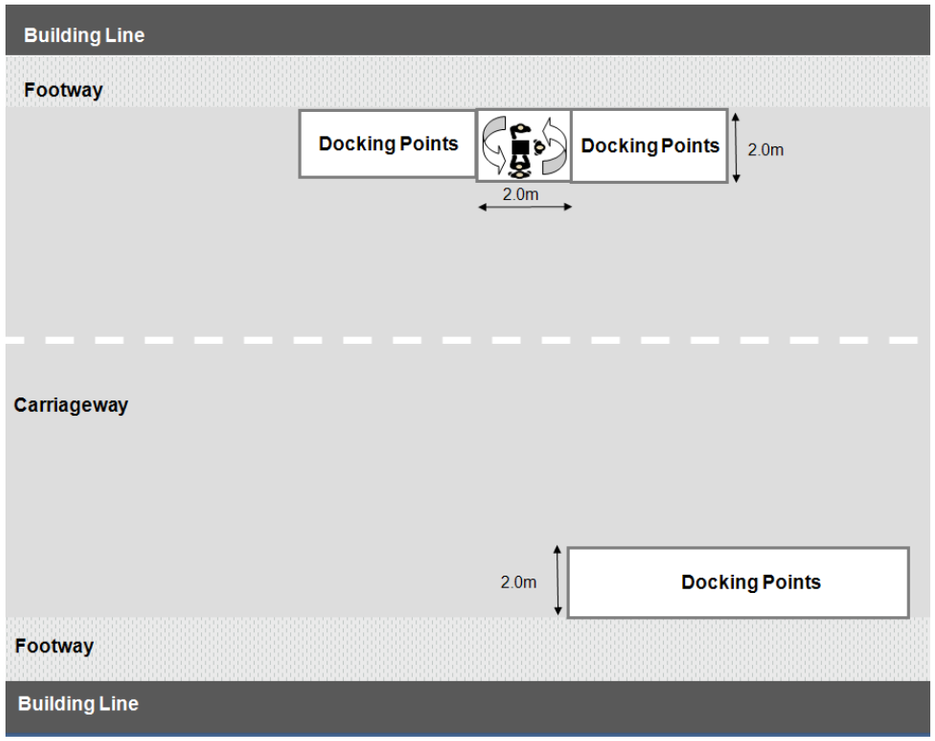


Figure 3.3: Illustration of pedestrian circulation around docking station

4. Planning Policy and Guidance

4.1 Introduction

In making a decision on whether to grant planning permission, Section 38(6) of the Planning and Compulsory Purchase Act 2004 (the 2004 Act) requires that a decision accords with policy within the Development Plan, unless there is policy of particular importance within other planning documents that should be applied.

This section thus first provides an appraisal of the extent to which the proposal supports relevant policies within *The London Plan (Spatial Development Strategy for Greater London) (July 2011*) , the relevant Local Development Framework documents, which comprise the Development Plan. An appraisal of the proposal against other relevant planning policy including the National Planning Policy Framework and guidance is provided thereafter.

At the national level the appraisal focuses on sustainability, transport and design policies. At the local level the proposal is assessed against relevant policies within the Camden Core Strategy (adopted 2010), the relevant Supplementary Planning Guidance, and policies within the London Borough of Camden Local Implementation Plan and Local Development Framework.

4.2 The Development Plan

The London Plan

The London Plan is the overall strategic plan for London, and sets out a fully integrated economic, environmental, transport and social framework for the development of the capital over the next 20-25 years.

Strategic principles are fundamental to the overall London Plan. Policy 1.1 (Delivering the strategic vision and objectives for London) states that growth and change in London will be managed in order to achieve the Mayor's vision for London's sustainable development, ensuring all Londoners enjoy a good, and improving, quality of life sustainable into the future.

Improving London's public transport is a key component of the London Plan. Policy 6.1 (Integrating Transport and Development) seeks to encourage integration of transport within new schemes and supports a shift to more sustainable modes of transport. It promotes a greater use of low carbon technology in order to reduce carbon dioxide and other contributors to global warming ensuring a minimal impact on the local environment. It requires Boroughs to support sustainable means of transport and reduce the need for travel by car. Table 6.1 'Indicative List of Transport Schemes' notes that the Central London Cycle Hire Scheme is to be expanded in area and/or additional bikes within central London to be completed by 2013-2020. Policy 5.1 (Climate Change Mitigation) also seeks a reduction in London's carbon dioxide emissions of 60% by 2025.

The London Plan seeks to encourage healthy lifestyles in order to reduce health in equalities within London. It outlines that transport (along with other developments) should incorporate health benefits.

The Mayor will encourage a significant increase in cycling. Policy 6.9 (Cycling) states that cycling will be encouraged by completing and promoting the Cycle Super Highways project and implementing the London cycle hire scheme within central London and expanding the project towards outer London. It also outlines that cycling facilities are to be integrated within new developments and that Local Development Frameworks should identify, promote, facilitate and safeguard the Cycle Super Highways and the Mayor's London Cycle Hire Scheme.

Policy 6.11 (Smoothing Traffic Flow and Tackling Congestion) outlines that a coordinated approach needs to be taken in order to smooth traffic flow and tackle congestion. It states that Development Plan Documents should improve the extent and quality of public transport, improve management of the road network and support a shift to walking and cycling to improve traffic congestion and reduce air pollution.

The Barclays Cycle Hire Scheme provides a sustainable mode of public transport which makes a significant contribution to improving London's transport system and reducing traffic congestion. It provides an active form of transport therefore promoting a healthier lifestyle.

Local Development Framework

The Local Development Framework (LDF) replaced the London Borough of Camden Unitary Development Plan (UDP) in November 2010. This document sets out the strategy for managing growth and development in the borough, including where new homes, jobs and infrastructure will be located. A fundamental component of the LDF is the Core Strategy, which outlines the spatial vision and strategic objectives for an area. The London Borough of Camden's Core Strategy was adopted , alongside the Development Policies, at the Full Council meeting on 8 November 2010.

The Core Strategy outlines a number of key issues for the future development of Camden. Those of particular relevance are:

- The quality of the environment;
- climate change and sustainability; and
- improving transport.

Core Strategy CS11 (Promoting sustainable and efficient travel) seeks the continual improvement of facilities for cyclists, including increasing the availability of cycle parking, helping to deliver the London Cycle Hire Scheme, and enhancing cycle links. CS14 (Promoting high quality places and conserving our heritage) seeks to ensure that Camden's places are attractive, safe and easy to use by requiring development of the highest standard of design that respects local context and character. CS14 also seeks to preserves and enhances Camden's rich and diverse heritage (including conservation areas, listed buildings and historic parks and gardens).

The Cycle Hire Scheme will promote cycling as an alternative mode of travel for short journeys. The docking station has adopted principles of high quality design and consideration has been given to the need to preserve and enhance the built heritage in selecting a suitable site. For these reasons, the proposal is considered to comply with the adopted LDF.

Local Implementation Plan

Each borough is required to produce a Local Implementation Plan (LIP) setting out how local transport improvements will brought forward and financed. The London Borough of Camden's LIP (2011) reiterates the policy framework within the Mayor's Transport Strategy and outlines a number of measures for the implementation of the strategy. Of particular relevance is an objective to reduce vehicular traffic flows through the borough and encourage a shift to more sustainable modes of transport. The Scheme will assist a shift to a more sustainable mode of travel in accordance with the LIP.

Development Policies

Camden Development Policies 2010-2025 seeks the provision of sustainable travel options in order to reduce the environmental impact of travel, to support future growth, to relieve pressure on Camden's existing transport network, and to provide alternatives to the private car (Policy DP17).

Camden has inherited a rich architectural heritage with many special places and buildings from many different eras in the area's history. Policy DP25 'Conserving Camden's Heritage' seeks to maintain Camden's Conservation areas and listed buildings.

Supplementary Planning Guidance

The Camden Planning Guidance (2011) provides additional advice and guidance for development proposals. The guidance seeks to:

- Ensure that the Cycle Hire Scheme is extended to key destinations. Where appropriate, developments could be required to provide a financial contribution or include a docking station within the development if suitable (Paragraph 9.9 of CPG 7 Transport);
- Provide for connectivity to, from, around, and through sites for people using all modes of transport, including pedestrians, cyclists etc. (Paragraph 2.9 of CPG 1 Design);
- Respect the built form, character, history, archaeology and nature of existing buildings on the site and other buildings immediately adjacent and in the surrounding area. (Paragraph 2.9 of CPG 1 Design);
- Respect and be sensitive to natural and physical features, both on and off the site. (Paragraph 2.9 of CPG 1 Design);
- Ensure that street furniture does not obstruct pedestrian views or movement or be positioned to encourage anti social behaviour (Paragraph 9.23 of CPG 1 Design);

Streetscape Design Guidance

Camden's *Streetscape Design Manual* (2005) seeks to raise the standard of street works throughout the borough. It sets out six key design principles respecting and enhancing the local streetscape;
• using a simplified palette of quality materials;
• providing a clutter-free environment on our streets;
• enabling equal and inclusive access for all road users;
• considered, yet innovative complementary design; and
• making the street environment safer.

More specifically, the Streetscape Manual provides detailed design guidance for cycle parking. The Borough supports the provision of cycle parking in order to actively encourage cycle use. The Manual notes that cycle parking should be installed wherever demand is evident and where space allows. The guidance is relevant to the proposal in terms of influencing the design, layout and location of the docking station.

These proposed design of the docking station and the arrangement of the docking points and terminal within the site reflects these design guidelines.

4.3 Other Planning Documents

National Policy Documents

National Planning Documents

The National Planning Policy Framework (NPPF) was published on the 27th March 2012 and sets out the Governments planning policies for England. At the heart of the NPPF is a presumption in favour of Sustainable Development. Paragraph 9 of the NPPF details that 'pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life'. This includes improving the conditions in which people, live, work, travel and take leisure.

The NPPF includes 12 principles for delivering sustainable development. Principle 4 (Promoting sustainable transport) seeks to highlight the importance of sustainable transport modes, ensuring people have a choice about how they travel. Paragraph 30 states that solutions that support reductions in greenhouse gas emissions and reduce congestion should be encouraged.

Principle 7 (requiring good design) highlights the importance of design in the built environment. Paragraph 58 outlines that planning decisions should support local transport networks and ensure that developments create safe and accessible environments. Paragraph 63 adds that, when determining applications ,'great weight should be given to outstanding or innovative designs'.

Principle 8 of the NPPF (promoting healthy communities) highlights the important role the planning system can have in facilitating social interaction and creating healthy, inclusive communities. It identifies that planning decisions should aim to promote safe and accessible environments, and encourage the active and continual use of public areas.

Principle 10 (meeting the challenge of climate change, flooding and coastal change) outlines the importance of the planning system in helping to secure radical reductions in greenhouse gas emissions, providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and infrastructure.

Principle 12 of the of the NPPF (conserving and enhancing the historic environment) details local planning authorities role in creating a positive strategy for the conservation and enjoyment of the historic environment. Paragraph 126 outlines that development within the historic environment should make 'a positive contribution to local character and distinctiveness'.

The Barclays Cycle Hire Scheme provides a sustainable mode of transport which is considered to support the sustainable development principles highlighted in the NPPF, by providing a green infrastructure across London. The Scheme helps to encourage healthy and sustainable communities and its design has been carefully considered to be innovative and compatible with London streetscapes.

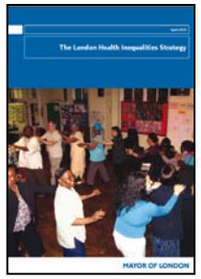
The Mayor's Transport Strategy

The Mayor's Transport Strategy published in May 2010 sets policies to improve transport within Greater London. The strategy sets out the Mayors vision, which requires a transport system with enhanced capacity and connectivity that is efficient and integrated; encourages mode shift to cycling, walking and public transport; is accessible and fair to users; offers value for money; contributes to improving quality of life and the environment; and offers improved opportunities for all Londoners.

Proposals in chapter 5.13 set out to encourage more cycling. Proposal 53 seeks to raise the profile of cycling, and proposal 54 specifically seeks to deliver the Cycle Hire Scheme, along with other cycling facilities. The strategy also recognises the health benefits of cycling in Policy 17, which seeks to promote healthy travel options.

Proposal 83 seeks to use the principles of 'better streets' to improve town centres, in particular: removing clutter and improving the layout and design of streets; enhancing and protecting the built and historic environment; increasing the permeability of streets; and creating clear and easily understandable routes and spaces to make it easier for cyclists, pedestrians and disabled people to get about.

The London Health Inequalities Strategy
The Mayor published his first ever Health Inequalities Strategy in April 2010, along with an accompanying 'action plan', *First Steps to Delivery*. The cycle hire scheme is supported by objective 5 (Healthy places), which states:



"Efficient and affordable transport systems can also help to tackle health inequalities. The Mayor's Transport Strategy emphasises the need to reduce congestion, reduce transport related carbon emissions, improve the reach and reliability of London's public transport system and increase the number of people walking and cycling which will be greatly helped by the introduction of the cycle hire scheme".

The Scheme can help to reduce health inequalities by encouraging active travel and providing a low-cost form of transport to access employment and services, and therefore supports this strategy. The expansion of the Scheme will bring these benefits to a wider group of people.

The Mayor's Climate Change Mitigation and Energy Strategy
Delivering London's energy future was adopted in October 2011

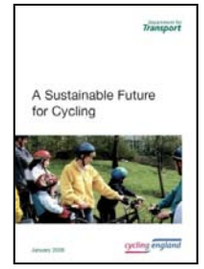
The Strategy sets out a strategic approach to reduce carbon emissions from a range of sources, including London's transport. Action 10.5 under Policy 10 promotes the development of the London Cycle Hire Scheme as part of a shift to more carbon efficient modes of transport.

The Mayor's Air Quality Strategy
Clearing the Air was published in December 2010 following public consultation. It sets out the Mayor's plans to improve air quality in the Capital, including the reduction of air pollution from London's transport.

Barclays Cycle Hire is included in the Strategy as one way to promote a shift to cleaner forms of transport (Policy 1: encouraging smarter choices and sustainable travel). It also notes that the eastwards expansion of the scheme, combined with public transport improvements, will help to achieve behavioural change away from the car to more sustainable modes.

Cycling Revolution London
Within *Cycling Revolution London* (May 2010) the Mayor states that cycling has an important role to play in the future of the Capital and affirms that it is the "single most important tool for making London the best big city in the world". The Barclays Cycle Hire Scheme is the centrepiece of the cycling programme to make London a genuine cycle-friendly city.

Sustainable Future for Cycling
Sustainable Future for Cycling published in January 2008 sets out the Government's planning policy direction regarding cycling. It recognises the important contribution of cycling as a sustainable form of transport and how cycling contributes to climate change; health, security and safety; quality of life; and equality of opportunity.



Streetscape Guidance: A guide to better London streets

Streetscape Guidance: A guide to better London streets (2009) prepared by TfL gives guidance on streetscape issues and shows how the Mayor's Better Streets objectives may be achieved. The document advises on key design principles including:

- consistency and clarity;
- integration and co-ordination;
- design for people;
- reduction of crime and disorder;
- function and safety;
- materials and maintenance; and
- recognition of local context and distinctiveness (including local heritage and its statutory and local designations).

The Scheme delivers a high quality design which is in line with these principles.

The London Cycling Design Standards

The London Cycling Design Standards (2008), prepared by TfL, sets out design guidance and indicative standards for all cycle schemes in London. Of particular relevance is Section 8 which states that cycle parking facilities should be situated at 'gateway' locations and be an integral part of streetscape design. Part 5 explains how the design will complement the existing streetscape.

5. The Application

5.1 Site Characteristics

5.1.1 Location

The site is located on the carriageway on the eastern and western side of Dukes Road, south of the junction with Euston Road (Figure 5.1 and 5.2).

Dukes Road is a two way street with footways on both sides. It carries a low level of vehicular traffic and has a low footfall. The surrounding area is predominantly urban with a hotel and a large church adjacent to the site. There are commercial offices and flats to the southern end of Duke Street and Euston Station to the north. There are commercial offices in the wider area.

Euston London Underground and Rail Station is located to the north west of the site and Kings Cross St Pancras Station is to the north east.

The site is located within the Bloomsbury Conservation Area and is adjacent to St Pancras Church, a Grade I listed building. The site is not located within a flood zone.

Figure 5.1: Location Plan

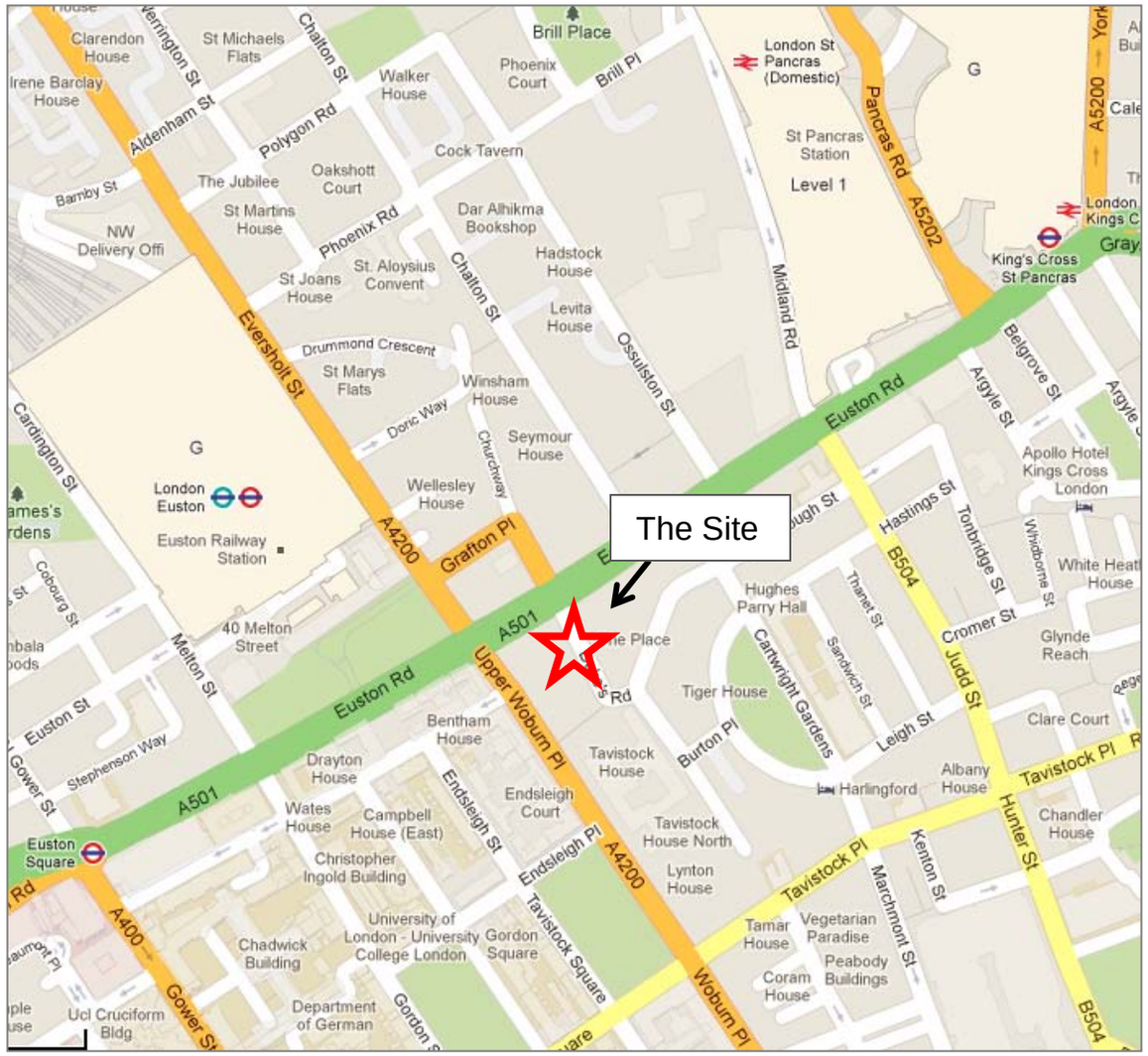


Figure 5.2: Map showing general location of site

5.1.2 Transport Links

Duke's Road runs in a north/south direction off Euston Road. Euston Bus Station is located nearby the site on Euston Road. Several bus routes serve the bus station including no. 10, 390, 59 and 91 linking the site through Central London to Hammersmith and Notting Hill in the west and Streatham in the south and to Archway and Tottenham in the north.

Euston London Underground and Rail Station is approximately 250 metres to the north west of the site. The Northern and Victoria lines run from this station and trains to north west London, Birmingham, Manchester and beyond. King's Cross St Pancras London Underground and Rail Stations are approximately 560 metres to the north east of the site. Northern, Victoria, Piccadilly Metropolitan, Hammersmith and City and Circle Underground lines run from this station. Trains serve the north east England and Scotland as well as the Euro Star.

There are many London Cycle Route Networks surrounding the site (figure 5.3). There is a key cycle route which runs east/west along Travistock Street which provides a main link to the West End and east towards Angel and Old Street. A Cycle route runs north along Ossulston Street providing a link towards Camden Town.

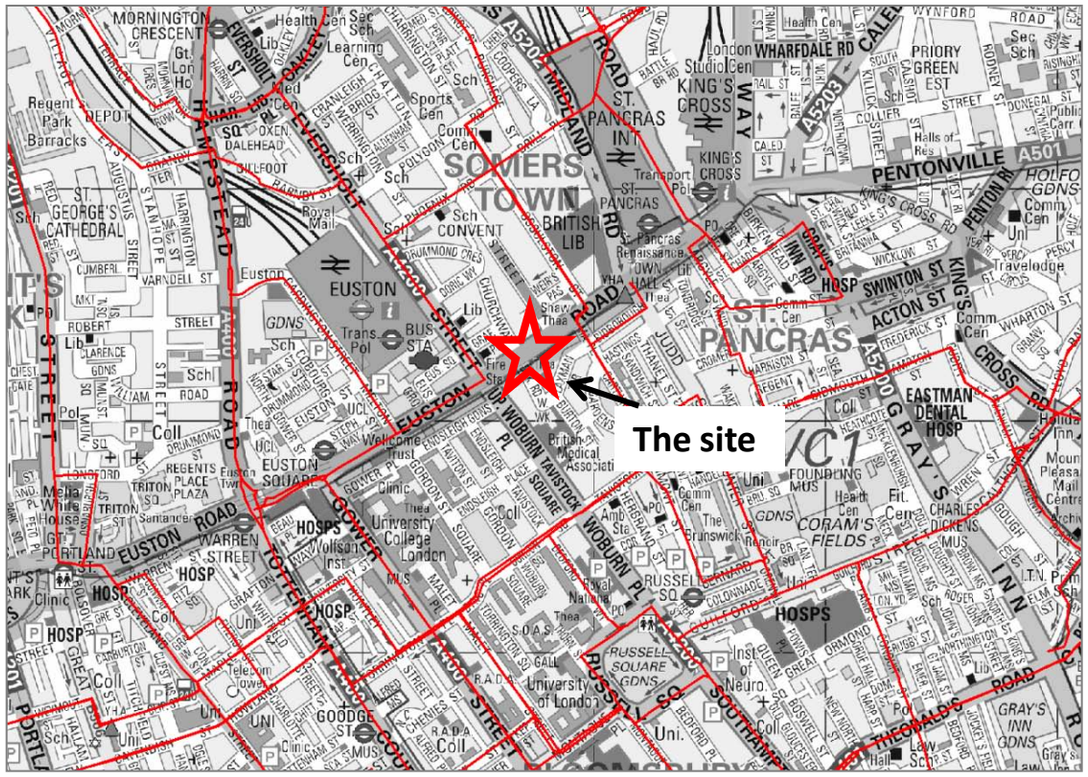


Figure 5.3: London Cycle Network, showing general location of site

5.1.3 Site Description

Duke's Road is a two way street with footways on both sides. It carries a low level of vehicular traffic and has a low footfall. The site is located on the carriageway which has a width of 8.75 metres (Figure 5.4).

Adjacent to the site to the east is a large 10 storey hotel with an outdoor seating area to the front. St Pancras Church is to the western side of Duke's Road, a Grade I Listed Building. It is a Greek Revival style church of Portland stone with stone coloured terracotta detailing.

There are mature trees along the boundary of St Pancras Church adjacent to the site. The wider area is characterised by commercial offices and flats, Euston London Underground, Bus and Rail Station is located on the northern side of Euston Road close to the site.

Items of street furniture surrounding the site include sign posts, a lamp column and railings. Road markings include double yellow lines and intersection markings at the junction with Euston Road (figure 5.4).

Figure 5.4: View of site looking north along Duke's Road

5.2 The Proposal

The proposal is to install a docking station on the carriageway using standard carriageway foundations within the yellow shaded area on Figure 5.5. The footway build outs do not require planning permission and therefore do not form part of this application but will be built with the consent of the Highways Department.

The docking station will be located on both the eastern and western side of Duke's Road. The eastern side would have a maximum length of 12.50 metres comprising of 14 docking points and would include the pay terminal in the centre of the linear row. The eastern section would not exceed a length of 11.25m and would have 15 docking points, also in a linear row (figure 5.5).

The docking station design will accord with the criteria outlined in Section 1.3.

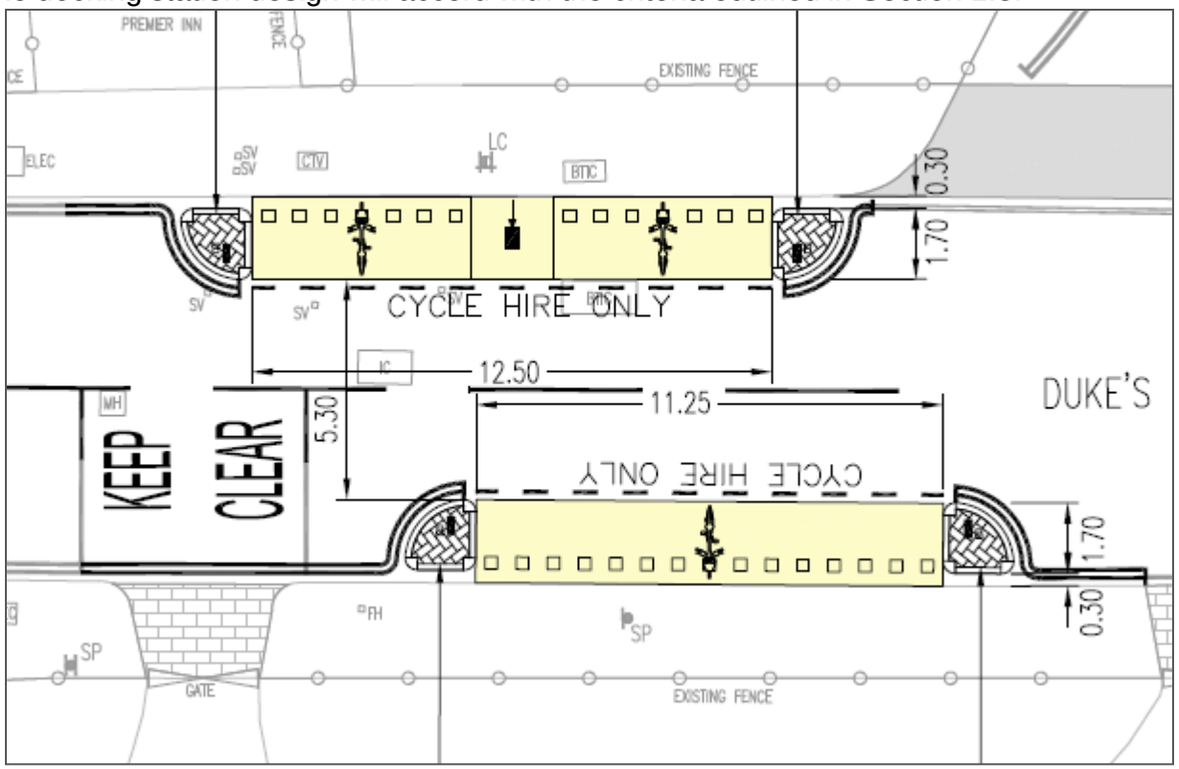


Figure 5.5: Proposed docking station arrangement extract

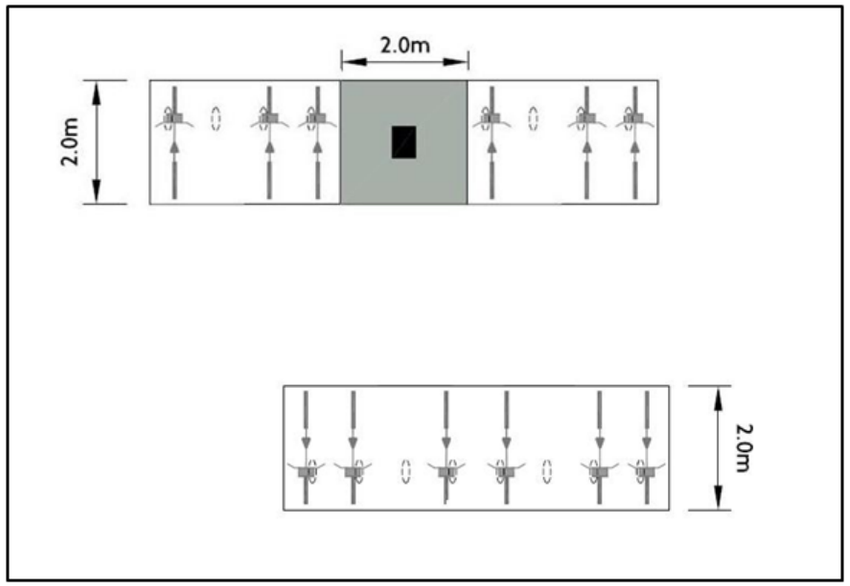


Figure 5.6: Indicative docking station layout extract

5.3 Key Issues

5.3.1 Traffic, parking and Access

The location of the site provides good access to public transport and to the London Cycle Network. It is within walking distance of Euston and Kings Cross St Pancras London Underground and Rail Stations and as well as the Euston bus station. This will ensure easy access to the docking station for a wide range of users.

The docking station will be located on the carriageway on Duke's Road, south of the junction with Euston Road and will maintain a clear pedestrian path of at least 2.2 metres between the boundary of the docking point area and the back edge of the footway, thereby ensuring clear pedestrian access is preserved.

A carriageway width of 5.30 metres will remain, therefore vehicle flow will be preserved. The proposal is located on double yellow lines and no parking spaces will be lost. Sufficient space will remain on the northern side of the carriageway for servicing the hotel.

A sufficient circulation area will be provided around the terminal to avoid congestion and a Membership key reader will be installed at each docking point, enabling users to hire bicycles without having to queue at the terminal and thereby minimising the time required for users to be at the docking station.

The site is sufficient distance from the docking station to the junction with Euston Road and the hotel car park therefore it will not conflict with vehicular movements or sight lines. The hotel benefits from off street service and parking area, therefore the proposal will not affect the operation of the hotel.

Overall, this is considered an ideal site within the immediate area for maintaining clear pedestrian and vehicular paths and avoiding areas of pedestrian congestion.

5.3.2 Townscape and Heritage and Amenity

Existing Situation

The character of the immediate area is mixed with a large ten storey hotel and the Grade I Listed St Pancras Church adjacent to the site (Figured 5.7). There are mature trees along the boundary of the Church. The wider area is characterised by commercial offices and flats, Euston Rail Station is located to the north of the site across Euston Road.

The rear facade of the Grade I listed St Pancras Church built in 1819-22 to a Greek Revival design is located to the west of the site, it is separated by the footway, railings, large trees and driveway area.

The site is located in the Bloomsbury Conservation Area which was designated in 1968. The quintessential character of the Conservation Area derives from the grid of streets enclosed by mainly three and four storey development which has a distinctly urban character of broad streets interspersed by formal squares which provide landscape dominated focal points.

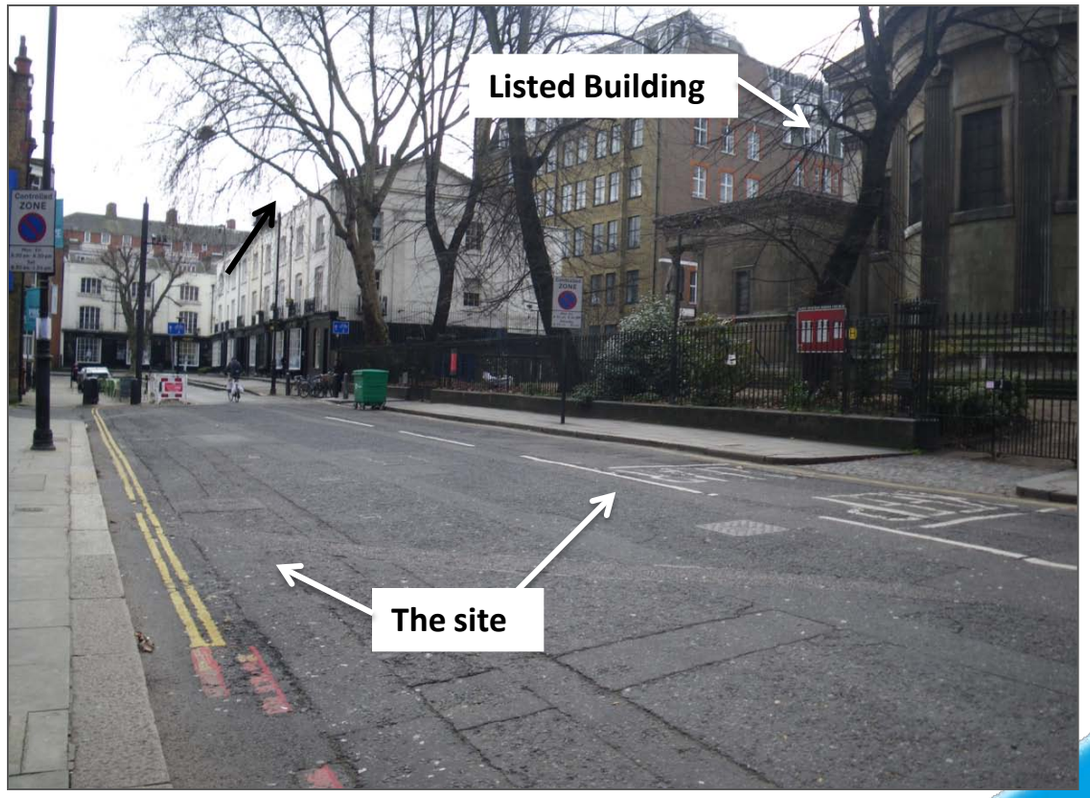


Figure 5.7: View of the site looking south along Camden Street

Proposed Works

In selecting the docking station site, consideration was given to the function of the street and the context of the surrounding area. The proposed docking station will be largely viewed in the same setting as the carrigeway, therefore the docking station will relate more to the carriageway than the surrounding buildings (Figure 5.7 and Figure 5.8).

The proposed docking station is set adjacent to the rear boundary of St Pancras Church (Grade I Listed). Given the modest scale of the proposed street furniture and its location within the setting of the carriageway adjacent to the ten storey modern hotel and considerably set back behind railings and mature trees, the docking station is not considered to harm the character or appearance of Duke's Road, St Pancras Church or the Bloomsbury Conservation Area.

The docking points will have a maximum height of 0.8 metres and the width between the centre of each docked bicycle will be 0.75 metres. This will allow a sense of visual permeability and will limit the presence of the docking station within the streetscene.

The materials of the docking station will complement other street furniture within the context of the site. The size and dark-blue colour of the terminal and the layout and size of the docking points have been carefully chosen to ensure the docking station integrates with existing street furniture. Logos for the Mayor, boroughs and TfL have been discretely integrated in the design of the docking station.

The docking station has been designed to enable quick and quiet use of both terminal and docking points by users, as described in Section 1.6. The design of the docking mechanism, coupled with the separation distance between the site and the hotel adjacent to the site and the closest residential properties, is considered to satisfactorily preserve the amenity of residents.

Overall, given the scale of the docking station and its immediate context, the proposal will integrate well into the surrounding streetscape and safeguard the character of Duke's Road, The Bloomsbury Conservation Area or the St Pancras Church.

Figure 5.8: View of the site looking south along Duke's Road

5.4 Application Summary

The application will fully support National and Local Planning Policies and Streetscape Design Guidance. In addition to the wider benefits which are outlined in Section 2 the Barclays Cycle Hire Scheme will:

- meet the Borough's site selection criteria (outlined in Section 1.3);
- ensure the delivery of the Barclays Cycle Hire Scheme network is at the required density;
- provide a well-considered design that is compatible with the activities and functions of the Central Activity Zone;
- provide a well-considered design that maintains the character of the Bloomsbury Conservation Area and the adjacent listed buildings;
- provide a well-considered design that preserves the amenity and value of the nearby trees;
- provide a well-considered design that is compatible with the surrounding area and preserves residential amenity;
- provide a high quality design which ensures that the development is compatible with the function of the street; and
- not affect the safety of highway users or affect the flow of pedestrian or vehicular traffic in the area.

Appendix 1: Community Consultation

APPENDIX 1: Community Consultation

TfL Special Projects team has worked closely with Camden transportation officers on consultation for the Cycle Hire Scheme. Camden officers have engaged with their local Councillors and attended area forums with the local community. TfL has supported these activities by providing background information about the Scheme and communication material.

TfL Arranged Local Information Events
Two events were hosted by TfL and attended by representatives from the London Borough of Camden. They were located specifically to ensure that the five wards affected by the scheme were covered**.** They took place at:

•Holborn Community Centre - Tuesday 17 March 2009; and
•Somers Town Community Centre - Thursday 26 March 2009.

Invitations were sent to local amenity groups, residents, tenants groups and local councillors. Both events were advertised in the local press and posters were placed in local libraries.

Information at each event included:

•exhibition boards, scheme maps and artist's impression;
•map with sites marked on it; and
•photos of proposed locations within the ward.

TfL staff were present to answer questions and note matters raised.

Comments made included:

•support for improved cycle provision in Camden;
•suggestions for additional sites;
•acceptance of the scheme generally but concerns about locations in residential areas;
•concern about footway locations being obstructed by docking stations;
•concern about theft of the cycles; and
•safety concerns for pedestrians.

Cycle Hire Presentation at Public Area Forums
Camden officers offered to attend Area Forums in the five affected wards. Presentations were made for two wards at:

- Holborn and Covent Garden - Wednesday 4 March, 7.00 – 9.00pm;
- St Pancras and Somers Town - Thursday 12 March, 7.00 – 9.00pm.

Bloomsbury Councillors wanted information but not a presentation.

The area forums were chaired by the ward Councillors. Liz Halsted and John Bartels (Camden Transport Officers) attended to present the scheme. Attendees included a mixture of individual residents and local groups.

Each area forum included:

- a presentation of the scheme;
- timeframes for the scheme;
- photos of proposed locations within the ward; and
- time for questions and answers.

Comments made included :

- broad support for the scheme;
- concern for cyclist safety;
- concern about cycling on footways and cyclists running red lights;
- concern about footway locations being obstructed by docking stations; and
- need for complementary measures as part of the scheme implementation.

Appendix 2: Pre-application Advice

Transport for London has met with the London Borough of Camden officers on a regular basis since August 2008 to discuss the selection of sites for docking stations and other matters related to the Barclays Cycle Hire Scheme.

Discussions have also been held to seek the advice of planning and design officers in relation to the preparation of planning applications and design matters. The particulars of these meetings are summarised by following table.

Officer(s) name	Date	Key points discussed
Meeting with Planning Officer (Vanessa Leddra)	19.01.2009	Pre-application planning meeting discussing application format, phasing of submissions, processing and determination arrangements (i.e. delegated). Agreed to meet again once draft application produced for review.
Telephone Conversation with Borough Lead (Vanessa Leddra)	17.03.2009	Fees, pre-application and formal submission arrangements
Pre-Application Planning Meeting with Planning Officer (Vanessa Leddra)	01/04/09	Encouraged TfL to submit applications at earliest opportunity; LBC would require kerb build-outs on all carriageway sites' VL confirmed application validation requirements; Admin will refer to TfL's cover letter in all cases; LBC to liaise with GLA Tree Officer on appropriate sites; VL requested Crime Prevention Checklist to be completed. LBC to supply TfL with completed checklist for each site. LBC to provide TfL with justification for loss of car parking (on appropriate sites) TfL to submit applications to Camden in phases; LBC accept tress scoping report for some sites where trees are close to the site, but not problematic in terms of their effect on the development. LBC agreed that TfL would submit 3 x copies of the application documents – Under 10MG (on planning portal); Photomontages sought for sensitive applications; 1:100 Drawings will be required (terminal and docking points) Planning condition would be imposed confirming appropriate ground surface materials; LBC would seek regulatory conditions (where appropriate);