



Designated Cycle Route Design Standards for Southwark's Parks

July 2018

LDĀDESIGN

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Executive Summary

This report was commissioned to produce a set of design standards for designated cycle routes in Southwark's parks. TfL Quietways are used as a specific example in this report as there are two Quietway routes being installed as part of a further phase of regeneration at Burgess Park, called Burgess Park West. Furthermore, Quietways are set to be installed in Peckham Rye Park and Kennington Open Space. It is important to note that these standards can be applied to all new designated cycle routes to be installed in Southwark's parks. When designing a cycle route, designers need to refer to sections 3 & 4. These standards have been developed carefully, drawing upon relevant policy and best practice guidance from several groups across London as well as using case studies to further inform findings and recommendations. This report seeks to understand what conflict between cyclists and pedestrians can arise in park settings and what issues need to be addressed to ensure the comfort and enjoyment of all.

Comfort for all users is the principal by which these routes should be designed and implemented and there should be several attributes which define the design approach. These should be underpinned by an emphasis on quality, which is fundamental to any design project undertaken by the London Borough of Southwark. Although cycling is an increasingly popular mode of transport which helps reduce carbon emissions and promotes healthy living, it is important to bear in mind that bicycles are still vehicles capable of acquiring speed and as such have the capacity to cause injury. Therefore pedestrians should be given ultimate priority of shared use paths through parks and cyclists must adjust their behaviour accordingly when they enter a park setting.

A hierarchy of priority based on a range of user groups should be established as follows, with any design interventions supporting the most vulnerable users:

1. Vulnerable users, i.e. visually impaired people, disabled people, elderly people, children, etc.;
2. Pedestrians/walkers;
3. Runners/joggers;
4. Leisure cyclists, skaters, scooters;
5. Sports and commuter cyclists;
6. Operational vehicles.

In order to address safety concerns and promote behavioural change amongst cyclists, Southwark Council is committed to developing a Cycling Code of Conduct in the future as well as addressing speed concerns through a Considerate Cycling Campaign in Burgess Park.

Research into present policy highlights the acknowledgement that cycling is a key sustainable transport mode that has the potential to enhance urban life by reducing car journeys and encouraging an active lifestyle. Government bodies at national through to local level have put in place strategies to address the needs of cycling and what improvements to infrastructure may be necessary to create a more cohesive network. These policies also outline a commitment to improving the health and well-being of citizens through committed improvements to parks and open spaces.

This report aims to understand how best to maintain comfort levels for all users in order to preserve the quality and safety of the user experience whilst also maintaining the quality of a park setting. A series of key comfort determinants were identified as essential to achieving successful designated cycle routes through parks.

A summary list of key comfort determinants was identified as follows:

- Unsegregated vs segregated paths
- Path width
- Volume of users
- Cycle speed
- Adequate signage
- Lighting
- Junctions
- Management

To better inform the report, three parks in the borough of Southwark were used as case studies to evaluate what improvements could be made in future. The methodology for these studies include direct observation of the site locations during specific times of the day (8-9am and 5-6pm) and recording any interactions between pedestrians and cyclists. The results of these studies helped better understand the

existing volume of cyclists and concluded that observed interactions between mode types were very mild and that all three observation sites could use improvements.

An Equalities Impact Assessment (EQIA) was also undertaken as part of the consultation process. The EQIA looks at all aspects of the proposals that affect accessibility for disabled people, including people with mobility impairments, hearing and visually impaired people, people with cognitive impairments and learning difficulties, older people and children. For the EQIA carried out in Burgess Park, a consultation meeting was carried out that included stakeholders from different groups representing various disabilities, including mobility impairment and visual impairment. It also represented different genders and people of different age groups. The results of the EQIA have been incorporated into the Design Standards.

One of the most important issues when considering cycling provision in parks is whether to segregate the cycling space through physical interventions such as a white line or through other means. This report specifically looks at this issue and how it is addressed elsewhere in the city. Guidance from the Department of Transport, Sustrans, and The Canal & River Trust, as well as precedent studies from The Royal Parks, Hampstead Heath and The Queen Elizabeth Olympic park, concluded that segregating shared use paths can lead to territorial behaviour and leads to greater incidents of noncompliance. Providing the width of the path is adequate, segregation is viewed as unnecessary. Speed concerns can be addressed through other means such as promoting behavioural change through considerate cycling and awareness raising.

Drawing on the research and findings, a summary of the design interventions for designated cycle routes is as follows:

- Unsegregated shared use paths are recommended at a min width of 4 metres with pedestrians having priority;
- Signage should be used to better effect in Southwark Council's parks to serve three functions in respect to wayfinding, speed awareness and indicating pedestrian priority spaces;
- A change of surfacing at junctions where designated cycle routes meet other designated cycle routes should be used to raise awareness of the change in environment i.e the presence of other cyclists and pedestrians.

- Not all designated routes will require lighting. Where they do, lighting should adequately provide enough illumination to ensure the paths through the park are safe for users at night. Lighting columns should be provided in a single sided arrangement and should be LED. Lamp shape and finishes should be considered against the park character and a registered ecologist should be consulted before any lighting is installed in parks;
- Existing infrastructure such as mature trees and existing light columns could be accommodated by expanding the path width using bonded gravel which is more flexible and requires less build up;
- A program of awareness raising should be developed alongside engagement days to address speeding cyclists. Involving local cycling clubs and school programs would be an inclusive way to involve the community;
- Vital to the ongoing management of designated cycle routes through Southwark's parks will be regular monitoring of the volume of users. Consultation with park users should be integral. Other maintenance treatments may be necessary for more general issues relating to up-keep in the parks.

In conclusion, conflict between cyclists and pedestrians in Southwark Council's parks, was observed to be very mild, with no collisions reported. Improvements could be made to all three case studies to increase the comfort of both user groups. These improvements include path widening, better signage, awareness raising programs and surfacing changes at key junctions.

It is recommended that these Design Standards are trialled on Quietway 7 which is due to open through Burgess Park in 2018.

L D Æ DESIGN

New Fetter Place
8-10 New Fetter Lane
London
EC4A 1AZ

www.lda-design.co.uk



1. Introduction

Background

LDA Design was commissioned by Southwark Council's Parks & Leisure department in January 2016 to produce a set of design standards for designated cycle routes in parks to be developed alongside a further phase of regeneration at Burgess Park, called Burgess Park West. TfL Quietways are used as a specific example in this report as there are two Quietway routes being installed as part of this phase of regeneration. These standards have been developed carefully, drawing upon relevant policy and best practice guidance from several groups across London. The Burgess Park West project will see the first implementation of the design standards for Quietways, which is due to open in 2018.

Project Brief

Cycling is becoming increasingly popular in London. The Council is looking to improve facilities for cyclists and their commitment to cycling is exemplified in their most recent Cycling Strategy. This strategy has to work well with the implementation and delivery of different designated cycle routes which are being rolled out across the city. Therefore it is important to the Council that a set of standards are developed which bring continuity and harmony to what these designated cycle routes will look like through the parks and green spaces in the borough.

Key objectives of developing Design Standards for Designated Cycle routes are:

- Create a lit cycle path standard design that can be used for all parks that contain new designated cycle routes in the London Borough of Southwark;
- Liaise with officers to reach agreement on whether the Quietways within parks should be segregated or not; surfacing and materials; the dimensions; raised or not; style of lighting; etc.
- Apply the design standards to the proposed Quietway cycle routes in the Burgess Park West project site design.
- Take into account the results of the EQIA carried out by Open Accessame

Consultation with internal Council departments will be required, including but not exclusive to Highways Team, Planning Team, Community Safety Team, & the Environmental Directorate. Public consultation with external groups will be required and have taken place as part of the delivery of Burgess Park West. This includes local residents, park users, local organisations and community groups. As mentioned previously, TfL Quietways will be looked at specifically as an example of designated route being installed in Southwark's parks.

Purpose

The Designated Cycle Route Design Standards is primarily designed to provide third party designers, developers and land managers with:

- the overarching design principles expected by Southwark Council when designing new cycle routes through their parks;
- design parameters for selecting materials and products;
- high level guidance on implementation standards;

The Design Standards should be read in conjunction with other relevant planning permissions and conditions, plus other relevant guidance for specific cycle routes e.g. TfL Quietways.



2.

Design Guide

The section sets out guidance for materials, finishes and dimensions to inform the design and implementation of designated cycle routes within Southwark's parks. The London Cycling Design Standards should also be considered when designing cycle routes.

This information is for guidance, and will need to be tested on a case by case basis as part of design development. The design guide is set out as follows:

Paths

- 1) widths
- 2) extensions
- 3) surfaces
- 4) edges
- 5) intersections

Signage

Lighting

Cycle parking

Entry/exit barriers

Overview

The Design Guide should be used to inform design decisions in Southwark's Parks.

Designers are expected to utilise the guidance set out in this document to justify the decision making process and the selected material palette. Where alternative design approaches are suggested by a third party designer, reasons for deviating from the standards set out in this guidance should be agreed with Southwark Council.

Recommendations should not be seen as a prescriptive set of rules, but rather as best practice design parameters that still allow for some flexibility and individuality in designs coming forward. These parameters are needed to ensure a lasting coherence for the design aesthetic of the Southwark's Parks as a whole.

The document is intended to be a live report and will need periodic review.

It must be recognised that the guidance set out in this document cannot replace the expert advice of professionals.

Paths

1) Widths

The recommended path width for designated cycle routes through Southwark's parks is 4 metres. A minimum width of 3metres may be acceptable, but proper assessments of current and future use should be made before implementing. Similarly, wider path widths may be necessary on particularly busy paths. Cambering of paths should not exceed 1:40 crossfalls and paths should be free of obstacles such as barriers, bollards and speed bumps as advised by the EQIA.

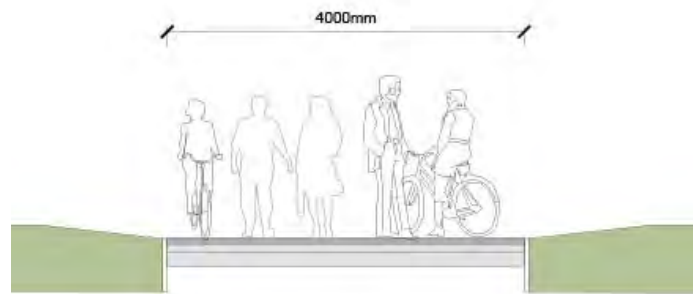


Fig. 1.1 - 4m footpath width diagram

2) Path extensions

Where existing infrastructure such as lighting columns or mature trees prevent the widening of hard paths, CEDEC or similar should be used to expand the path to a more suitable width. Path expansion width should be assessed on a case by case basis. Quality will need to be maintained to a high level to ensure mobility impaired users are not adversely affected. The design should allow for easy and cost-effective path widening to one side of the path. Max 8m in case of an increase in volume of cyclists. Lighting should be located along this side.

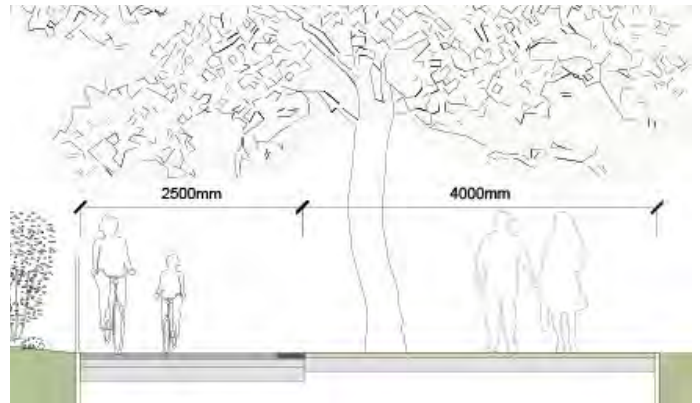


Fig. 1.2 - Footpath extension diagram

3) Surfaces: Bitmac Concrete Path Typical Detail

Specification:

British (European) Standard to BS EN 13108-1

Surface course:

AC 10 close surface

Reclaimed content to BS EN 13108-8.

Application:

Most appropriate for med/high flow shared use footpaths. Cambering of paths should not exceed 1:40 crossfalls.

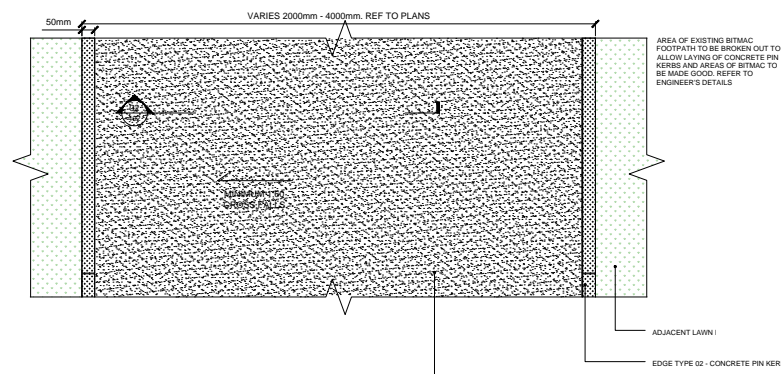


Fig. 1.3 - Surfacing Typical Detail (not to scale)

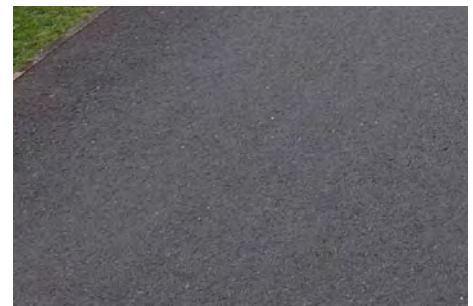


Fig. 1.4 - Typical bitmac surfacing

3) Surfaces: Resin Bound Gravel Typical Detail

Specification:

3-5mm resin bound gravel surface course preferred; Buff coloured or similar; Thoroughly mixed and uniformly spread. 12mm thick or to engineer's specification. Compaction to all layers: By heavy roller or other appropriate means, adequate to resist subsidence or deformation of the completed roads/ pavings when in use. Average slip resistance must be min 55 or over.

Application:

Most appropriate for junctions and where a change of attention could benefit from a change of surfacing such as when a cycle route crosses or meets another cycle route. To be assessed on a case by case basis.

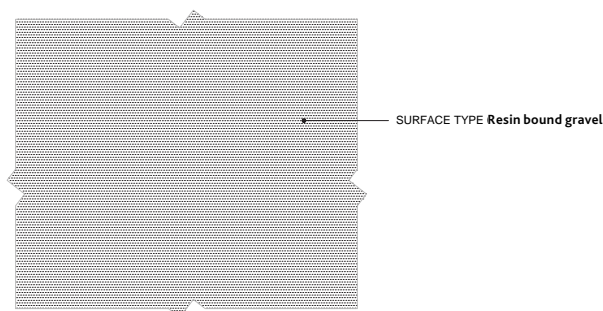


Fig. 1.5 - Surfacing Typical Detail (not to scale)



Fig. 1.6 - Typical resin bound gravel

3) Surfaces: Self Binding Gravel Path Typical Detail

Specification:

6-10mm angular gravel, free from clay, with sufficient grit to enable compaction. CEDEC gold in Golden Buff; compacted thickness 50mm, compact to produce a firm, regular surface, stable in use.

Application:

Most appropriate for path widening and as an approach to existing trees and infrastructure.

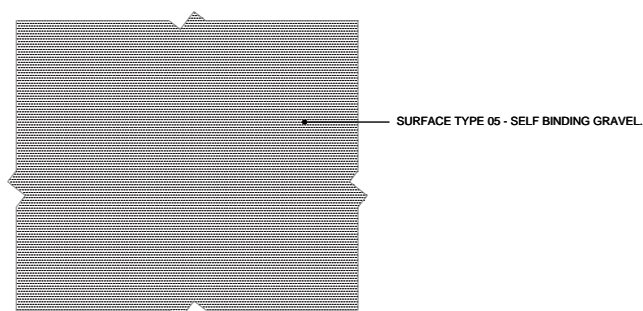


Fig. 1.7 - Surfacing Typical Detail (not to scale)



Fig. 1.8 - Typical self binding gravel

4) Edges

Edge restraints to footpaths can be beneficial aesthetically and in terms of durability. Edge treatments will increase the overall construction cost but can assist in reducing the likelihood of material being washed out and maintain structural strength.

Edging can provide a visual contrast that is highly beneficial to visually impaired users. Where grass does not provide good visual definition, a contrasting colour kerb should be considered.



Fig. 1.9 Concrete pin kerb



Fig. 1.10 Granite Kerb Strip to paving

Concrete Pin Kerb Edge Typical Detail

Specification:

Concrete pin kerb; 50 X 150 X 915mm. Set in concrete foundation on compacted Type 1 granular subbase.

Application:

Most appropriate for hard pathway surfacing i.e. asphalt.

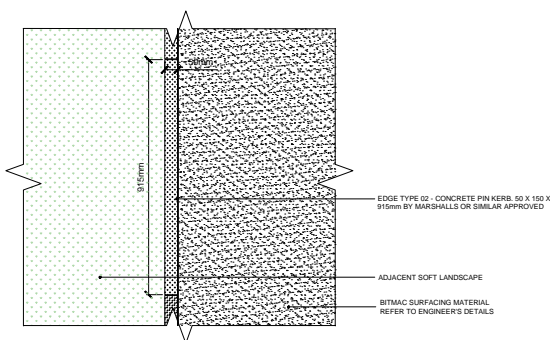


Fig. 1.11 - Edging Typical Detail (not to scale)



Fig. 1.12 - Typical concrete pin kerb

Granite Kerb Strips Typical Detail

Specification:

Granite Kerb; 150X305X915mm; 3mm upstand

Application:

To be used for approaches to junctions to signal areas requiring heightened awareness at junctions, and where paving changes occur. Edges that cross a path should be raised 3mm.

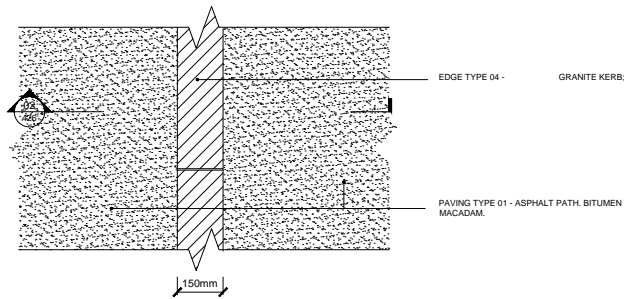


Fig. 1.13 - Edging Typical Detail (not to scale)

Fig. 1.14 - Typical granite kerb

5) Intersection Treatment

Specification:

Figs 1.15 to 1.18 show different types of path intersections. In Fig 1.15 the undesignated pathway should have kerb strips that are a continuation of the path edges; indicating that there is a priority to the undesignated pathway over the designated cycle route. Priority of the undesignated path is shown in a similar way in Fig 1.16 where the undesignated path meets the cycle route path, again with kerb strips following the edges of the undesignated pathway as it joins the cycle route path. Resin bound gravel should be used to bring attention to junctions where two designated cycle ways cross one another, where cycle ways split or join at a T junction, or where a greater number of routes intersect,

examples of these are shown in Figs 1.17 and 1.18. 3mm raised kerb strip provided as per design detail. Kerb strips should be installed on all cycle route pathways where the route approaches a path intersection of any type. Surface signage paver shown in figure 1.19 must be installed at junctions. Refer to appendix for supplier details when placing orders.

Route specific information such as a route name or number can be painted on ground below inset paver. Any directional arrows should be smaller than those used on highway. Where cycle route changes direction a directional arrow should be painted on the ground on the approach to the junction, along with a name or symbol that identifies the route. In the figures shown, Quietway 7 and Quietway 8 are used as an example.

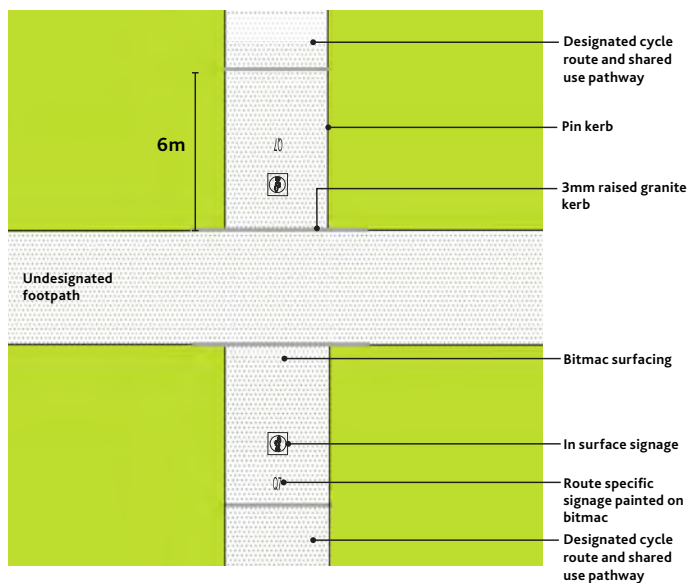


Fig. 1.15 - Undesignated footpath crossing with designated shared use path - junction treatment (not to scale)

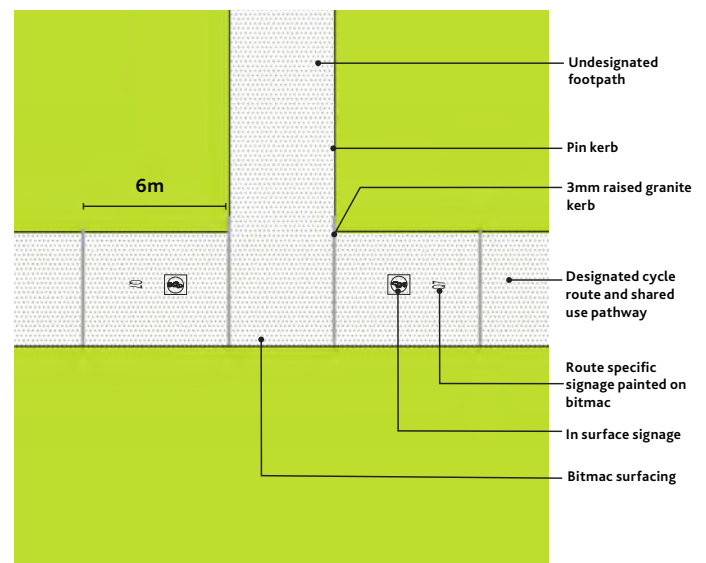


Fig. 1.16 - Undesignated footpath T-junction with designated shared use path - junction treatment (not to scale)

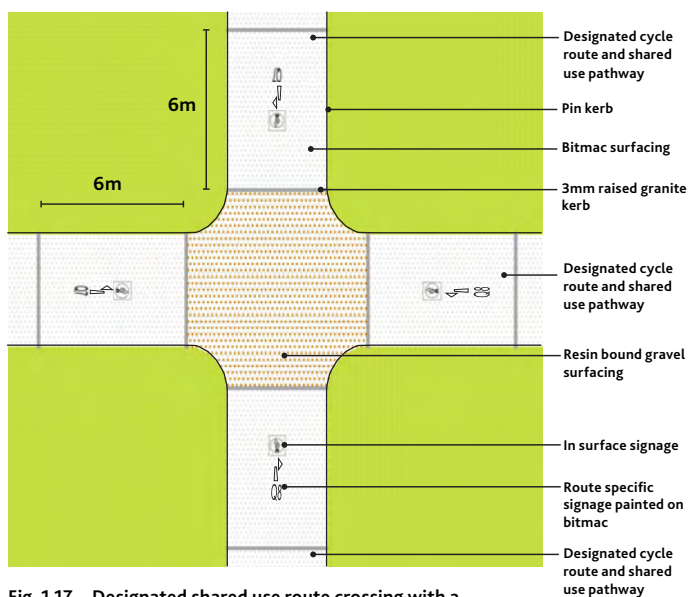


Fig. 1.17 - Designated shared use route crossing with a designated shared use route - junction treatment (not to scale)

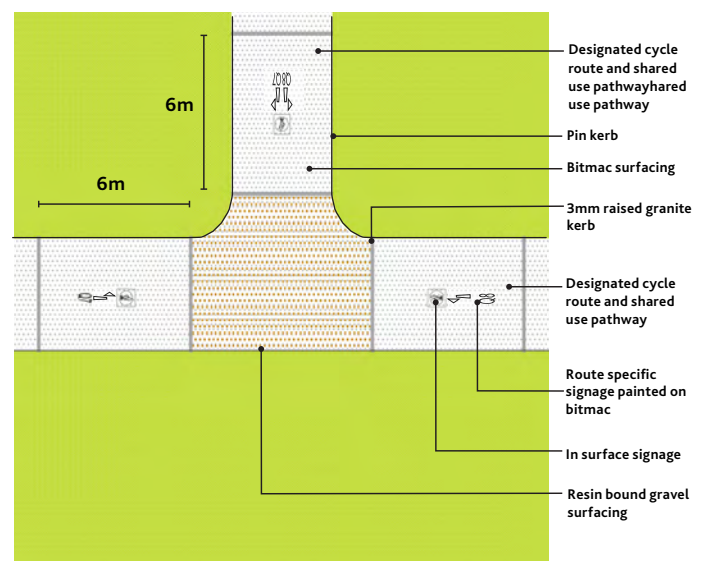


Fig. 1.18 - Designated shared use route T-junction with a designated shared use route - junction treatment (not to scale)

Signage

Signage should be safe, direct, attractive, coherent, adaptable, and appropriate. Signing should serve 3 functions in Southwark’s parks. The first is to support wayfinding for designated cycle routes which will involve using the appropriate symbols for direction signing and route reassurance. The second is to support awareness raising of shared use routes and who has priority in certain situations. The third is to help address speed concerns. Signage to support mobile and visually impaired people should be implemented where possible. See pg 11 for details. All signage must be approved by Southwark Council. Please see the appendix for acceptable wayfinding markers. When ordering wayfinder markers please send relevant appendix pages to the company as this will provide them with the artwork and specification information they require.



Fig 1.19 - Surface signage paver



Fig 1.20 - Vertical signs



Fig 1.21 - Finger posts



Fig 1.22 - Temporary Signs (not Southwark approved)

Surface Signage Paver

Specification:

Granite inset paver by Marshalls or equal and approved. Flamed finish in white grey. All sides sawn; 600X675X50mm. Recessed symbols and lettering backfilled with durable non-shrink coloured resin. Please see appendices where you can find artwork that can be used when placing orders for the surface signage pavers (fig. 1.23).

Application:

To be located at the transition point between pedestrian only paths and shared use surfaces. Position within 2 metres of the start of the change of footpaths use. The signage should be surrounded by the same surface treatment and should not straddle a change in surfacing.

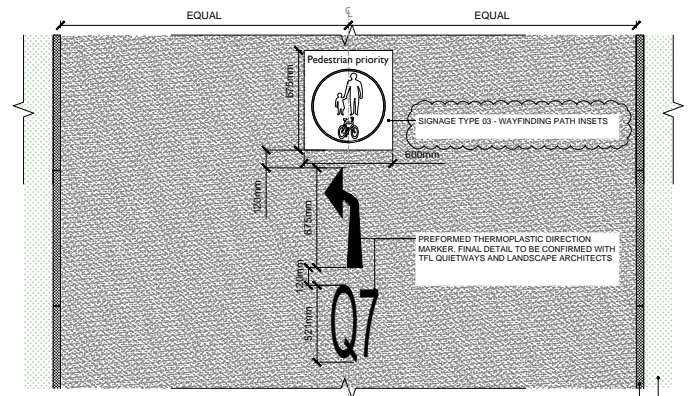


Fig 1.23 - Surface sign typical detail (not to scale)

Vertical Signage

Application:

Vertical signage is typically attached to gates or fencing at park entrances, mounted on existing poles and lamp columns, or integrated into the design of a bollard. Pedestrian priority signs should be located consistently across Southwark's parks at a height of 1.0 - 1.7 metres above the footpath surface. The approved Southwark Parks shared use sign should be installed when entering a shared pathway from a non-shared area such as a footway: for example when entering the park. A 'CYCLISTS DISMOUNT' sign should be installed when leaving a shared use pathway and entering a non-shared use area such as a footway. Please see appendices where you can find artwork that can be used when placing orders for parks shared use signs (fig. 1.25) and parks cyclists dismount signs.



Fig. 1.24 - Typical TfL Quietway Sign



Fig. 1.25 - Approved shared use sign



Fig. 1.26 - London Cycle Network vertical signage

Temporary Signage

Application:

A1 signage can be used to reinforce messages of pedestrian priority or to address speeding issues in targeted locations. Temporary signage can be relocated to have more impact on behaviour as people notice change and are more likely to respond to the message.

'A' frame boards can be located on grassed areas to avoid impinging on the effective width of the footpath, assuming the board can be locked in positions. They should be located off path where possible.



Fig. 1.27 - Example of A frame board (Not Southwark approved)

Finger Posts

Specification:

Extruded aluminium anodised with engraved lettering; Stainless steel finials and adjustable collars with Woodhouse geo stainless steel finger post. POST Ø90mm 316 stainless steel tube with 240 grit brushed finish.

Application:

For path intersections with designated cycle route change and where general wayfinding principles are required.



Fig. 1.28 - Typical Finger Post

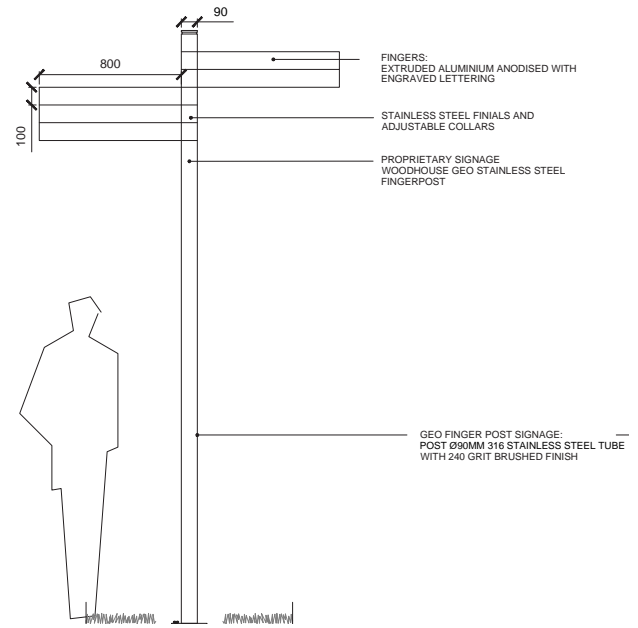


Fig. 1.29 - Finger Post Typical Detail (not to scale)

Signage for Visually & Mobility Impaired People

Application:

Wayfinding for visually and mobility impaired people should be accommodated wherever possible. Providing signage which is tactile can aid visually impaired persons and maps at lower levels can aid wheelchair users and children. Locations of these maps should be considered carefully and installed in locations that would be most beneficial to their users. Maps such as Marshalls intelligent street furniture which integrates with smart tags to provide tailored functionality, should be considered.



Fig. 1.30 - Textured map for visually impaired users

Lighting

Specification:

Spec should be agreed with LBS Lighting team and suitable illumination for a cycle route.

Application:

To be located at regular intervals to the designated cycle routes if required to provide lighting to the route.

New lighting should be installed to one side of the route to allow for possible path expansion in the future.

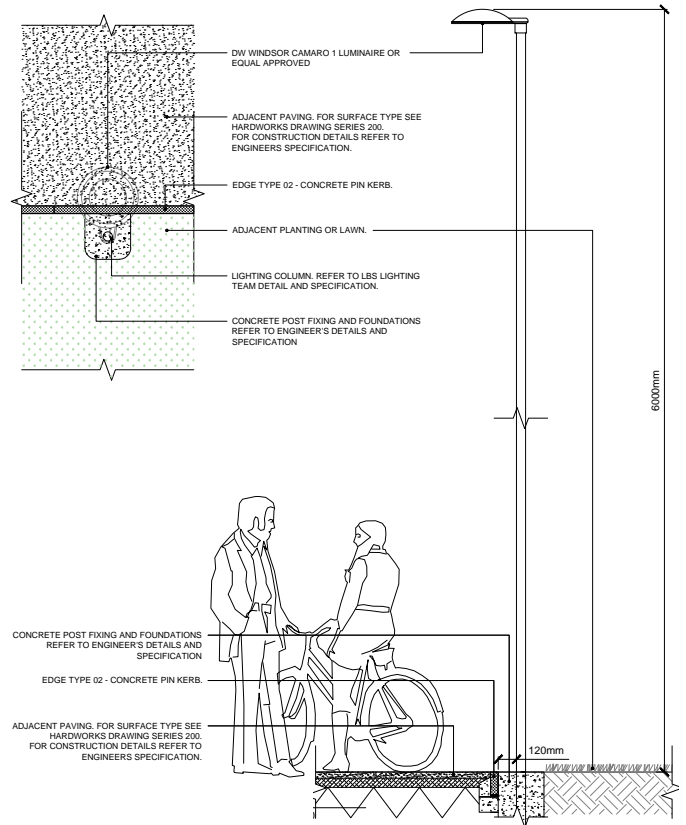


Fig. 1.31 - Lighting column Typical Detail (not to scale)

Cycle Parking Typical Detail

Specification:

Style and type should be suitable for each individual park. Should be constructed of high grade steel and root fixed in a concrete foundation. Cycle parking for mobility impaired people should always be considered as best practice.

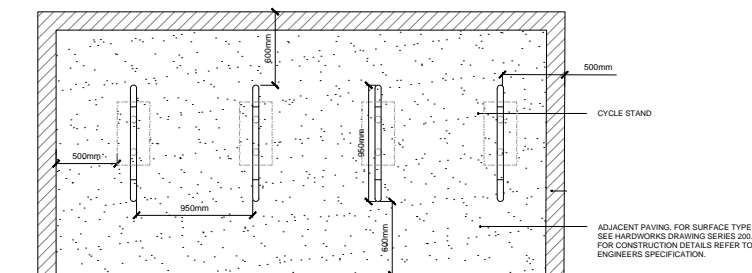


Fig. 1.32 - Cycle parking typical detail (not to scale; do not scale from these figures)



Fig. 1.33 - Cycle parking Burgess Park



Fig. 1.34 - Burgess Park cycle stands

Entrance Treatment

Specification:

Park entrances that are designated cycle routes should have smooth bitumen surfacing with 3mm raised kerb strips at entrance approach. Surface signage paver shown in figure 1.19 must be installed at entrances. Refer to appendix for supplier details when placing orders. Route specific information such as a route name or number can be painted on ground below inset paver. Any directional arrows should be smaller than those used on highway. Entrances should have a minimum of one and maximum of two kerb strips, spaced at 6m. The paver should be located between the entrance threshold and kerb strip, or between the kerb strips if there are two as Fig 1.35.

Application:

To applied at all park entrances which are a designated cycle route.

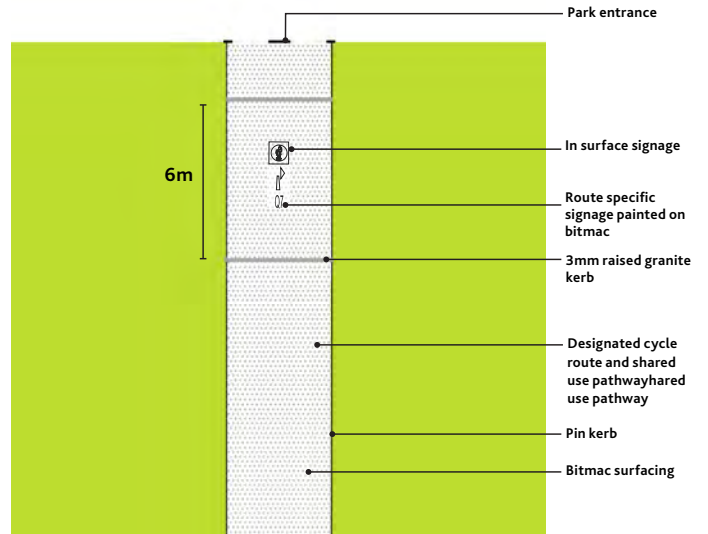


Fig. 1.35 - Designated shared use cycle route entrance treatment

Entrance/Exit Barriers

Note:

Used to prevent motorcycles and scooters from entering a park. Although sometimes necessary, entrance/exit barriers can disadvantage some people with disabilities and users of bicycles adapted for disabled people. If it is felt there is a need to install them, there must be wide consultation under taken by LBS and an Equalities Impact Assessment carried out prior to installation.

Specification:

Style and type should be suitable for each individual park. Should be constructed of high grade steel and root fixed in a concrete foundation.



Fig. 1.36 - Typical entrance/exit chicane



Fig. 1.37 - Typical motorcycle entrance/exit barrier



3.

Monitoring & Awareness

Monitoring & Change

As part of its on going commitment to improve the user experience of its parks, Southwark Council will implement a monitoring and change process on any newly installed designated cycle route. This will include park user observation sessions and park user feedback gathering. This will be done frequently within a stated trial period for the route in question. After this initial trial period, monitoring will become less frequent. Any changes that may need to be made as a result of user feedback will be carefully considered by the council before being implemented.

Please refer to the appedix for Southwark Council's Burgess Park Quietway Cycle Route Monitoring Survey Brief.

Considerate Cycling Campaign

A Considerate Cycling Campaign (CCC) should be rolled out shortly after any new designated cycle route opens. Park Liaison Officers (AKA Park Wardens) will assist with awareness raising strategies by targeting cycle routes at busy commuting times. The aim is that their presence will encourage better behaviour amongst commuting cyclists. Speed and conflict issues will be addressed verbally and fines issued for repeated or extreme behaviour. Temporary signage such as A-boards should be used at key points such as entrances and junctions, with friendly slogans to encourage good behaviour by everyone, rather than negatively targeting any group. The campaign should be reviewed after 6 weeks to make suggestions for improvements. After 2 months the campaign will be reviewed again, and a decision made on whether to continue, change or stop. Local Friends Groups and Cycling Groups must be consulted before the CCC begins, and while it is implemented. Consideration should be given on how to involve local schools.

A CCC will be implemented in Burgess Park after Quietway 7 opens in April 2018, and after Quietway 8 opens, which is proposed to be in 2019.



Fig. 1.38 - Park Liason Officers on bikes

Awareness raising

One of the best ways of managing cyclist speed is through site management and awareness raising. Good signage, coupled with support from the Council can enact behavioural change amongst cyclists who travel too fast to drop speeds and behave more considerately towards other users. Although segregation is often requested from pedestrians and some cyclist groups, latest research as detailed in this report, shows that segregation leads to ownership, which leads to behaviour issues and increased conflict. Shared use space works best when there is clear signage indicating expected behavioural patterns (Considerate Cycle Route, Cycle Speed Limits, Pedestrian Priority, etc) and a level of enforcement / engagement is introduced along the route such as Southwark Council's Considerate Cycling Campaign.

The landscape itself is not enough to alter cyclists behaviour when they use the parks as part of a commuting route or for sports cycling / training. The Council, with the help of designers and other stakeholders, should develop a cycling policy for parks, setting out expected behaviour to ensure the safety of all park users. Southwark Council is committed to developing a Cycling Code of Coduct that will apply to all parks in Southwark.

Cyclist engagement days should be included as part of a Considerate Cycling Campaign for addressing speeding cyclists. Involving local cycling clubs and school programs could be a fun and inclusive way to raise awareness of cycling in a park environment.



4.

Strategic Context

Relevant Policy

Quietways Definition

As part of the Mayor of London's Vision for Cycling (2013), Quietways are a cross-London network of high-quality guided cycleways that aim to help overcome barriers to cycling. They will target cyclists who want to use quieter, low-traffic routes, providing an environment for those cyclists who want to travel at a more gentle pace. According to the Mayor of London, Quietways will be direct, well-surfaced, clearly signed paths with each route to be delivered as a whole that will not give up at so called "difficult places". The Quietways are intended to stretch into the suburbs, with both radial and orbital routes linking up into one network. Quietways are intended to be developed with the different boroughs with the network complementing other cycling initiatives such as the Central London Cycling Grid, Cycle Superhighways and Mini-Hollands.

The Quietway network will also include new off-road greenway routes through parks and along waterways to be used for recreation and family enjoyment. The routes will overcome barriers to cycling, targeting cyclists who want to use quieter, low-traffic routes, providing an environment for those cyclists who want to travel at a gentler pace. Routes through Burgess Park have been considered ideal based on the criteria above as they will provide an off-road opportunity to encourage less confident cyclists in a recreational environment.

National Policies

At a national level, there are several key documents that emphasise the importance of planning and promoting both walking and cycling as part of a healthy lifestyle. The National Planning Policy Framework (2012) sets out objectives for "Promoting sustainable transport", and in particular supports walking and cycling as part of these objectives. This forms part of a strategy which promotes healthy communities by preserving and improving access to green spaces.

Proposed Central London Cycle Grid - Routes for completion by December 2016



Fig.1.39 Proposed central London cycle grid

The Infrastructure Act (2015) sets out the government's ambition for a Walking and Cycling Investment Strategy, emphasising the increasing importance for having a clear vision for both walking and cycling, at a national and local level.

The Government's Transport White Paper (1998) and the Mayor of London's guidance to boroughs on the preparation of their Local Implementation Plans (2001) recommend that all Local Authorities should prepare local cycling strategies. These should indicate how the local authority proposes to implement the National Cycling Strategy (1996) and achieve its targets to increase cycle use.

The Equality Act

The Equality Act 2010 introduced a public sector Equality Duty, which requires public bodies to play their part in making society fairer by tackling discrimination and providing equality of opportunity for all. Authorities will need to consider how different people are likely to be affected by proposals in the public realm.

Regional Policies

Key regional policies and strategies that underpin the planning and development aspirations for Southwark Council include:

The Mayor’s Vision For Cycling in London (GLA, 2013)

This document represents an ambitious plan to integrate cycling into the transport network and transform the infrastructure of the city of London. It proposes a hierarchical network of roads including cycle superhighways, Quietways, and “Mini-Hollands” in order to encourage more people to cycle, promoting healthier lifestyle choices. Junctions will be improved and there is an extensive plan to provide segregated cycle paths on London’s busiest roads.

With an increase of 173% since 2001, cycling has become a mainstream mode of transport in London. This vision for cycling proposes a ‘Central London Grid’ in the City and West End which will join up the network of Superhighways with the Quietways. Significant investment has been set aside for these improvements and at the time of writing this document, four Superhighways and one Quietway have been delivered with several more under construction. The implementation of this strategy relies on the cooperation of the relevant London boroughs and TfL plus working closely with the Department of Transport.



Fig. 1.40 - Southwark cycle routes and green spaces

The London Plan (GLA, 2015)

The London Plan further sets out the commitment of the Greater London Authority (GLA) to cycling through strategy, planning decisions and local development frameworks. They commit in policy to improving the cycle network, promoting cycling as mode of transport and ensuring proper facilities are available to cyclists in new developments. It is in line with The Mayor’s Vision for Cycling in London and in accordance with the London Cycle Design Standards. It supports significant improvement to infrastructure such as junctions, cycle parking as well as improving the cycle hire scheme. It states that cycling issues should be addressed in detail in development proposals as part of an integrated approach to sustainable transport, health and local economy.

Leading to a greener London (GLA, 2009)

This document lays out the GLA’s vision for improving environmental standards, addressing quality of life, adapting to climate change and reducing our greenhouse gas emissions. Sustainable transport plays a key part in this strategy with a strong focus on cycling as a way of reducing CO2 emissions from cars. Encouraging people to cycle improves air quality, reduces congestion and is beneficial to health. Improvements to green spaces and the public realm go hand in hand with cycling infrastructure as more people are likely to cycle if their route is a pleasant one. The Mayor of London’s office acknowledges this and further commits to working with the London boroughs to enhance existing green space to create a ‘green network’ across the city.



Fig. 1.41 - Committed & future cycle routes in Southwark (Sep 2015)

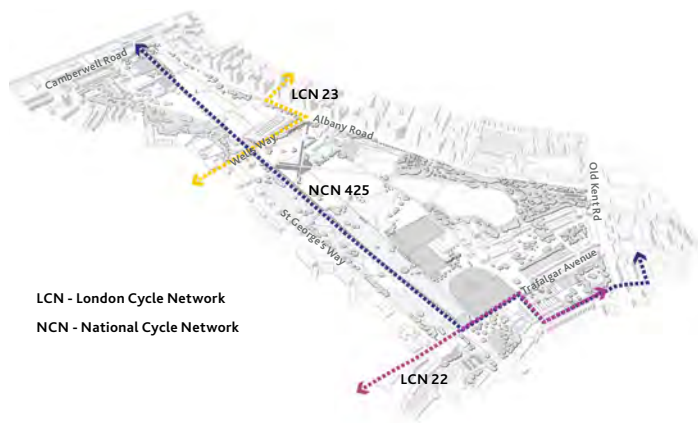


Fig. 1.42 - Existing designated cycle routes through Burgess Park

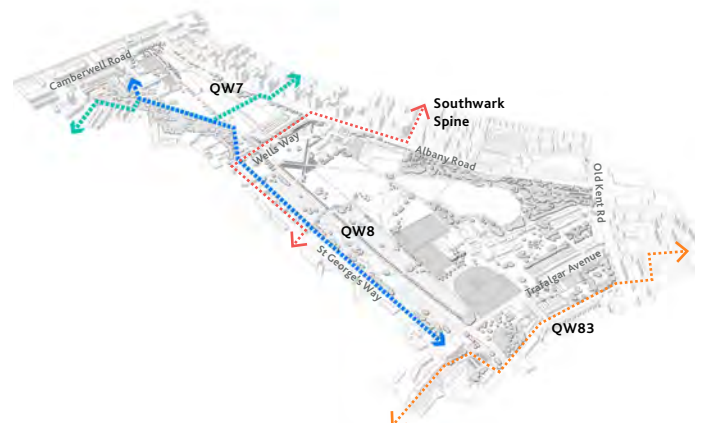


Fig. 1.43 - Proposed designated cycle routes through Burgess Park

Other relevant policies

- *Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation (NHS,2012)*
- *The Walking Plan for London (GLA, 2009)*
- *TfL Subregional transport plans*

Local Policies

Local policies from the London Borough of Southwark must be considered when linking with other strategies. This ensures coherent routes and a consistent quality of design approach is provided.

Southwark’s Cycling Strategy (Southwark Council, 2015)

Southwark’s vision for cycling is an inclusive policy that plans to deliver cycle routes attractive to all. Future-proofing and promoting cycling as a natural choice to get from “A-to-B” is at the core of the policy. The Council has carried out comprehensive analysis on the demand for cycling in the borough and how this can best be served by improvements to cycle routes and network interventions. Their proposed network has been thoroughly tested and there is significant commitment in terms of funding.

Developer’s investing in Southwark will need to ensure that they design for existing and future cycling levels. The Superhighways and Quietways, sit comfortably within this policy and the council is reviewing proposals for a new north/south link running through the borough. The council is continuing to consult the community on cycling improvements with the future cycle network map as a living document to be amended as appropriate.

Walking

Although the Council does not have a specific walking policy document, it is actively investing in improving walking in the borough through improving streets and spaces.

‘Making Walking Count’ is part of the Mayor of London’s priorities for the capital. The Council is encouraging more residents and visitors to travel around the borough on foot. TfL also funds the Strategic Walk Network in order to deliver a pan-London walking resource comprised of seven high-quality walking routes. It is important that walking is taken into consideration when making future transport related plans in the borough.

Southwark Open Space Strategy (Southwark Council, 2013)

Southwark’s Open Space Strategy addresses the need to protect, conserve and enhance existing open spaces whilst creating new ones where there’s demand. The strategy sets out standards for different types of open space and recreation facilities, and provides an action plan to deliver the objectives set out in it’s strategy.

The relevant policies on cycling, walking, and open spaces demonstrate the Council’s commitment to improving quality of life in the borough, ensuring Southwark is a healthy, safe and pleasant place to live, work and visit. Together these policies feed into each other and work in tandem to provide an integrated approach to health and well-being. Walking and cycling are sustainable forms of transport which benefit the health and wellbeing of London’s population, as well as enabling a number of wider environmental, social and economic benefits. Parks and open spaces are a well established urban green resource, operating as important places for social interaction and recreation, as well as an integrated part of the wider walking and cycling network.



5.

Accommodating Uses & Addressing Comfort

Walking and cycling are sustainable forms of transport which benefit the health and wellbeing of Southwark's population, as well as enabling a number of wider environmental, social and economic benefits. Parks within the borough are well established urban green resources, operating as important places for social interaction and recreation, as well as functioning as an integrated part of the wider walking and cycling network. However conflict between both user groups can arise in park settings and need to be addressed to ensure the comfort and enjoyment of all.

Walking

Walking is permitted in all areas of our three study sites with pedestrians having priority over all other users of pathways within each park. The majority of visitors that use the parks are pedestrians pursuing leisure activities, relaxing outdoors and enjoying some respite from the city. Visitors enjoy spending time in the park, often bringing the children, having a picnic and enjoying the fresh air. Dog walkers also make up a proportion of pedestrians visiting the park indicating a need to carefully consider how dog-walking is managed in busier areas, particularly adjacent to cycling routes.

A key challenge for accommodating walking is the popularity of cycling through the parks either on designated cycle routes or on the existing path network. With the introduction of more designated cycle routes in London, the pressure on the existing footpaths could grow as potentially higher numbers of cyclists will be taking routes through the park. This creates issues relating to maintaining high quality, comfortable footpaths for visitors, as more cycling changes the character of the parks and can make pedestrians feel unsafe or marginalised.

Cycling

Cycling is permitted in all Southwark's parks. Visitors cycle in parks for many different reasons which can include recreation, sport and commuting. Cycling has become increasingly popular in recent years due to the success of UK cycling athletes, government funded initiatives and infrastructure improvements. This means an increased number of cyclists are using parks across London for a wider range of uses and the impact of this needs to be considered.

The popularity of commuter cycling has led to an increase of people looking for quicker, healthier journeys to work. Many parks in Southwark are an attractive, safe alternative to busy roads and as such are an ideal location for designated cycle routes. The impact this could have on the aesthetic character of the parks is something council officers are highly attuned to and why they are continuing to work closely with TfL, LDA Design, and local residents to ensure the high quality of parkland is maintained whilst still delivering designated cycling routes.

Cycling is a significant design and management challenge across many parks in London, with a need to maintain pedestrian priority and safety while recognising that more can be done to provide for cyclists. The priority is to reduce the impact of cycling on other visitors' experience and to facilitate safe off-carriageway cycling.

Types of Conflict and Opportunities

Shared Use Paths:

According to the London Borough of Southwark's *Byelaws for Pleasure Grounds, Public Walks and Open Spaces*, cycling is permitted everywhere in Southwark's parks, and all routes through the park can be considered 'shared use' - meaning different modes of transport coming together. This can include motorised vehicles such as mobility scooters, as well as bicycles, and foot traffic. Shared use routes are designed to accommodate the movement of all users including pedestrians, cyclists and other permitted vehicles. They can be created from new, or by converting existing footways

or footpaths. They may be segregated or unsegregated. A segregated route has different zones for pedestrians and cyclists and can use elements such as line markings or a kerb. An unsegregated route is one where pedestrians and cyclists mix freely and share the full width of the route without the use of any demarkation.

Both route types have the potential to increase conflict between pedestrians and cyclists where both modes of transport use the footpath. Therefore an analysis must be undertaken to examine whether segregated or non-segregated routes are the most suitable for the footways which will be turned into designated cycle routes within Southwark's parks.

There have been many studies undertaken looking at the benefits of both route types as well as emerging research on perceived conflict between pedestrians and cyclists. Initial studies undertaken by Living Streets (*Sharing the Space: A study of four shared-use paths in London, 2015*) have reported that interactions between pedestrian and cyclist modes are frequent and appear mild, but pedestrians subjectively experience more conflict than cyclists. Therefore it's important to understand how best to maintain comfort levels for all users in order to preserve the quality and safety of the user experience whilst also maintaining the quality of a park setting.

Unsegregated versus segregated footpaths is a hotly contested issue amongst different user groups and as such must be given serious consideration. This report will examine best practice guidance, as well as precedent studies on unsegregated versus segregated path types in order to suggest the best possible solution for designated cycle routes through Southwark's parks.

Other Comfort Determinants:

Other determinants that can affect user comfort include the volume of users of both cyclists and pedestrians compared to path width, cycle speed, adequate signage, treatment at junctions, lighting, and how all of these factors will be managed. Using signage to promote slower cycling speeds is seen as key for promoting behavioural change amongst cyclists. Alerting cyclists that they are in a pedestrian priority area and reinforcing this, is an invaluable method for encouraging safe behaviour in shared space. Junctions should also function to alert multiple users of their surroundings.

This report looks to find the opportunities presented in overcoming these design challenges in order to give Southwark Council an adequate tool kit for enhancing the user experience within the parks. Furthermore it is important to examine how each of these factors are to be treated within the setting of a park and how management can play a role in ensuring the comfort of users is maintained in the future.

Summary List of Key Comfort Determinants:

- Unsegregated vs segregated
- Path width
- Volume of users
- Cycle speed
- Adequate signage
- Lighting
- Junctions
- Management



Fig. 1.44 - The Broadwalk in Regents Park, London - an unsegregated shared use path



Fig. 1.45 - The Broadwalk in Hyde Park, London - an segregated shared use path

6.

Three Case Studies in Southwark

Case Studies

To better inform this report and its relevance to Southwark Council, an observational study was undertaken to understand cyclist movement and cyclist-pedestrian conflict in Southwark's parks particularly pertaining to shared use. The three study areas were also observed and rated for their key comfort determinants. This small observational study sets out to ask the questions:

- What volume of user groups use each space?
- How common and how severe are pedestrian/cyclist interactions?
- How many other key comfort determinants are currently present in each space?

Site Selection

A total of 3 sites were selected based on the criteria that a TfL Quietway route will be built through them in the future. The sites chosen were: Burgess Park, Kennington Open Space, and Peckham Rye Common. All three are parks in Southwark and are currently used by both pedestrians and cyclists on unsegregated shared use paths.



Fig. 1.46 - Kennington Open Space



Fig. 1.47 - Peckham Rye Park and Gardens



Fig. 1.48 - Burgess Park

**Fig.1.49
Burgess Park -
Site Location**



Site Location and Study Areas

LDA Design has looked at three different study areas for the purposes of this report. All three are green spaces within the London Borough of Southwark which will in future have a Quietway pass through them. The study areas are as follows:

Peckham Rye Park & Common

At 42.75 hectares, Peckham Rye Park and Common comprises both a newly restored Victorian Park and historic common and provides a pleasant refuge for both the local community and wildlife. Featuring ornamental gardens, flowing streams, woodland and a lake, the park is used for relaxation and other activities. The park has been awarded Green Flag status since 2007. Peckham Rye Park has a long and engaging history. It was recorded as being cultivated before the Norman Conquest in the 11th Century.

**Fig. 1.50
Peckham Rye
Common & Park -
Site Plan**



Kennington Open Space

At 2.24 hectares, this small open space is located on John Ruskin Street and adjoins Kennington Park. Kennington Open Space offers a small grass area which can be used for informal recreation, and an area of outdoor gym equipment. The adjacent Kennington Park is in the London Borough of Lambeth and comprises two parts: a Victorian Grade II listed park and the park extension to the east, created in the 1960's alongside Kennington Open Space.

Fig. 1.51
Kennington Open
Space - Site Plan



Fig.1.52 Burgess Park



Fig.1.53 Peckham Rye Common



Fig.1.54 Kennington Open Space

Research Methods

This study undertook direct visual observations of cyclists and pedestrians and recorded their numbers in order to analyse volumes and any observed conflicts. The site observation approach, developed by Living Streets in their report *'Sharing the Space; A study of four shared-use paths in London, 2015'* included:

1) Site Observation

- Direct visual observation in the morning (8:00hrs - 9:00hrs) and afternoon (17:00hrs - 1800hrs).
- Observation points were chosen where there are the largest number of pedestrians and cyclists passing each other, together with frequent opposing or perpendicular movements. The observer had an unobstructed view without interfering with the path users' usual behaviour.

- If possible, interactions between the two user groups were recorded and ranked in severity from 'A' the mildest to 'H' the most severe. See table below for reference. This methodology was developed from the methodology used by Living Streets.

2) Pedestrian & Cyclist Counts

- Snapshot counts of pedestrians and cyclists carried out over a 10 minute period of the mid point of each morning or afternoon period;
- If possible direction of travel and movement of users noted to identify main desire lines

Limitations of this study include not testing for subjective experiential evidence amongst cyclists or pedestrians. This would serve to augment the findings by surveying how different users feel about sharing the space with each other as perceived levels of comfort have shown to differ between user groups.

Interaction Type	Description
A. Early change of direction or slowing down	• A cyclist or pedestrian noticing the presence of another user on the path and adjusting their position accordingly or slowing down in a controlled manner
B. Negotiation or inconvenience	• Hesitation, waiting for the other user to proceed or mild irritation as identified verbally, with body language or gestures
C. Warning	• A vocal warning or alert, such as bell ringing, given to another path user to announce one's presence. (This could also occur out of courtesy as well as in frustration)
D. Late swerve/change of direction	• An uncontrolled, sudden or uncomfortable last minute movement. The user had clearly not anticipated the need to change course early enough
E. Sudden stop	• Coming to a halt at a late stage or sudden braking/stopping that is largely uncontrolled
F. Verbal (or physical) exchange	• An argument, shouting or swearing. A physical assault (likely to be a rare occurrence)
G. Near miss	• A near collision where two or more users are alarmed by the incident and may take emergency action to ensure an impact is avoided
H. Collision	• A physical collision between users

Fig. 1.55 - Table showing categories of interaction used for the site observations



Results

Case Study 1:

Burgess Park

Study day: July 5th 2016

Location: Path intersection west of Wells Way

Weather: Sunny and warm

As previously noted, Burgess Park is a large recreational area in Southwark which extends from the Old Kent Road in the east to Camberwell Road in the west. The case study focuses on the area to the west of Wells Way and observations were taken at a busy intersection - in red on map below. Both of the proposed Quietways will intersect close to this point once fully implemented.

The table below shows the pedestrian and cyclist count. More cyclists than pedestrians were observed at both morning and afternoon sessions in the park. Burgess Park has a network of established shared use paths available to pedestrians and cyclists all of which are unsegregated according to Southwark's bye-laws. There was a significant concentration of cyclist movement at the selected intersection as it provides a junction before users travel south west down New Church Road, west towards Camberwell Road or east towards Wells Way. There was a noticeable increase in cyclist activity earlier in the morning, approximately 8:10hrs and also later in the evening, 17:45hrs, indicating that cyclists use Burgess Park for commuting purposes. Many families and children were

present at both observation times and the park was busy and well used. Dog walkers, joggers, rollerbladers, skateboarders, as well as two mobility impaired users on mobility scooters were observed during the afternoon observation session. Some cyclists appeared to travel at higher speeds in Burgess Park than the other two study areas but it was difficult to understand why this might be. Path widths west of Wells Way at the study area are mostly 3m but widen to 5.8 along Church Road. Observed interactions were mild (category A, plus category B) with the respective conflicts involving cyclists negotiating small children or other cyclists at path intersections. In the afternoon session there was a high incidence of cyclists cycling off the footpath on to the grass to avoid large groups, families etc. Altogether this was observed nine times during the afternoon session and once during the morning observation period. This could indicate a need for greater path width. Overall though the paths as unsegregated shared use seemed to work well. As mentioned previously, testing for subjective experience could show different results.

Other key comfort determinants were also observed. Very little signage is present to indicate pedestrian priority or that cyclists should give way to pedestrians. Junctions could use enhancing in order to raise cyclists awareness that they are entering into a pedestrian environment and similarly pedestrians could use some notification indicating they may encounter cyclists especially during peak commuting times when cyclist flow rates are highest. Lighting will need to be installed as the Quietways are meant to be accessible 24 hours.

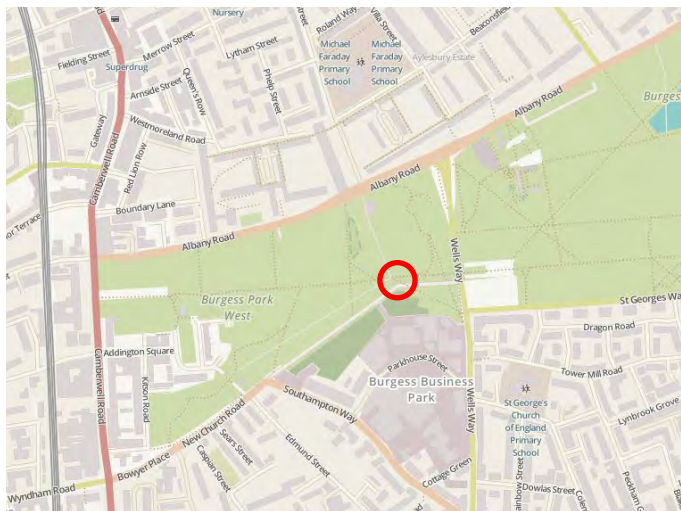


Fig. 1.56 - Burgess Park sight observation location

	Pedestrian flows	Cyclist flows
Morning Peak (8:00 - 9:00)	65	69
Afternoon Peak (17:00 - 18:00)	43	56
Total	108	125

Fig. 1.57 - Burgess Park snapshot pedestrian and cyclist counts



Fig. 1.58 - Photo of site observation location in Burgess Park

Case Study 2:

Kennington Open Space

Study day: July 6th 2016

Location: NE corner by path junction

Weather: Sunny and warm

This is a small open space at the western edge of the borough, located on John Ruskin Street which adjoins onto Kennington Park in Lambeth. It is primarily used for informal recreation including boot camp exercise classes as well as football for small children. Observations were taken from the north east corner of the open space. See map below for location. This is roughly where the proposed Quietway will run once finalised.

The table below shows the pedestrian and cyclist count. In this location far fewer cyclists were observed than at Burgess Park. It was well used by pedestrians including joggers and dog walkers. One wheelchair user was observed during the morning observation session. There is a strong desire line running from the north west of the open space which was used often by pedestrians and occasionally by cyclists. Most cyclists kept to the shared use paths. There was no observable pronounced flow of cyclists at peak commuting times indicating this route is not regularly used by commuter cyclists.

Cyclists observed travelled at slower speeds than in Burgess Park. Average path widths in Kennington Open Space are 3m. There were no observable interactions at the observation times and both user groups seemed to share the unsegregated shared use route well.

Other key comfort determinants were observed. There was no signage indicating routes, pedestrian priority, or shared use. Surface signage and measurements to raise awareness at junctions may need to be considered depending on volume of users and the risk of conflict. Lighting is present and will need to be evaluated for correct safety levels for cycling at night.

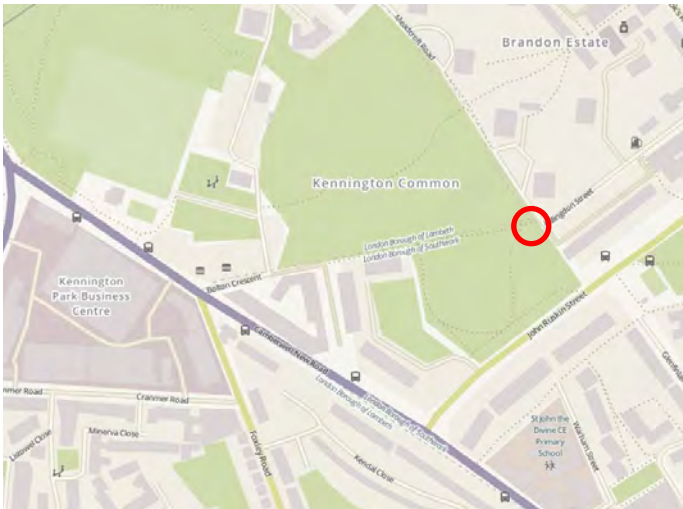


Fig. 1.59 - Kennington Open Space sight observation location

	Pedestrian flows	Cyclist flows
Morning Peak (8:00 - 9:00)	31	4
Afternoon Peak (17:00 - 9:00)	50	6
Total	81	10

Fig. 1.60 - Kennington Open Space snapshot pedestrian and cyclist counts



Fig. 1.61 - Photo of site observation location in Kennington Open Space

Case Study 3:

Peckham Rye Park & Common

Study day: July 4th 2016
 Location: Cafe on the Park
 Weather: Cloudy with light rain

Peckham Rye Park and Common comprises both a newly restored Victorian Park and historic common. It is a well used public space on the border of Dulwich and Peckham. The case study focuses on the east west route that functions as the northern border of Peckham Rye Park which is the more formal Victorian park. This was restored using Heritage Lottery Funding in 2001. See fig 1.23. This is a proposed Quietway route which will function as a “South Circular” for leisurely cycling in south London.

The table below shows the pedestrian and cyclist count for Peckham Rye Park and Common. At the beginning of the observation period there were many young children and mothers with buggies using this route due to the location of the one O’ clock club and the cafe alongside it. There were few cyclists observed at this time. Towards the middle and end of this session the parents and children thinned out which coincided with an increase in commuter cyclists along the route. Cyclists travelled at slower speeds than observed at Burgess Park. Path width in Peckham Rye Common is about 4.8m. Observed interactions were very mild - mostly A category.

There was one category C conflict observed where the path user required a bell warning from a cyclist, which was a french bull dog persistently sitting in the footpath. Overall due to the wide footpath and fluctuating nature of both pedestrian and cyclist use patterns, both users appeared to use the unsegregated shared use route comfortably. As mentioned previously, testing for subjective experience could show different results.

Other key comfort determinants were observed. This route through the park makes up part of London cycle route 25 and is therefore signed at junctions and has some in surface markings, although they were notably faded. Further signage, either in- surface or vertical, to denote pedestrian priority on these routes would be beneficial. Peckham Rye was the only one of the three study areas that had a different surface treatment at junctions. At junctions, concrete block paving was laid in 90 degree herringbone pattern either at the approach or throughout the junction. Tarmacadam with different coloured aggregate was also used in some locations. This functioned to raise awareness of potential conflict for all users and could be adapted for use by the proposed Quietway. Existing lighting was present and could also be used to light the proposed Quietway providing lux levels are adequate.

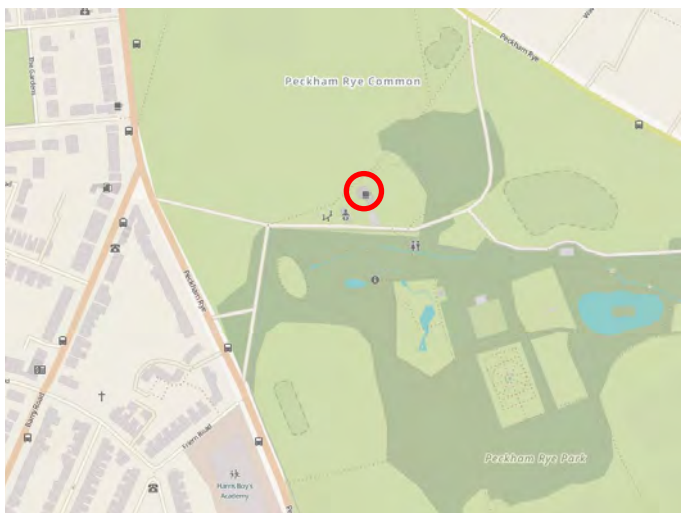


Fig. 1.62 - Peckham Rye Park & Common sight observation location

	Pedestrian flows	Cyclist flows
Morning Peak (8:00 - 9:00)	11	9
Afternoon Peak (17:00 - 18:00)	16	15
Total	27	24

Fig. 1.63 - Peckham Rye Park & Common snapshot pedestrian and cyclist counts



Fig. 1.64 - Photo of site observation location in Peckham Rye Park & Common

Discussion

As previously described each study area is located in a different park within the London Borough of Southwark and each is to have a TfL Quietway in future. All three sites also have unsegregated shared use paths as part of the existing infrastructure. All three have recreational value to the local community and provide places to enjoy nature and escape the city even for a short time.

Burgess Park was by far the busiest of the three study areas and had a higher volume of cyclists than pedestrians at peak hours. Cyclists in Burgess Park also appeared to travel at higher speeds than the other two areas despite a larger volume of pedestrians. This indicates that Burgess Park is already a key commuting route for many people in the area. Although most users shared the space well, there were several incidents observed where cyclists needed to cycle off path to avoid large groups of pedestrians or families with small children, suggesting that a wider path width might be necessary. Most cyclists adjusted their speed in the presence of unpredictable small children and dogs and only mild interactions between cyclists and pedestrians were observed. Burgess Park appears to be a very busy cycling route already which could be due to its size and its position in south London. It will be important to monitor cycling activity in the park in order to understand what effect the introduction of the Quietways will have. Should it bring an even higher volume of cyclists, more will have to be done to accommodate both user types and ensure pedestrians and cyclists are comfortable using the park. The 3m wide paths from the Camberwell road entrance may have to be reconsidered as the current width was perceived to be insufficient at times with existing use. Wider paths, such as at New Church road appeared to cope with current use well. Burgess Park may benefit from some speed awareness days managed by Southwark Council. Other management measures could include cycle safety days for the borough.

Kennington Open Space was the smallest of the three study areas but is still very well used for its size. It is clear that it is very valuable for local activities. It had the lowest volume of cyclists compared with the other two sites but a high proportion of pedestrians in comparison. Both users shared the path well and path width did not appear to be an issue. It was clear from observation that this space was not used by commuter cyclists. This does not preclude that it could not be if the proposed Quietway provided an enhanced connection between point A and point B. If the proposed Quietway does pass through Kennington Open Space, bringing an increase in cyclist volume, it will have to be designed and implemented carefully in order to minimise impact on the pedestrian experience of this space. It also must not impact on the use by young children through local sports clubs.

Peckham Rye Park and Common was the quietest of the three study areas observed in terms of volume of users. Weather could have been a determinant in this as it was raining during the observation period. An increase in cyclists was observed towards the peak commuter times indicating that this route is used by commuter cyclists. Flows of pedestrians were observed based on the opening times of the cafe and one o'clock club. The unsegregated shared use path in this study area was the widest of the three at an average of 4.8m. This allows for more space to accommodate different users, including families with pushchairs, and could easily accommodate a higher volume of cyclists in future. Most cyclists observed travelled at slower speeds and adjusted their speed accordingly in the presence of dogs and children. The current junctions used a change of materials to enhance attention and existing lighting could be used depending on adequate light levels.

Further monitoring and analysis of all three study areas will be required once the designated Quietways are established in order to reassess pedestrian/cyclist flow and make further recommendations.

Summary

Based on the observations reported in this study we can conclude that a high volume of cyclists and pedestrians use Burgess Park. A low volume of cyclists and high volume of pedestrians use Kennington Open Space, and a low volume of both user groups use Peckham Rye. Pedestrian/cyclist interactions do occur but the majority are very mild, consisting of natural adjustments and considerate behaviour as both groups accommodate each other's relative speed and direction of travel. Improvements to junctions and lighting would benefit Burgess Park and Kennington Open Space. The western part of Burgess Park would benefit from a revaluation of current path widths. All 3 study areas could benefit from better signage, particularly signage that encourages more considerate behaviour such as Pedestrian Priority signs.

Key Comfort Determinants

	Average path width at site observation location	Average volume of users	Average cycle speed	Signage	Junction treatment	Lighting
Burgess Park	3 metres most footpaths in park 4.8m at New Church Rd	<ul style="list-style-type: none"> • High cyclists • High pedestrians 	<ul style="list-style-type: none"> • Fast 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • Not through main park • Lighting along New Church Rd
Kennington Open Space	3 metres	<ul style="list-style-type: none"> • Low cyclists • High pedestrians 	<ul style="list-style-type: none"> • Slow 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • Yes
Peckham Rye Park & Common	4.8 metres	<ul style="list-style-type: none"> • Low cyclists • Low pedestrians 	<ul style="list-style-type: none"> • Slow 	<ul style="list-style-type: none"> • Yes 	<ul style="list-style-type: none"> • Yes 	<ul style="list-style-type: none"> • Yes

Fig. 1.65 - Key comfort determinants table



Fig. 1.66 - Cyclist in Rust Square, Burgess Park



7.

Best Practice Guidance & Precedents

Best Practice Guidance

Considerable research has been undertaken by relevant bodies which focuses on unsegregated shared paths versus segregated shared paths for cyclists and pedestrians. Outlined below is a summary of this research from a selection of organisations.

Atkins

In 2012 Atkins engineering produced an operational review of shared use space for the Department for Transport which was used to inform the DfT report *Shared use Routes for Pedestrians and Cyclists (2012)*. It examined the effectiveness of segregation versus unsegregation on shared use paths concluding that:

- Collisions are no more likely on unsegregated routes than segregated ones, while the need to interact with other users is likely to increase;
- Where there is sufficient capacity to provide a good level of service, conflict is less likely to be an issue regardless of whether the route is segregated (by white line) or not.

Therefore pathways need to be wide enough for users to pass each other at a safe distance.

Department for Transport

The following are relevant points from the Department of Transport (DfT) on shared use and whether segregation or unsegregated paths should be considered:

- If a scheme objective suggests a clear preference for providing cyclists with an off-carriageway facility, such as in the case of the Quietways, creating a shared use route might be highly desirable. Such routes can be particularly valuable where a considerable proportion of cycle traffic is for recreation, and they could be of particular benefit to children and less confident cyclists;
- A key decision when introducing shared use is whether to segregate the route or not. An unsegregated route is the simplest option – it is relatively inexpensive, the

least visually intrusive, easier to maintain and makes good use of the land available where width is limited;

- Where pedestrian movement is mostly linear and there is adequate width, segregation can work well. However, if pedestrian movement involves significant crossing manoeuvres, it might be better not to segregate. Wheelchair and mobility scooter users in particular might be unable to easily cross any physical dividing feature such as kerbs or raised markings;
- When considering the potential for conflict between user groups, research undertaken by Atkins (*Shared Use Operational Review, 2012*) was commissioned which compared unsegregated routes with routes segregated by white line, the results of which concluded that there was no evidence to suggest that segregation by white line materially reduces the potential for conflict between pedestrians and cyclists.
- Width strongly influences the quality of shared use routes – insufficient width tends to reduce user comfort and increases the potential for conflict between pedestrians and cyclists;
- A width of 3 metres should generally be regarded as the preferred minimum on an unsegregated route, although in areas with few cyclists or pedestrians a narrower route might suffice. Where a significant amount of two-way cycling is expected, additional width could be required. However, the need here for additional width is not clear cut, because the absence of segregation gives cyclists greater freedom to pass other cyclists. It might therefore depend on user flows.

Sustrans

Sustrans is a UK charity enabling people to travel by foot, bike or public transport for more of the journeys they make every day. They work with families, communities, policy-makers and partner organisations so that people are able to choose healthier, cleaner and cheaper journeys, with better places and spaces to move through and live in. Their vision is that by 2020 four out of five local journeys will be made by bike, foot or public transport. The following are relevant guidance points on shared-use paths as published in *Segregation of Shared Use Routes: Technical Information Note No.19 (2014)*

- There are significant advantages with unsegregated paths where the width is shared by all users, particularly on traffic free routes away from the road. Unsegregated routes maximise usable width and minimise maintenance requirements and sign/line clutter. Effective segregation will benefit all users but requires significant additional width to provide the same level of service;
- Where pedestrians walk in groups (especially at weekends and school journeys) they are more likely to ignore segregation unless widths are adequate;
- More considerate behaviour is observed on unsegregated routes and segregated routes can encourage territorial behaviour and faster cycling;
- Narrow segregated routes have higher levels of noncompliance;
- Unsegregated routes require fewer signs and markings, thereby offering a less urban and intrusive solution. On unsegregated paths consideration should be given to the erection of courtesy signs such as “cyclists give way to pedestrians” or “Pedestrian Priority”
- Effective segregation requires sufficient width to be provided for each user group; segregation where insufficient width is provided is largely ineffective. Noncompliance with segregation, where and when it occurs, may lead to increased potential for conflict amongst all users. Where levels of noncompliance are likely to be high an unsegregated path might be more satisfactory;
- For an unsegregated shared use path, a minimum width of 3m is preferred, although 4 should be provided on busier routes;
- A preferred minimum for a segregated shared use path with no side constraints is 7m (3.5m for cyclists and 3.5m for pedestrians) although an acceptable minimum could be 4.5m (2.5m for cyclists and 2m for pedestrians).



Fig. 1.67 - Pedestrian sign example - Germany

Canal & River Trust

The Canal & River Trust manages and cares for 2000 miles of waterway across the UK, including the management of historic towpaths that traverse the country. These towpaths are predominantly unsegregated shared use paths that need to accommodate multiple users including pedestrians, cyclists, anglers, horse riding, and house boating. The potential for user conflict is high and cycling has been reported as a major concern along tow paths, specifically regarding cycling speeds. The Trust have conducted thorough consultations on how best to manage the towpaths including the *Summary Output Report Sharing Towpaths consultation (2014)*. This has gone into informing a national policy for sharing towpaths (*Better Towpaths for Everyone, 2015*) as well as a specific guide for Greenways and Quietways in London (*Greenway & Quietways: Better Towpaths for Everyone in London, 2014*). Some of their key suggestions on shared use and cycling are;

- Encouraging better behaviour through a Towpath Code which encourages cyclists to ‘*Share the Space, Drop your Pace*’;
- Applying a speed limit as part of a code of conduct through clear signage and some kind of enforcement could go some way to alleviating cycling user conflicts;
- The Trust could develop better relationships with cycling clubs in order to create a credible channel to reach cyclists and raise awareness of the towpath code of conduct;
- Priority should be given to the slowest users and those using the waterway and considerate behaviour towards these groups should be fostered;
- Simple signage will be used to encourage safe sharing such as at blind spots, pinch points and on busier towpath stretches;

In most cases concerning the Trust, widening the towpath to accommodate more users is not an option due to edge constraints and the historical sensitivity of the paths themselves. Therefore the Trust have had to focus on promoting behavioural change through positive reinforcement and awareness raising.

Living Streets

Living Streets is the UK charity for everyday walking. Together with the City of London and Westminster University, they commissioned a study (*Sharing the Space: A study of four shared-use paths in London, 2015*) to report on the impacts to pedestrians of sharing space with cyclists. Results of the report showed that the majority of pedestrian-cyclist interactions in shared space are very mild. However, often the user experience is impacted more deeply, particularly for pedestrians; that people feel more than they show. The report has shown that:

- Sharing spaces affects both modes. Interactions are frequent and appear mild, but pedestrians experience more conflict than cyclists;
- There is a disproportionate impact on disabled people, who may prefer to avoid an area completely;
- Both volume of users (of both modes) and ratio of cyclist to pedestrians can affect comfort;
- Cycle speed is the key issue for pedestrians. Cyclists should be slowed down, for example, through the use of street furniture or if possible alternate routes provided;
- Where sharing is unavoidable, signage should make the situation clear. However, it must be recognised that insufficient space significantly reduces user comfort. Improving adjacent alternate routes for pedestrians and cyclists may help to diffuse the pressure and tension on key routes.

The case studies in the report suggest that shared spaces work better for pedestrians where pedestrians outnumber cyclists, where there is sufficient space and visibility – and where there is more emphasis on a ‘place’ function rather than movement. Once again the report emphasises that comfort is key to encouraging and supporting growth in walking and cycling.



Fig. 1.68 - Towpath cycling as part of the Canal and River Trust



Fig. 1.69 - Towpath cycling awareness day



Fig. 1.70 - Towpath cycling as part of the Canal and River Trust

Precedent Studies

The following precedent studies are examples of cycle routes from working parks in the UK. All three are objectively successful public spaces based in London which exemplify good practice and good management of paths shared by different users. Understanding what has worked successfully and what has not for the following public parks and how they adapt to change, enables us to understand the requirements for parks in Southwark. Parks in the Netherlands will also be examined as cycling is fully embedded in Dutch culture which is seen as a benchmark around the world for promoting cycling and healthy living.



Fig. 1.71 Tarmacadam paving The Broadwalk, Regents Park

The Royal Parks

Policy Summary

The Royal Parks (TRP) are managed for the enjoyment of the public, balancing visitor needs with other duties relating to wildlife, heritage, and conservation. In the Parks, pedestrians are given priority on paths as they comprise the vast majority of park users although other activities are supported. Not all paths in The Royal Parks permit cycling on them and these are usually marked by in surface signing at the beginning of the path. Paths that do permit cycling are managed to give pedestrians priority. The Royal Parks acknowledges pedestrian concerns about cycling especially regarding speed and volume and have developed a cycling policy and a Pathway Code of Conduct to encourage behavioural change by park users. A summary of the cycle policy and Code is as follows:

- Wherever possible, cycle routes in the parks link with designated cycle routes outside the park, with cycle routes through the park kept to the perimeters to minimise volume pressures on the centre and impacts on historic character;
- Cycle routes through the park do not always take the most direct route to meet the individual journey needs of every cyclist;
- Pedestrians have priority over all other users of the pathways, even in areas designated and marked for other purposes. Considerate behaviour is encouraged;
- Adhere to British Standard approved protective equipment and adhere to all pathway and road markings including speed limits.
- As some park visitors may be visually or hearing impaired, using a bell or high visibility clothing and lights is advised.
- Thank other park visitors who allow you to over-take or pass them;



Fig. 1.72 Granite setts at junction, Hyde Park



Fig. 1.73 - Spray and chip surfacing at junction, Kensington Gardens

Segregated vs Unsegregated

Over the years TRP have conducted a series of studies examining segregated vs unsegregated shared use paths in the parks and the efficacy of segregation. One of the most recent was undertaken by Atkins in 2010 which looked at unsegregated shared use on The Broad Walk in Regents Park (*The Regent's Park, The Broad Walk Shared Use Monitoring, 2010*). Path width and relatively small volume of cyclists in comparison to pedestrians contributed to users feeling that the Broad Walk is successful as an unsegregated shared use path. Although there were concerns about dog walkers and adherence to dismount signs in other areas.

Other studies have looked at Hyde Park which has an exceptionally busy segregated cycling route running through it, particularly at peak times. TRP have noted that the segregated nature is an issue as there is fear that young children and dogs, not aware of segregation, are likely to be involved in cycle related accidents on these routes. There is an aspiration within TRP to convert this corridor to an unsegregated shared-use path where more considerate behaviour can be encouraged.

Physical Interventions

TRP have used highway design best practice techniques as well as their own design guide (*The Royal Parks Design Guide, 2010*) in order to guide the treatment of the physical elements situated within their historical landscapes.

Physical interventions for cycling provision in TRP's parks on paths include:

- Surfacing
- Path width
- Cyclist speed control
- Junction
- Signing

Surfacing:

Asphalt/tarmacadam is used for wide high flow footpaths and most formal, pedestrian only routes in TRP. Tar spray and chip in Golden Gravel is often used to emphasise pedestrian priority particularly at junctions.

Path Width:

Minimum width for a pedestrian only path is 4.0 m.
Minimum width for a major shared use path is 6.0 m.

Cyclist Speed Control:

TRP state that any speed control measures should be a response to a behaviour monitoring study that establishes whether there is a problem that relates to cycling speed issues. Speed control techniques in TRP's parks are as much about raising cyclists' awareness of the pedestrian environment as they are about lowering cycling speeds through physical interventions. TRP advocates a cycling speed on shared use paths of 8-12 mph.

Junctions:

TRP uses setts or cobbles positioned across the full width of the path on the approach to a conflict point where there may be an issue of cycling/pedestrian interaction. These are set at a minimum 2m from the intersection point and are no more than 6m apart as cyclists can regain speed quickly. If there are gradients that encourage speeding, TRP use rumble strips implemented at a spacing of 10 m. Bollards are only introduced in TRP's parks where low cycling speeds are expected as a warning that cyclists are entering a road or a change in the character of the place need emphasising.

Signing:

Road markings and surface signs are used in TRP's parks with a light touch. TRP adopt a risk based approach to the use of signage which should typically conform to their set of guidance and standards. Minimising visual clutter is actively promoted across all the parks. Surface signage, such as "pedestrian only" signs, are located at the transition point between pedestrian only paths and shared use surfaces and positioned within 2m of the start of the footpath.

Vertical signage in TRP are typically attached to gates or fencing at park entrances, mounted on existing pole and lamp columns, or integrated into the design of a bollard. National Cycle Network signage should generally not be used within TRPs and proposed Quietway signage is to be reviewed on a case by case basis.

The City of London - Hampstead Heath

Policy Summary

Hampstead Heath has several bye-laws relevant to cycling which include limitations on speed and cycling on routes not approved by the council or to the annoyance of other users. Cycle routes through Hampstead Heath are all unsegregated shared use routes and emphasis is placed on considerate cycling and behavioural change. Their guidance for cyclists includes:

- stay on authorised routes
- do not exceed 12 mph speeds
- respect other users and slow down accordingly
- always give way to pedestrians at all times and respect 'No Cycling' signs
- take care at crossing points and sharp bends

Physical Interventions

Hampstead Heath has minimal physical interventions in the landscape to address issues with cycling which reflect the rugged character of the Heath. The City of London have used the recommendations for cycle routes through parks and green spaces as laid out in *The London Cycle Design Standards* (TfL 2014) as a starting point for how their cycle routes are designed.

Physical interventions for cycling provision on Hampstead Heath on unsegregated shared use paths include:

- Surfacing
- Path width
- Signing

Surfacing:

Asphalt/tarmac is used as surfacing on primary routes through the Heath. Bonded gravel or loose gravel is used on more tertiary routes.

Path width:

Path width varies through the Heath ranging from a minimum 2.5m wide on tertiary routes up to 5m wide on primary routes

Signing:

Hampstead Heath uses both surface signing and vertical signing to indicate where cycling is permitted or where the route is shared. Minimising visual clutter is a principal that the City of London shares with The Royal Parks. Signs at path entrances indicate a cycle route and the speed limit for these routes, as well as indicating that they are shared use.



Fig. 1.74 - Hampstead Heath unsegregated shared use path



Fig. 1.75 - Hampstead Heath shared use signage



Fig. 1.76 - Hampstead Heath cycle restrictions sign

The Queen Elizabeth Olympic Park

Policy Summary

Cycling in the Queen Elizabeth Olympic Park (QEOP) falls under the governance of the Lee Valley Regional Park Authority and as such are subject to its bye-laws and cycling code of conduct. The main summary of these two policies are:

- Cycling is not permitted anywhere apart from where there is a right of way for cycles or on a designated route for cycling;
- Always give way to pedestrians on shared use paths;
- Be considerate and courteous to all users bearing in mind those with visual or hearing impairments.
- Slow down at path junctions, bridges and bends;
- Do not expect to use the path for high speed travel;

These policies once again reflect emphasis on behavioural change and encourage considerate cycling over implementing physical interventions.

Physical Interventions

The QEOP has a variety of physical interventions similar to The Royal Parks and experiences a similar volume of users per year. Most of the cycle routes through the park are unsegregated shared use routes however there are some segregated routes that run adjacent to roads. These are to address concerns by those with visual impairments about certainty of use. These routes include tactile paving to differentiate cycle lanes from pedestrian footpaths and follow the Inclusive Design Standards set out by the London Legacy Authority.

Physical interventions for cycling in the Olympic Park include:

- Surfacing
- Path Width
- Segregation strip
- Signing

Surfacing:

Surfacing throughout most of QEOP is resin bound gravel which is a mix of natural coloured aggregate and a clear resin binder. Other surfacing includes self-binding gravel which give a more informal feel.

Path width:

As the park was built to accommodate a large number of visitors at one time for the London 2012 Olympic Games, the paths are often in excess of 6m. This provides a high comfort level for all users and can accommodate groups of pedestrians as well as cyclists.



Fig. 1.77 - Cycling in the Queen Elizabeth Olympic Park



Fig. 1.78 - Young cyclist at the Queen Elizabeth Olympic Park



Fig. 1.79 - Segregated shared use routes in Queen Elizabeth Olympic Park

Segregation Strip:

A raised central delineator strip of concrete blocks is used to help people with visual impairments keep to the pedestrian side. Ladder and tramline tactile surfacing is also used to indicate to people with visual impairment which side of the footpath to enter.

Signing:

Signage in the Olympic Park is intended to be complementary to the surrounding park environment and as such should not visually intrude into the landscape. Simple and consistent wayfinding strategies guide visitors through the park using finger posts and other simple vertical signing.

Vondelpark, Amsterdam, The Netherlands**Policy Summary**

Vondelpark is a large urban park in the centre of Amsterdam which receives 10 million visitors a year. It provides cycle routes which connect in to a wider network which is used as part of a continuous commuter route. There has been significant conflict over the past 20 years between pedestrians and cyclists as to who should have clear right of way. It was confirmed in recent years that cyclists have the right to use the park. Implicit rules relating to pedestrians are followed within the park such as keeping to the side of major avenues, allowing cyclists and other faster travellers to use the middle area.

Physical Interventions

Routes through the Vondelpark interestingly present a segregated shared use path which integrates with the park setting. The cycle paths are of an abundant width of asphalt/tarmacadam with an area of self-bonded gravel alongside it for joggers and pedestrians.

Physical interventions for cycling through parks in the Netherlands include:

- Path width
- Surfacing
- Segregation
- Signing

Path Width:

In Vondelpark path widths at some points are up to 10 m wide allowing ample room for multiple users. This serves to minimise conflict between pedestrians, cyclists, and other users such as rollerbladers and skateboarders.

Surfacing:

Cycle routes through Vondelpark are typically surfaced with asphalt/tarmacadam to provide an even surface for wheeled activities. Adjacent to these core cycle routes run footpaths surfaced in self-binding gravel for use by pedestrians and joggers etc. This is in keeping with the park character.

Segregation:

Due to the spatial capabilities of Vondelpark, having segregated shared use routes through the park is an easily achievable physical intervention in the landscape that does not disrupt the character of the park. The segregation strip between the self bound gravel and the asphalt comprises of several rows of stack bond brick which also functions as a drainage channel. This provides a gentle change of surfacing easily identified by different user groups including visually impaired people.

Signing:

There is very little signage throughout Vondelpark either vertical or in surface. This is perhaps due to the directional nature of the park itself but could also be specific choice based on the setting and the desire to reduce visual clutter. Any signage that is present is confined to the park entrances as maps and visual way-finding routes. As cycling is permitted anywhere, 'no cycling' signs do not exist anywhere.



Fig. 1.80 - Vondelpark, Amsterdam, The Netherlands

Best Practice Summary

After examining best practice guidance and precedent studies from relevant bodies and established projects, it is possible to conclude that:

- Unsegregated shared use paths are the preferential treatment in park settings;
- Providing the width of the path is adequate and can accommodate different user groups, segregation is viewed as unnecessary with a high incidence of noncompliance;
- Segregation can encourage territorial behaviour in instances of noncompliance and does not promote behavioural change;
- Segregation also requires additional width in order to provide the same level of service to all users and often requires more signage and road markings meaning segregation has a significant impact on the landscape.

Examples from precedent studies show that:

- Speed concerns can be addressed through having a speed limit as part of a Cycling Code of Conduct as well as awareness raising and the promotion of considerate cycling;
- Path width is crucial to providing adequate space and comfort for accommodating different user groups;
- Segregated paths may be used to address issues with visually impaired users who may find using segregated footpaths easier to negotiate although the evidence for this is inconclusive. Anecdotal evidence gathered by The Royal Parks suggested that visually impaired persons may feel more comfortable on unsegregated shared use routes as the fear of straying into the “wrong” lane is eliminated.
- Promoting behavioural change through considerate cycling may be the best way to alleviate speed concerns.
- In all precedent studies, particularly in the UK, signage is considered instrumental to promoting safe cycling speeds and raising awareness amongst cyclists that pedestrians have priority. This was not observed in Vondelpark in Amsterdam, however it could be reasonably concluded that cycling culture in The Netherlands is far more advanced and these types of behavioural reminders are unnecessary.
- Surfacing in each precedent study was universally asphalt/tarmac for main cycle path routes with some resin bound or self-binding gravel on more tertiary routes. Treatment at junctions was only observed in The Royal Parks in mostly urban environments where different user groups intersect with one another or where there may be blind corners or a designated route change.

Taking into account the above precedents and guidance alongside the results of the observational studies conducted, it is now possible to draw up a set of design standards, applicable to Southwark’s parks, which address park specific design challenges for implementing Quietways.

Inclusive Design Principles

The Equalities Act 2010 highlights that 20% of the population have a disability which can include people with long term sickness and mental health issues, as well as 5% of the population that are wheelchair users.

The Council advocates equality as part of their fairer future vision (*Southwark Council’s approach to equality: delivering a fairer future for all, 2015*). This includes providing facilities that enable all users to have a safe and enjoyable experience by considering vulnerable users including elderly people and children. Protecting the equitable rights of disabled people through inclusive design, ensures the improvement of the quality of life in Southwark.

The London Plan (GLA, 2011) states that the ‘*Public Realm should be secure, accessible, inclusive, connected, easy to understand and maintain.*’ These principles should be used to form an approach that ensures walking and cycling facilities in parks are inclusive and accessible for all.

The below Inclusive Design Criteria are based on those found in *The Royal Parks Walking & Cycling technical design guide (TRP2016)*.

Inclusive Design Criteria

- Seating, lighting and park furniture should be located so as to minimise the obstruction of walking routes.
- Inconsistency of materials should be avoided.
- Patterns within the footpath can be perceived as a level change and bespoke surfacing should be carefully selected.
- Paths should generally be smooth including where they transition to road crossings.
- The placement of kerb and edge paving should be carefully considered as uneven surfaces can be uncomfortable for wheelchair users, elderly people and people with sensory impairments.
- Steps that taper are a trip hazard and should generally be avoided.
- Overhanging vegetation at head height needs to be maintained as people with visual impairments may not see these obstructions.
- Selected materials need to be robust and appropriate for the context.



Fig. 1.81 - Unsegregated shared use path in Hampstead Heath

- Disabled parking facilities require sufficiently high quality crossings and joined up design approach to access the network of accessible footpaths.
- Convenient access for wheel chair users is a priority across LBS parks.
- Any measures which help people with sensory impairments to be aware of cyclists should be encouraged.
- Gravel surfaces give some audible warning that cyclists or vehicles are approaching whereas completely smooth materials do not. In some circumstances it may be beneficial to consider using surface materials that improve audible warning.
- Adequate sight lines and path width are required when shared paths change directions to avoid potential conflicts arising between users.
- Cycle parking should be located so that it does not obstruct pedestrian desire lines, including the additional width when occupied by a bicycle.
- Tactile paving is recommended for crossing at busy entrances and gateways.



Fig. 1.82- Wheels for Wellbeing cycle in Dulwich Park

Equality Impact Assessment

An Equality Impact Assessment (EQIA) helps public authorities ensure their policies and the way they carry out their functions are inclusive to all.

An EQIA can assist public authorities to meet their duties under the Equality Act 2010 and identify opportunities and further steps they can take to promote equality, improve access and participation in public life and good relations between all groups.

Southwark Council commissioned Brenda Puech, NRAC Consultant, Open Accessame in June 2017 to carry out an Equality Impact Assessment of the draft Designated Cycle Route Design Standards for Southwark's Parks and also to review proposed designs for the designated Quietways in Burgess Park West. It focused on the impact on groups with protected characteristics in relation to the Equality Act, including the impact on older and disabled people and also how the policy/standard affects parents with small children. The recommendations made were received and incorporated into this document.

The Equality Impact Assessment (EQIA) focuses on

- identifying the key aims of the guidance and the scheme;
- systematically assessing and recording the likely equality impact of an activity or policy;
- identifying any direct or indirect discrimination;
- identifying whether certain groups are excluded from any of the services;
- assessing the impact on people with protected characteristics;
- making sure that, as far as possible, any negative consequences are eliminated or minimised;
- opportunities for promoting equality and improving services are maximised;

The EQIA looks at all aspects of the proposals that affect accessibility for disabled people, including people with mobility impairments, hearing and visually impaired people, people with cognitive impairments and learning difficulties, older people and children.

Legal Context

The Equality Act 2010 sets out duties and responsibilities of service providers in relation to disabled people as defined by the Act. The Act defines a disabled person as 'someone who has a physical or mental impairment, which has a substantial and long-term adverse effect on his or her ability to carry out normal day to day activities.'

Councils have general legal responsibilities to demonstrate that they are taking action to promote equality in relation to policy making, the delivery of services and employment.

More specifically, Public Authorities have a legal responsibility to assess their activities, and to set out how they will protect people from discrimination on the basis of the nine 'protected characteristics: Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion or belief, Sex, Sexual orientation.'

EQIAs are one of the key ways in which public authorities can meet their general duties on equality. These require that due regard is given to achieving the goals set out in the general duties, all with the aim of achieving greater equality for affected groups.

The weight that public authorities give to equality should be proportionate to its relevance to a particular function. EQIAs can help identify the most proportionate and effective responses.

In relation to works carried out in Southwark's parks, an EQIA should be conducted for all projects that require a significant change to any existing hardworks or when significant new hardworks are being proposed. EQIA's allow projects to be assessed for significant implications on vulnerable users and ensures relevant stakeholder groups have been consulted. They are a systematic assessment that should be conducted where any significant change could compromise accessibility of safety and should engage with a wide range of groups as appropriate. These groups should focus on disability, gender, age and racial equality. The scheme design process should document how vulnerable users have been consulted and how designs accommodate the needs of those user groups, as well as any design iteration that has responded to comments.

For the EQIA carried out in Burgess Park, a consultation meeting was carried out that included stakeholders from different groups representing various disabilities, including mobility impairment and visual impairment. It also represented different genders and people of different age groups. The results of this meeting have been incorporated into the Design Standards.

EQIA Recommendations

The EQIA conducted by Open Accessame recommended the following which have been incorporated into the Design Standards.

- 4m path widths should be trialled with the potential to create wider paths of min 6m up to max 10m in future. This would help future proof the park for increased volumes of cyclists and pedestrians expected over the years. The recommendation for potential wider path widths is based on design widths in major parks including The Royal Parks, Queen Elizabeth Olympic Park and Vondelpark, Amsterdam.
- Physical interventions to slow cyclists including change of surface materials, colour and size of junctions, and gentle vertical deflections at junctions could be effective in addressing speeding cyclists. Camber of paths should be no steeper than a 1:40 gradient as this can have adverse effects on wheelchair users and other mobility vehicles. Speed bumps, raised cobbles and loose gravel should be avoided as they disadvantage disabled cyclists and wheelchair users.
- Complementary information and wayfinding signage for both walkers and cyclists should be incorporated into the park so that signage is not just provided for benefit of cyclists. Providing further signage for the benefit of walkers including visually impaired people in the form of tactile and coloured maps at a lower level for wheelchair users and children would be appreciated by all users.
- Consider other guidance for visually impaired people such as sensory planting, using contrasting colours of planting to indicate different areas, and for assistance with way finding. Consider other methods of assisting visually impaired people such as smart phone applications such as WayfindR. ‘Talking signs’ such as the Marshalls intelligent monolith which indicates to users with an ‘intelligent tag’ that they are near a crossing or cycle path and could be incorporated into parks.
- The ‘sound strips’ proposed will not be apparent to hearing impaired walkers or those using headphones. The sound will be most useful to indicate to cyclists that they are approaching a location where they need to take additional care. However the comfort of the rumble strips should be tested out as a precaution and should be adjusted as part of Southwark’s ongoing monitoring and change program.
- Prominent interventions are required at junctions which could include: wider junction configurations, strong visual contrast, material usage to slow cyclists such as resin-bound gravel, some form of gentle vertical deflection is recommended however cambering of junctions should be no more than 1:40. Priority

markings or signage to indicate pedestrian priority should be present and lighting should be enhanced at junctions

- Adequate lighting is a key component of comfort for vulnerable park users particularly visually impaired people. Lighting should be provided to both main Quietway routes as well as pedestrian paths after dark to ensure both comfort and security. Lighting should be especially focused on signage and also at junctions.
- It is recommended that visual contrast is provided at the kerb edge to provide guidance for visually impaired people.
- Low level bicycle stands should be provided with additional space for cycles used by disabled people including handcycles, recumbents, tricycles etc.
- Good maintenance is critical for the comfort of disabled people in the park. Maintenance routines should look to ensure surfaces are smooth, level, firm and slip-resistant, with no pot holes or loose gravel (even in small amounts). Visual contrast of edges needs to be maintained. Adequate lighting is particularly important for visually impaired and older people. Ponding needs to be attended to quickly as wheelchair users, disabled cyclists and visually impaired people cannot easily move around these areas.



Fig. 1.83 - EQIA stakeholder engagement meeting in Burgess Park



8.

Park Specific Design Challenges

Design Approach

As the findings of this report have shown, there are many factors to be considered when designing designated cycle routes for shared use in parks. Comfort for all users is the principal by which these routes should be designed and implemented and there should be several attributes which define the design approach. These should be underpinned by an emphasis on quality, which is fundamental to any design project undertaken by the London Borough of Southwark.

In order to ensure quality, it is important the borough continues to work with landscape architects, highway engineers and other professionals with recognised expertise in the design of walking and cycling facilities in parks. Reviews and feedback must be encouraged throughout improvement processes and after implementation in order to monitor walking and cycling provision within the parks. It is also vital that the right people are consulted and involved and appropriate groups are represented as part of the feedback process. This should include any Equality Impact Assessments (EqIA) the Council may require on a project by project basis.

The design of any path through Southwark's parks should conform to the following principles that set out fundamental considerations to ensure that designs are appropriate for the context of parks.

Character:

The existing character and setting of the parkland landscape must be maintained as a priority. Materials used are to be visually sympathetic to a park setting and conform with professional guidance.

Safety:

Visitor safety is of the highest priority to the Council. Parks in Southwark are perceived as safer spaces to cycle and walk than the surrounding road network, but it should be acknowledged that there are areas of the parks where conflicts, near misses and accidents are reported. The Council works closely with the Metropolitan Police to record accidents and incidents. Accident statistics are considered in the design of cycling and accessibility projects, particularly where routes intersect roads or entrances to the parks.

Inclusivity:

Facilities should enable all users to have a safe and enjoyable experience in the parks. Vulnerable users including elderly people and children should be considered throughout the design development process as well as protecting the rights of disabled people. A set of Inclusive Design Principles (see pg37 for details) has been developed and adapted from similar guidance set out by The Royal Parks. Furthermore, recommendations from the EQIA carried out on this document have been incorporated (see pg 45 for details).The principles and recommendations should be considered for each project involving significant hardscape changes.

Fit for Purpose:

Adjustments to upgrade the existing path and road surfaces (particularly in terms of presentation and improving access), and to rationalise the extent of hard surfacing, should be undertaken where possible. Paths should be continually reviewed to ensure that they are fit for purpose and appropriate for the level of demand.

Construction:

The construction of any path should be in keeping with the intended use, anticipated volume of users and the character of the surrounding landscape.

Environment:

Construction should ensure adequate drainage, with materials carefully selected to minimise impact to the surrounding soil. Construction processes are to be managed to minimise disruption to ecosystem services and park specific environmental considerations must be made.

With these principles in mind, and based on the understanding gained through observations of the study areas, recommendations will now be given on each of the key comfort determinants in relation to a park setting. These recommendations are to be used as a guideline with each situation being assessed on a case by case basis for what is appropriate in each instance. Recommendations from the EQIA have been incorporated.

Park Character

A park has a unique character different to that of any other urban context. Each park in the city has its own historical background within which it sits and continues to change through time with the development of its surrounding community. The establishment of the park for public enjoyment in cities has its history in the industrial revolution as preserving areas of nature within the city, as the city expanded and grew. As such, parks are usually defined as areas of natural, semi-natural, or planted space set aside for human enjoyment and recreation or for the protection of wildlife or natural habitats.

Parks also provide a recreational role in a city, giving citizens space to exercise, socialise, relax and enjoy the benefits of nature. The benefits to health that exposure to green spaces provide, have been proven time and time again with results having an impact on mental and physical health. Public Health England working with UCL have published documents demonstrating that increasing the use of good quality green space for all social groups is likely to improve health outcomes and reduce health inequalities (*Local action on health inequalities: Improving access to green spaces, 2014*).

The quality of the green space impacts directly on use as poor quality green spaces can encourage anti-social behaviour, or be seen as unsafe. This is why park regeneration projects, such as those undertaken at Burgess Park, have been of enormous benefit to the local community, providing social cohesion and reducing social isolation. Therefore it is important to provide green spaces where people feel safe, that are well-managed, and that feel like a respite from the surrounding business of the city.

People's enjoyment of parks relies in part on their effect on mental health and ability to allow the mind to unwind. The physical environment and landscape of the park is vital to this. Physical interventions in the landscape must be designed with this in mind. They must draw on the historical context and special character of the place, in order to enhance the features of a landscape and interventions within them, such as cycleways, to ensure they are appropriate for their purpose and context.

Signs, road markings, furniture and other elements that might be provided for cycleways in roads may not be appropriate for a park environment and this must be considered through all stages of the design process. Efforts should be made to minimise visual clutter in parks in order to be visually sympathetic to the setting and surroundings. Therefore cycleway signage should be kept to a minimum wherever possible and other physical interventions should be considered within the constraints of what makes a good park. Surfacing, junction markings, cycle parking etc. should all be assessed for suitability in a park and designed with the enjoyment of a high quality greenspace in mind.



Fig. 1.84 - Burgess Park



Fig. 1.85 - The Lime Kiln, Burgess Park

Paths

The path network is the fundamental consideration amongst all discussions of comfort and use. Paths will be used by all visitors to the parks and are the object of all claims to territory and who has the right to its use. Paths should be designed for the use of all: inclusive, high quality and easily accessible.

With that in mind, however, there is a hierarchy of users who should be given priority over others and who should moderate behaviour in the others' presence or when confronted on the path network. Although cycling is an increasingly popular mode of transport which helps reduce carbon emissions and promotes healthy living, it is important to bear in mind that bicycles are still vehicles capable of acquiring speed and as such have the capacity to cause injury. Parks are locations in the city where pedestrians are not always going from point A to point B. Recreational walking in parks can be more ambling in nature and less of a direct route.

A park's ability to give more space and time to the pleasure of walking is a significant added value to the local community and should above else be preserved. Other best practice guidance from The Royal Parks and City of London reflects these values in preserving parks for the enjoyment of pedestrians. Therefore pedestrians should be given ultimate

priority of shared use paths through parks and cyclists must adjust their behaviour accordingly when they enter a park setting.

A hierarchy of priority based on a range of user groups should be established as follows, with any design interventions supporting the most vulnerable users:

1. Vulnerable users, i.e. visually impaired people, disabled people, elderly people, children, etc.;
2. Pedestrians/walkers;
3. Runners/joggers;
4. Leisure cyclists, skaters, scooters;
5. Sports and commuter cyclists;
6. Operational vehicles.

Segregated or Unsegregated

Best practice guidance, relevant precedents, and case studies, demonstrate that segregated shared use paths do not alleviate user conflict. Pedestrians are forced to use a more constrained area of the path and cyclists often travel at higher speeds as they incorrectly assume they have priority over pedestrians on the cycle lane side of segregated routes. Segregated shared use paths promote more territorial behaviour and require significantly more space to provide the same amount of comfort as on unsegregated shared use paths. The impact this can have on the surrounding landscape is significant. Along with additional width, segregated shared use paths often require other visual intrusions such as surface markings or signs within the path structure that impact the character of the park.

Therefore unsegregated shared use paths are currently the preferred approach for providing cycling through parks within the borough of Southwark. Unsegregated shared use paths are more conducive to considerate cycling, with cyclists travelling at lower speeds providing greater safety and comfort benefits for all users.

This is already the accepted arrangement within Southwark’s parks due to unrestrictive bye-laws on cycling. There are, however, a number of factors that may increase comfort levels for all users, such as monitoring peak flows of both transport modes and adjusting path widths accordingly.

Unsegregated shared use paths will be trialled on designated Quietway 7 in Burgess Park. They will be future proofed for widening if volume of cyclists increases or evidence from monitoring suggests that segregation is required.

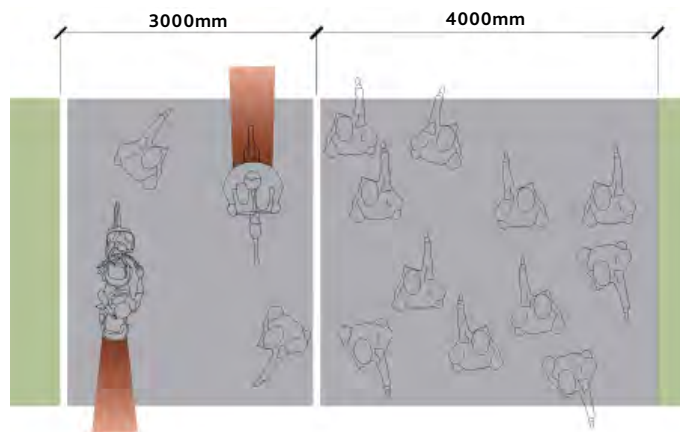


Fig. 1.86 - Segregated shared-use space

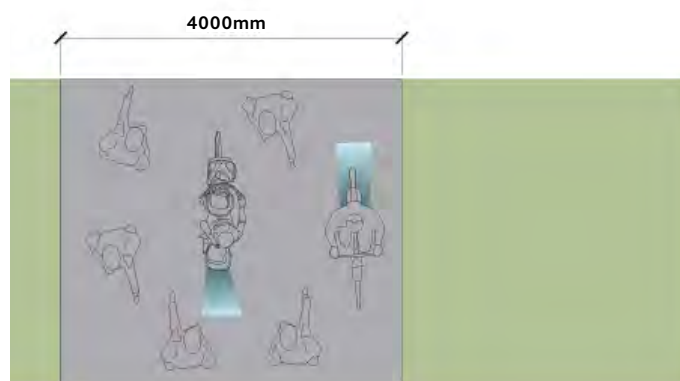


Fig. 1.87 - Unsegregated shared-use space

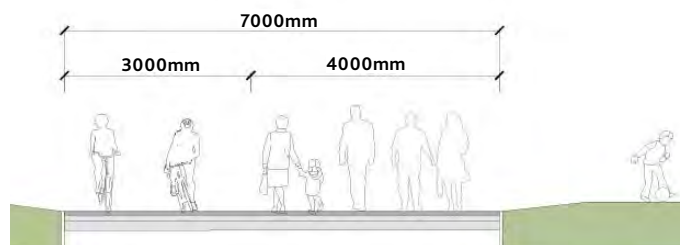


Fig. 1.88 - Segregated shared-use space

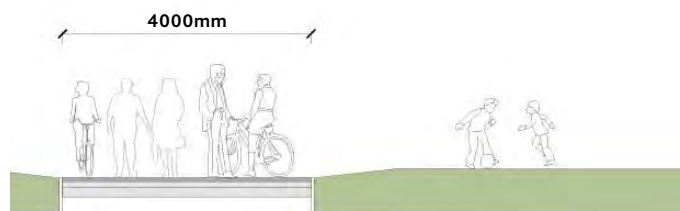


Fig. 1.89 - Un-segregated shared-use space

Width

Path width is a key comfort determinant in ensuring unsegregated shared use paths function well. Current best practice guidance advises that a preferred minimum width of 3m be provided for unsegregated shared use paths, with a preferred minimum width of 4m being provided on busier routes. A 3 metre path width is currently in place in the western side of Burgess Park, going up to 4.8m along the canal path in the east. We would recommend increasing the 3m width up to 4m in future due to the busy nature of the park. Where an entirely new path is being designed and built which incorporates a designated cycle path, a 4m width should be used where possible to accommodate different users. We suggest this width should be trialled in Burgess Park West to ensure sufficient comfort is provided. Options to increase the width of the path should be futureproofed into the design in order to anticipate increased volumes of cyclists and pedestrians. Other widths may be considered but these must be weighed up carefully against existing volume of users and projected volume of users. All unsegregated shared use routes should be reviewed and monitored regularly to understand how any changes in use and density of pedestrian and cycle flows are impacting on the quality of the user experience.

Speed

Cyclists' travel speeds are variable based on trip purpose, bicycle type, path width and design. Surface conditions also have a significant impact on cycling speeds and manoeuvring. Best practice guidance, relevant precedents and case studies demonstrate a common consensus that addressing speed concerns can be done through other means than physical interventions such as developing a Cycling Code of Conduct which could be applied to Southwark's parks. However the recommendations from the EQIA suggest physical interventions such as surface material change, junction size and gentle vertical deflections could aid in speed reduction. We would recommend a combination of minimal physical interventions coupled with good signage and awareness raising should be part of an overall strategy to reduce speeds in the park through behavioural change.



Fig. 1.90 - Southwark's Parks shared use sign



Fig. 1.91 - In carriage Quietway sign



Fig. 1.92 - Quietways sign



Fig. 1.93 - Legible London, fingerpost

Flow Rates

As commuter cycling has become increasingly popular with more people looking for quicker, healthier journeys to work, more people are using parks as attractive alternatives to busy roads. As the observational study conducted in Burgess Park has shown, there is a pronounced spike in number of cyclists through the park at certain times of the day as people commute to and from work on a daily basis. Being able to plan for these daily fluctuations could go some way in increasing comfort levels to all users. Signs at the entrances of the parks alerting users to the peak flows of cyclists could be beneficial. Likewise temporary signs could be used to remind walkers that certain times of the day will be busier with cyclists and therefore greater care should be taken during these times. This should be consistent with ongoing monitoring processes.

Signage

Signage in Southwark's parks should be safe, direct, attractive, coherent, adaptable, and appropriate for a park setting. Signing for the designated cycle routes through parks should be adapted on a case by case basis. For the Quietways being implemented in Burgess park, signing will be adapted from the Quietway signing guidance from TfL (*Quietways signing guidance, 2015*).

Signing should serve three functions in Southwark's parks:

- 1) to support wayfinding for the designated cycle routes which will involve using the appropriate symbols for direction signing and route reassurance;
- 2) to support awareness raising of shared use routes and emphasise who has priority;
- 3) to address speed concerns by encouraging cyclists to drop their pace or to inform pedestrian of high flow rates of cyclists.

For all instances, signs should be used sparingly to minimise visual clutter. A plethora of signage can create a visually-poor first impression when viewed en masse, lose its intended meaning or be overlooked easily. Overall, signs should be located consistently across each park. The main types of signs should include:

- In-surface signs for route reassurance and pedestrian priority re-emphasis;
- Vertical signs at park entrances and gates to raise awareness of the shared-use environment;
- Finger posts where routes diverge, intersect other routes, or where there is a significant direction change;
- Temporary signs in the form of A1 sized boards could also be used for more targeted initiatives such as during peak commuter times.

Directional signage

Way-finding signs for designated cycle routes should be implemented based on any signing guidance that may accompany the route, and be adapted to a park setting. In the instance of the Quietway routes in Burgess park, Quietway numbers will be painted on the asphalt footpaths to provide in route wayfinding. Fingerposts are to be used for signing a more complex movement or at a junction with another route. "Legible London" finger posts are already present in Burgess Park; adapting existing or introducing new posts in this style will not interrupt the established signage styles of the park. This style is in line with section 4.30 of the Quietway Signing Guidance (TfL, 2015) which will be adopted for Burgess Park. Fingerposts in Peckham Rye Park and Common and at Kennington Open Space should be evaluated for appropriateness and visual intrusion. Other vertical signing may be more suitable, such as mounting on an existing lamp post or fence especially where these are already present on the route.

Shared-use signage

Good, clear, coherent signage can play an invaluable role in promoting behavioural change amongst cyclists concerning speed and sharing the space considerately with other path users, leading to a more comfortable pathway environment. All signage is appropriate to the character of the park whilst being visible and legible at all times. Signage should be friendly and positive in tone and avoid using negatives where possible. Examples include:

"Breathe in the air, relax, and enjoy the park. Thank you."

"Get a PB in behaviour, not speed this morning. Thank you for being considerate to park users"

Vertical signs alerting visitors that they are entering an environment with shared use paths should be located at all entrances and gates. These should not be located close to other signs in order to communicate a clear message of pedestrian priority. Signs warning pedestrians about peak times for cyclists could also assist users less familiar with the park.

In surface symbols indicating pedestrian priority should be used at semi-regular intervals through the parks to reinforce compliance with considerate shared surface behaviour. For Burgess Park, in-surface markings should be combined with the Quietways route finding markings in order to minimise the types of signage. Signage with large amounts of information should only be provided where people will be stationary, such as at park maps.

Temporary signage such as A-boards may be useful for reinforcing the message of pedestrian priority where there is a proven issue of cyclist noncompliance or when cyclist flows are high and when . Temporary signs can be relocated to have more impact on behaviour as people notice changes and are more likely to respond to the message. This has worked well for The Royal Parks. Temporary signs could be incorporated into any awareness raising days that Southwark council may undertake in future.

It was noted in the EQIA that complementary information and wayfinding signage for both walkers and cyclists should be provided, including signage for visually impaired people. This could be in the form of tactile and coloured maps which could also be provided at lower levels for wheelchair users and children. Other guidance for visually impaired people such as sensory planting can assist in wayfinding. Furthermore smart phone applications such as WayfindR integrated with 'intelligent' signs are available and could be explored as an option to increase the comfort of visually impaired people within the park.

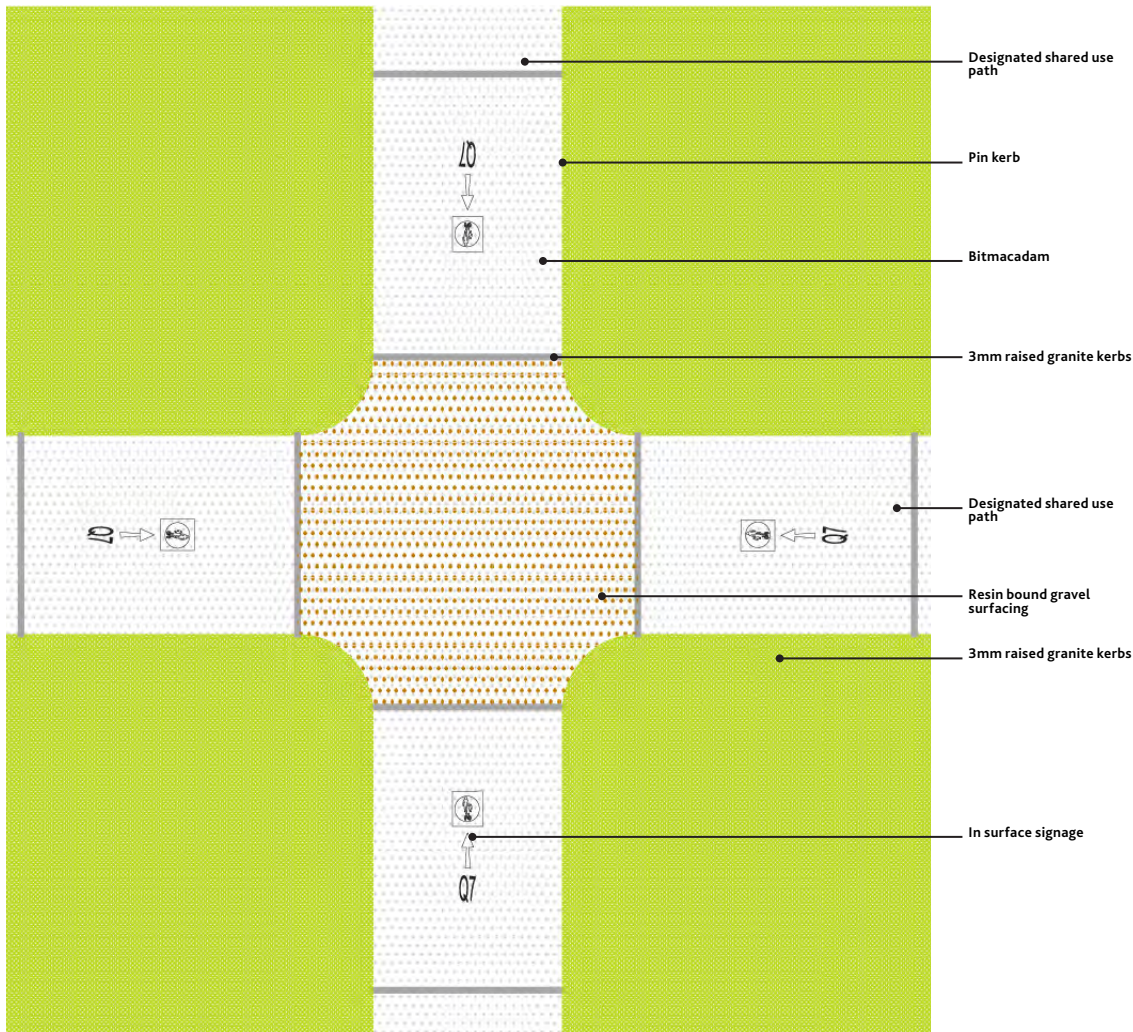


Fig. 1.94 - Proposed junction layout for designated shared use path crossing designated shared use path. See pg. 8 for further junction treatment details

Junctions

Where paths intersect and there is a possible change of direction for different users, there is an increased chance of conflict. In order to minimise this risk, awareness raising physical interventions should be used that best suit a park in an urban environment and offer minimal visual intrusion. These interventions comprise of a row of granite kerbs positioned across the full width of the path on the approach to the conflict point, a minimum 2m from the intersection point and at no more than 6m intervals, as cyclists can regain speed quickly. We would recommend a kerb raised 3mm from the existing footpath to bring attention to the route whilst maintaining a manageable height for wheelchair users and buggies. This this treatment should also be applied to park entrances where a designated cycle route enters or exits the park. See pg 13 for details.

At high-risk intersections, a change of surfacing to resin bound gravel should be considered in addition to the 3mm raised kerbs as a change of surfacing type or colour can provide an indicator to cyclists and visually impaired people that the current parkland environment requires awareness.

Any kerb strips and change of surfacing to path intersections are intended to remind park users that heightened awareness is required and are not intended to slow speeds down directly, although it is possible this may be an outcome. The EQIA suggests that the design of paths and junctions should indicate pedestrian priority. Where a non-cycle route path crosses or meets a cycle route path, the placement of kerb strips should follow the edge of the non-cycle route path as it crosses over the cycle route path. This gives the feeling that the pedestrian path is “on top” of the cycle route path and there is a “break” in the cycle path where pedestrians should be allowed to pass. If the pedestrian path has a different type of surfacing to the cycle path, the surfacing of the pedestrian path should continue into the area occupied by both pathways

Tactile surfaces, such as granite kerbs, also serve as a warning for pedestrians with visual impairments that they are crossing into an area requiring more attention. Ensuring junctions are wide enough to accommodate different user types, with clear priority signage, will be key to accommodating the comfort levels of all users. Some vertical deflection such as mounding could be considered providing it does not adversely affect wheelchair users or those with buggies or prams.

Lighting

It is one of the key objectives of the Quietways to create a lit cycle path. However it must be acknowledged that not all designated routes will require lighting. This section is included as an example on how to treat situations where designated cycle routes may require lighting.

Lighting should adequately provide enough illumination to ensure the paths through the park are safe for users at night. Lighting focused around signs and at junctions would help visually impaired users.

Lighting columns as opposed to illuminated bollards or other lighting features, will provide the correct lux levels to provide safe and secure cyclepath through the parks at night. Columns allow users to see the route ahead, to detect potential hazards and generally increases the sense of personal security. The height of the lamp column also makes them less susceptible to vandalism than lower level lighting. The columns should be placed at evenly spaced intervals on only one side of the path (exact placement to be determined with a lighting specialist). This allows the possibility of expanding path widths in the future if necessary. Single sided arrangements also improves route delineation and reduces cabling costs. LED should be used as they are more efficient and durable.

Special consideration should be given when proposing lighting columns adjacent to areas with high ecological value or within known habitats relating to bats or other wildlife affected by urban light conditions. Thorough assessments and consultations with a registered ecologist should be undertaken before lighting is installed through the parkland.

Lamp shape and finishes should be considered with the park character in mind in order not to detract from the setting. In the QEOP, a powder grey lamp post finish was specified for the lighting columns as it is visually unobtrusive. A similar finish should be considered in Southwark's parks.

Approach to Existing Features & Infrastructure

In most park situations, designated cycle routes will follow a path with existing features and infrastructure. At the locations in Kennington Open Space and in Peckham Rye, a proposed Quietway is to follow an already existing route through the park. In each of these locations infrastructure is already present which could impact on the design of the Quietway. In Kennington Open Space, lighting columns are in place, and staggered either side of the path which would make any expansion of the existing footpath difficult and costly to retrofit. At Peckham Rye Park and Common, several locations along the proposed Quietway have stands of mature trees and one section of the proposed cycle route has an existing historical boundary delineated by a cast iron railing on one side and mature trees on the other. An increased expansion area could be introduced adjacent



Fig.1.95 - Lighting at the Olympic Park, with visually unintrusive powder grey finish



Fig. 1.96 - Footpath with existing lighting and mature trees, Peckham Rye Park & Common

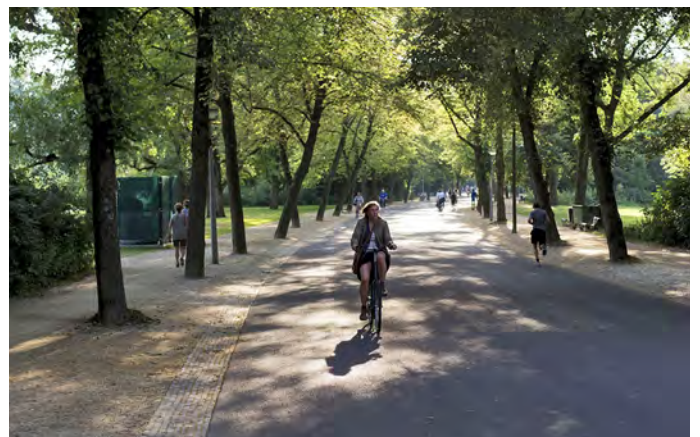


Fig. 1.97 - Cyclepath in Vondelpark, Amsterdam

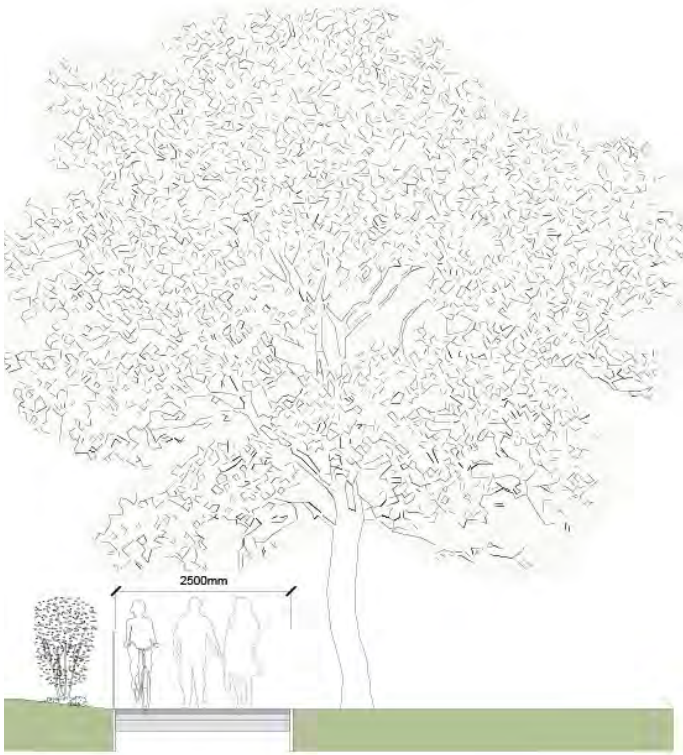


Fig. 1.98 - Quietway on existing path structure



Fig. 1.99 - Quietway on extended self-binding gravel path

to the existing asphalt, with a minimal edge treatment, surfaced with bonded gravel as that found in the Vondelpark. This would provide ample room for pedestrian overspill should extra room be required. Furthermore, the gravel would provide a more flexible dressing to the surrounding area of mature trees, impacting less on root zones. However quality must be ensured as damaged surfaces can adversely impact vulnerable walkers and wheelchair users.

Management & Maintenance

Vital to the ongoing management of cycle Quietways through Southwark's parks will be regular monitoring of volume of users and the re-evaluation of key comfort determinants.

Consultation with park users should be an integral part of the monitoring process and adaptations should be made accordingly. Lessons learned and continual improvements will be key to the successful implementation of Quietways through parks across London.

Other maintenance treatments may be necessary for more general issues relating to up-keep in the parks. Regular assessments will be required for:

- surface materials and their existing condition in terms of aesthetics and safety
- existing structural conditions
- traffic flows - volume, speed, user-groups

- tree roots and vegetation
- surface water and drainage

Other landscape maintenance treatments should include:

- repairing surface damage with like for like materials
- clearing drainage channels and culverts
- sweeping debris
- mowing verges
- cutting back trees and other vegetation
- fencing off areas with grass seed applied to recover worn turf

Trees and hedgerows should be cut back outside of bird nesting season and as part of the existing maintenance regimes for each park. This is important for vegetation adjacent to any paths where vegetation can impact on visibility and effective width. Good maintenance regimes will ensure that the path is maintained in a safe condition and that there is natural light on the path during daylight hours.

Appendix

Comments from Friends of Burgess Park

These comments were a response to a draft version of this document issued on the 6th of October, 2017.

“Thank you for offering this opportunity to comment on the draft report.

Friends of Burgess Park (FOBP) originally saw a version of the report called “Quietways Design Standards for Southwark Parks” We note that the revised report — now called “Designated Cycle Route Design Standards for Southwark Parks” — states that it will be applied as a test case to Quietway 7 in Burgess Park. (The description of Burgess Park, by the way, is missing from page 4 of the draft report.)

The authors of the report have identified the particular problems facing Burgess Park, which is already a lively cycling hub: its busy nature, narrow paths, speeding commuter cyclists, tricky entrances and lack of signage. However, though the document purports to be a set of design standards for cycle paths, its various recommendations fail to address the major issue of path layout.

The policy of the Royal Parks, referred to as part of the background to the report, states: “Wherever possible, cycle routes in the parks link with designated cycle routes outside the park, with cycle routes through the park kept to the perimeters to minimise volume pressures on the centre and impacts on historic character; Cycle routes through the park do not always take the most direct route to meet the individual journey needs of every cyclist”. FOBP have repeatedly requested that the planners rethink the route for QW7, but it is still the intention that it should cut straight through the park.

The study declares that, “the priority is to reduce the impact of cycling on other visitors’ experience and to facilitate safe off-carriageway cycling” — and yet the recommendations seem contrary to this aim. Routes through Burgess Park, according to the report, are ideal, “as they will provide an off-road opportunity to encourage less confident cyclists in a recreational environment”. Quietways, however, are for cyclists who want to travel at commuter speeds. FOBP note that Southwark intend to monitor the change and get user feedback. Subsequently, they may or may not make alterations.

Volume of users

The authors acknowledge that Burgess Park is already a popular commuting route, and is likely to become more so in the near future: Southwark’s building policy will result in hundreds of new properties in the immediate area and beyond.

The authors state that Quietways target cyclists who want to use quieter, low-traffic routes, providing an environment for those cyclists who want to travel at a more gentle pace. But this does not accord with actual experience. Southwark Cyclists reported that “since the improvements with Q1 there has been a more than 2-fold increase in peak time cycling on this route. Some of this will be existing cyclists choosing to alter route, e.g. using the QW1 route instead of the Old Kent Road. But hopefully there are also lots of new cyclists choosing to cycle to work now that the infrastructure has been improved.” (Report from Bruce Lynn, Southwark Cyclists, 6 August 2016). QW7 is quite likely to attract many more commuting cyclists, and the volume will increase as the planned cycleways Southwark Spine and QW8 join QW7.

Note email from Rebecca Towers, Southwark Council: 3 Jan 2017 [T]he council has agreed to formally drop the Spine from St Georges Way to Harper Road, for the time being, and, subject to consultation, the Spine will go along St Georges Way then up onto the agreed QW7 route. Figure 1.10 does not show Southwark Spine which it is now proposed should join QW7/8 in Burgess Park West. Nor does it show QW83 which is proposed near Trafalgar Ave and would link into QW8. In other words, there are plans to bring many more cyclists to these routes through the park so the number of cyclists likely to be using the routes will be much higher than has been suggested in this document.

Path Width

There are various path widths in Burgess Park West. One of the busiest paths is not being widened although the report now indicates this should happen. In this study, on paths which were 3m, it was observed the paths were already too narrow for comfortable sharing of the path by pedestrians and cyclists at busy times. It was noted that New Church Road which is 5.8m was easy to share. This is partly due to the width of the road but also because there are elevated pavements where pedestrians can take refuge. The problem is that in Southwark plans for Burgess Park West this road

is being removed and replaced with a narrower one (a few metres away) with no separation. This development is taking place at the moment. The recommendation in the study is that the path widths of Burgess Park West should be re-evaluated. The network of paths should have been re-evaluated before work was started.

Signage

As noted by the the study, there is currently no signage showing that the area gives pedestrians priority (in spite of it being requested by FOBP who also put in an application to the Cleaner, Greener Safer fund which was turned down). The report does stipulate that this situation should change.

Though the report repeatedly states that pedestrians should have priority, the signage examples do not give that impression. To speeding cyclists such signage would simply indicate that they were on the right route and that it was a route for cyclists. This is a current problem on the Surrey Canal Walk (in Burgess Park) which is designated as a 'quiet' route for cyclists.

Any signage that is embedded into the ground should make it clear that it is a shared pedestrian path, and use the options that clearly state pedestrian priority. It appears to be one of the main complaints about cyclists in the park that they do not heed pedestrians and that cyclists interpret pedestrians as targets to be avoided on a slalom, rather than hazards to slow down for. The presence of an 'official' cycleway (see the embedded waymarker on p.13) will only give support to the cyclists' viewpoint that the pathway is 'theirs', and they somehow have a right to bomb through, unless there's clear signage regarding the priority to pedestrians (part of the highway code anyway). Some additional temporary sign boards at key junctions (including park entrances) during the opening few months of the route to make this even clearer would be helpful.

The more 'cycling' images in the park (e.g. on the path), the greater validity for the use of the paths as highways — cyclists only see this as positive reinforcement of their right to use the path how they wish — whilst you want cyclists to follow these new routes, they should be strategically placed, not littered through the park, and they should be matched with reminders of the pedestrian priority — that is essential. "Share the space, drop your pace" is good example of signage. Speed limit, less so — most cyclists do't know what speed they're going. There is also a recommendation that pedestrians should be warned about busy times of day. This seems to put the onus on pedestrians to protect themselves, and fails to take into account the length of time commuter cyclists are likely to be encountered — particularly in the late afternoon/evenings.

While all signs indicating the quietway in the park should point out that pedestrians have priority, cyclists may find this peculiar since they are being encouraged to ride through the park and across busy pedestrian routes.

Rerouting the quietway around the perimeter would have been a much better solution.

Cycle parking provision

This is much needed near the Old Library next to Wells Way (Theatre Deli) — there appears to be no provision presently.

24 hour lighting

This will be in conflict with wildlife requirements. There is much to be said for keeping the park a dark oasis in an otherwise overly light-polluted city. FOBP would hate to see the paths lined with street lighting that wasn't sympathetic to the park and was on constantly. A naturally reflective path that 'lights' when a cyclist's lights fall upon it may be one option. If the route ran around the perimeter of the park, it would benefit from street lighting. Routes through parks at night are often much less popular with cyclists.

Junctions

With the coming of more designated cycling paths the issue of junction safety will become critical. Alternative strip of surfacing at park entrances would be one way to emphasise the entry to the park. QW7 is going to cross one of the most busy paths for both pedestrians and cyclists in Burgess Park West. FOBP approve of different surface treatments at junctions. However, the report states that a change of surface at junctions should "indicate pedestrians have priority". How does a change of surface indicate that pedestrians have priority? Highlighting junctions by using different material is an good idea to make all users more aware of junctions. The resin bound gravel is attractive too. That said, a looser (self-compacting) surface naturally slows the cyclist down because of its slippier nature, and reduced effectiveness in breaking, so the rider must slow down throughout the course of their journey rather than just at junctions. It's also noisier, which would slow them down too, as you can hear the surface moving beneath you. Curved paths introduce natural impedance to a straight-line pathway — Burgess Park is full of long straight flat paths, which is one important reason cyclists are able to enjoy getting up such speeds compared to other parks in the surveys. More street furniture (including trees in large planters) on current large straight paths would provide additional natural barriers to speed as they reduce the line of sight that so naturally provides a clear 'target' and therefore no reason not to speed ahead.

The narrow strips of more uneven surfaces as cyclists approach junctions (e.g. a line of setts paving as on pg 36) is really good at slowing one down to avoid an uncomfortable ride. That said, the use of rumble strips and give way dashed lines as used in Clapham Common are overly used and inelegant — the rumble strips are uncomfortable at any speed. Painted text warnings would make the park look like a highway.

The physical barrier on pg34 would cause cyclists to cycle round it if they could, and it will cause congestion, frustration and a higher perceived need for the cyclist to 'catch-up' with the lost time they've spent at the barrier. It also looks like it would cause problems for pushchairs and mobility vehicles.

Existing infrastructure

FOBP agree that infrastructure such as mature trees should be accommodated. In the current changes in Burgess Park QW7/8 is being routed through an area of trees. Many of them are going to be removed so this principle is being ignored at the moment.

Cyclists engagement days

FOBP approve of these and are interested to learn how successful they are. Perhaps these should be community engagements days. "Perception of danger is very hard to detect unless you ask [park users] and analyse what they tell you" (see Commonplace.com which maps urban environment experiences).

Summary

The Executive Summary is very generalised. For example, the report states that park user priority is: 1. Vulnerable users, i.e. the visually impaired, disabled, elderly, children, etc.; 2. Pedestrians/walkers; 3. Runners/joggers; 4. Leisure cyclists, skaters, scooters; 5. Sports and commuter cyclists; 6. Operational vehicles. But the executive summary does not make this clear. Rather there seems to be an effort to obscure the question of priority. Whilst trying to accommodate the policy of encouraging cycling for a healthy lifestyle and as an alternative less polluting form of transport, the requirements for creating a safe park environment for both physical and mental health are being downgraded.

Also missing from the executive summary is mention of the Cycling Code of Conduct for Southwark as well as the Equality Impact Assessment (EQIA).

One size of recommendations does not fit all parks and that should be made very clear in the executive summary. FOBP understand that this is a designated cycleways design standards policy for all Southwark parks but each park should be considered for its individual circumstances. In our case, Burgess Park is a very long, narrow, busy park which already has high volumes of cyclists and pedestrians. FOBP have undertaken cycle counts in Burgess Park West which demonstrate this and they can be seen here:

<http://www.friendsofburgesspark.org.uk/revitalisation/cycling/>

While the observations made by the study group said the interactions between pedestrians and cyclists appeared "mild", there have been many incidents of conflict reported

to the Friends including a father who refuses to take his children to the park any more following a cycling incident and an elderly lady knocked down in the underpass by a cyclist. The underpass is itself a unique feature in the park with inherent conflict issues.

The ideal way to avoid conflict and for all park users in Burgess Park to enjoy the space equally is to create an orbital cycle route that links to all the various cycle routes and keeps commuter cyclists on the road safely whilst still enjoying the proximity of the park.

Burgess Park is a place where all sorts of users come for recreation. Cycling to enjoy the park setting is not a problem but cycling as a transport option will conflict with the pleasure and safety of other park users. These guidelines seem to be a system for mitigating cyclist/pedestrian conflict which Southwark seems to be determined to cause by routing designated cycle routes inconsiderately through the park."

Friends of Burgess Park

Comments from Southwark Cyclists

These comments were a response to a draft version of this document issued on the 6th of October, 2017.

Comments from Southwark Cyclists drafted by Bruce Lynn, 16 Dec 2017

“The conclusions of this report are good.

‘In conclusion, conflict between cyclists and pedestrians in Southwark Council’s parks, was observed to be very mild, with no collisions reported. Improvements could be made to all three case studies to increase the comfort of both user groups. These improvements include path widening, better signage, awareness raising programs and surfacing changes at key junctions.’

The emphasis on providing enough space is the best approach. We agree that 3m is only enough for low flow situations. Wherever there are significant pedestrian and cycle flows, say over 180 per hour, you need at least 4m. The excellent east-west path across the east part of Burgess Park is nearly 5m and is easily cycled or walked on a busy summer Saturday.

The report does not specify what low and high speed cycling are. Some of the parks looked at in their “Precedent Studies” set 8-12mph limits. Cyclists who ride regularly and are reasonably fit will cruise at typically 15mph. In our view we should be providing enough space to allow this. We agree with the report that education, plus clear signage, are the best way to ensure smooth shared use. We do not want the kind of sharp granite setts used in Hyde Park, for example. Or the poorly designed rumble strips located on the temporary cycle contraflow on Duke St Hill.

The Precedent Studies presented in the report are The Royal Parks, Hampstead Heath and the Olympic (QEII) Park. The report presents these as best practice. They are not. In particular the Royal Parks and Hampstead Heath have fought against allowing any cycling and have only grudgingly put in minimal, often poor, facilities. A much better park to look at would have been London Fields. It is comparable in size to Burgess Park and also has 2 new Quietways planned (Q2 and Q13). These use in part a long-established shared path running roughly north-south across the park. This is part of a busy route for pedestrians and cyclists linking Hackney Central and Broadway Market and passing close to London Fields Station. The main path is 5m wide and is segregated by a white painted line. Pedestrians and cyclists closely observe the segregation. In the report segregation is played down. But on balance we think segregation should be considered where cycle and pedestrian flows are both high (above around 240 per hour). It might be worth contacting the relevant staff at Hackney to see how they are planning for the upgrade of the existing paths to Quietway status.

As an aside, nice to see Fig 1.43 of the disabled riders. This photo was taken on a Southwark Cyclist led ride, one of a short series we did for Wheels for Wellbeing.

Finally, must mention entry/exit barriers. The report does not deal with this matter. It does say that within the park barriers should be as far as possible not used. But getting easily in/out of parks is important if we are to encourage cycling. We would ask the Council to consult widely about the design of entry barriers.”

Southwark Cyclists

Burgess Park Quietway Cycle Route Monitoring Survey Brief

1.0 Background

Southwark Council are seeking fee proposals for cycle route monitoring surveying services at Burgess Park in the London Borough of Southwark.

Two new Quietways are being introduced in Burgess Park. They are currently being installed as part of a larger project called Burgess Park West and Quietway 7 is due to open in early April 2018.

Quietway 8 is currently in design development and is currently expected to open in 2019.

Quietway pathways are shared use between all park users, including pedestrians, cyclists, dog walkers, joggers, and anyone else visiting the park. Pedestrians have priority over cyclists which is indicated by signage. Pathways are 4m wide, and their width is intended to give user comfort, allowing enough space for different users to pass each other at a distance that feels safe. Junctions are highlighted with a different type of surfacing. The pathways have lighting and so can be used 24/7.

Pathways have been designed so they can be easily widened if the current width does not provide suitable levels of user comfort.

After each Quietway route opens monitoring will be carried out to measure numbers of users, and levels of conflict and satisfaction, to assess whether the pathways require widening, and whether any other improvements could be introduced to increase user comfort and reduce conflict.

2.0 Methodology

We envisage monitoring to include counting of the number of different users at various times of day. A minimum of two surveyors should be present, with one monitoring numbers and the other assessing where conflict is occurring and the seriousness of the conflict, from a cyclist slowing down or going off path onto the grass, to verbal interactions, up to collisions being the most serious form of conflict.

Counting should be carried out for a total of one full day during the week and one full day at the weekend. Each full day should start at 8am and finish at 8pm, divided into one hour sessions. The sessions must not be carried out on the same day, but instead must be spread out over a six week period, and should be random and not follow a pattern. It is very important that the sessions are spread over six weeks.

Appendix 1 shows six suggested locations on Quietway 7 where counting should occur. Consultants should provide a

price for two full days, as well as a day rate for one location in case we choose to increase the number of surveying days or locations.

Appendix 2 shows six suggested locations on Quietway 8 where counting should occur. Consultants should provide a price for two full days as well as a day rate for one location in case we choose to increase the number of surveying days or locations.

Further visitor surveys should also be carried out using a questionnaire to understand the opinions of different user groups as to how safe they feel, the number of conflicts they have witnessed or experienced and whether they feel the Quietway. Surveyors should remain the park, surveying people for at least one full day during the week and one full day at the weekend. Cyclists may prove difficult to stop and survey and so the visitor survey can also be distributed by Southwark Cyclists asking for any cyclists who use the Quietways to respond. It may be that additional surveying days are required and so your fee proposal should include a day rate.

The questionnaire content will be advised by council officers after appointment and should be drafted by the consultants for final approval.

Surveying should only be undertaken within the park and at entrances. We welcome suggestions to improve the monitoring methodology

2.1 Recording data:

The attributes and activities of people using the Quietway should be recorded. Suggested categories are:

1. Adult, teenager or child
2. Male, female or unknown (very young children, etc)
3. Alone or in a group
4. Pedestrian, cyclist, jogger, dog walker (including number of dogs), skater, other (please state)

The second surveyor should note:

1. Number of conflicts that occur
2. Precise location of the conflict
3. Who is involved in conflict
4. The type of conflict. Suggestions are: Cyclist stops to avoid collision, cyclist moves off path to avoid obstacle, verbal interaction, physical interaction, collision, other (please state)
5. The seriousness of the conflict should be measured on the scale below. (See chart). Notes should be made to back up the assessment of each conflict.
6. The length of the conflict. Was it over in a few seconds or did it last a number of minutes?

Interaction Type	Description
A. Early change of direction or slowing down	• A cyclist or pedestrian noticing the presence of another user on the path and adjusting their position accordingly or slowing down in a controlled manner
B. Negotiation or inconvenience	• Hesitation, waiting for the other user to proceed or mild irritation as identified verbally, with body language or gestures
C. Warning	• A vocal warning or alert, such as bell ringing, given to another path user to announce one's presence. (This could also occur out of courtesy as well as in frustration)
D. Late swerve/change of direction	• An uncontrolled, sudden or uncomfortable last minute movement. The user had clearly not anticipated the need to change course early enough
E. Sudden stop	• Coming to a halt at a late stage or sudden braking/stopping that is largely uncontrolled
F. Verbal (or physical) exchange	• An argument, shouting or swearing. A physical assault (likely to be a rare occurrence)
G. Near miss	• A near collision where two or more users are alarmed by the incident and may take emergency action to ensure an impact is avoided
H. Collision	• A physical collision between users

Fig. 1.100 - Table showing categories of interaction used for the site observations

We will pass on contact details of Park Liaison Officers (Wardens) who should be contacted by telephone if a serious conflict or other incident occurs.

If people ask the surveyors what they are doing we will provide a script to assist their explanation

2.2 Timescales

Quietway 7 is due to open at the end of March but surveying does not need to begin immediately. Ideally we would like surveying to begin in late April or May 2018.

Quietway 8 is due to open in 2019. Consultants will only be appointed to monitor Quietway 7 in the first instance, but can expect to be appointed to monitor Quietway 8 when it opens.

Analysis and reporting can be undertaken within a reasonable timescale after this date, and a proposed timescale should be indicated in your fee proposal.

3.0 Site

Maps identifying the Quietways 7 and 8 pathways to be surveyed are in appendices 1 and 2.

The pathways are within Burgess Park which is a public open space that can be accessed at any time of day.

Risk assessments will need to be provided prior to commencement of surveying, as part of the appointment.

4.0 Results, Analysis and Reporting

Results should be transcribed into an Excel spreadsheet. Once complete, a copy should be issued by email. A hard copy is not required.

Please provide a separate price for analysis and reporting. The report should include graphs to illustrate the results, comparison of weekend data with weekday data, comparison of data collected at different times of day, analysis of different locations along the shared cycle routes, any trends observed and any conclusions drawn.

5.0 Method Statement

A method statement is to be submitted outlining your understanding of requirements and how you intend to carry out the surveying.


Southwark Council Signage Details

The following signage details should be used when ordering signs for designated cycle routes in Southwark's Parks.


Web site: www.signway.co.uk
Email: Anna@signway.co.uk

Please contact Signways:
SIGNWAY SUPPLIES (DATCHET) LTD
TEL: 01256 811234
SIGNWAY HOUSE
KINGSLAND BUSINESS PARK
STROUDLEY ROAD
BASINGSTOKE
RG24 8UG

All complete with Overlaminates




Client Name		L. B. SOUTHWARK	
Sign Reference	ZV318/1	x-height	40.0
Letter colour	WHITE	Single Sided	
Background	BLUE	Width	534mm
Border	WHITE	Height	230mm
Material	Class R2	Area	0.12sq.m
Radius corner	8	Quantity	1
Number of bars	2	Channel bars	SMALL
Metal	Layout	Dispatch	



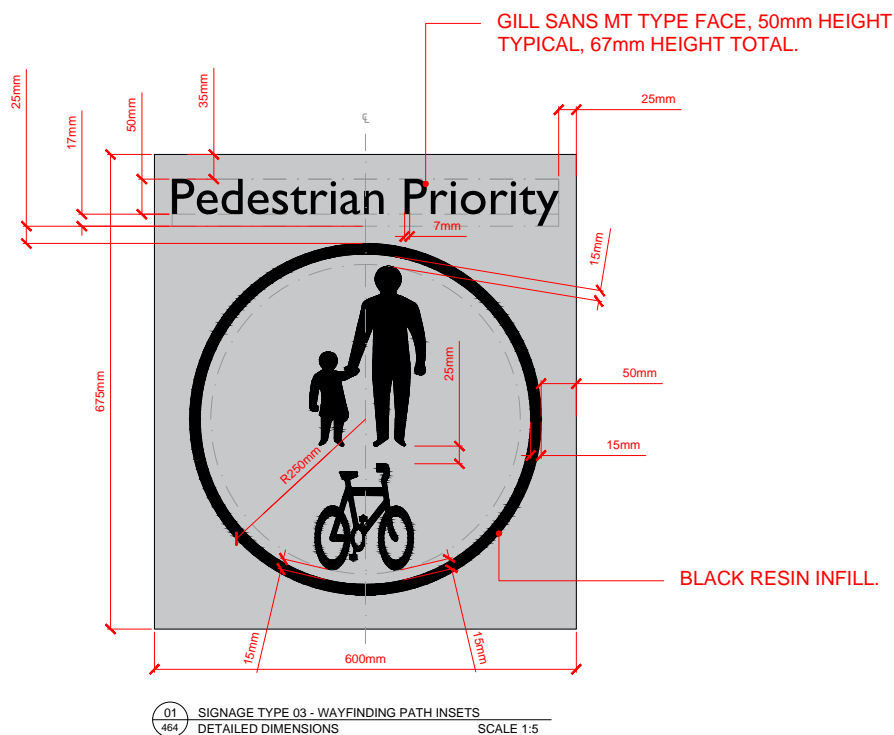
Client Name		L. B. SOUTHWARK	
Sign Reference	ZV318/2	x-height	75.0
Letter colour	WHITE	Single Sided	
Background	BLUE	Width	450mm
Border	WHITE	Height	450mm
Material	Class R2	Area	0.20sq.m
Radius corner	N/A	Quantity	1
Number of bars	2	Channel bars	SMALL
Metal	Layout	Dispatch	

Please ensure that all sign details, including dimensions, are checked thoroughly before approving these designs as we may have intentionally altered your requested signface layouts and/or dimensions to be more compliant with the guidelines laid out in the TSRGD 2016 and Chapter 7 of the Traffic Signs Manual 2013.



Aluminium
Channel
Rivets
Black
White
Yellow
Red
Blue
Green
Brown
Grey
P.O.F.
Plate Material
Reverse Colour
Approved By
Date
Drawn Date
29/03/2018 11:27:21

Fig. 1.101 - Signway vertical signage details



READ THIS FIRST

- Note for Contractors**
This drawing should be considered along with the risk information contained in the CDM Pre Construction Information. This information will include details of the SIGNIFICANT risks which LDA Design has identified which may arise from constructing their designs shown on this drawing. A Competent Contractor should be aware of the typical risks associated with doing this work.
- Note for Workers**
DO NOT START YOUR WORK unless you know the Risks and Controls relating to the work on this drawing (including SAFE SEQUENCES OF WORK and EQUIPMENT).
- Do not issue copies of parts of this drawing without the above Note for Workers (unless you are sure that the Workers can undertake the work safely).

REV.	DESCRIPTION	APP.	DATE
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LD A DESIGN

PROJECT TITLE
BURGESS PARK WEST

DRAWING TITLE
Hardworks Detail
Signage Type 03
Wayfinding Path Inset 02

ISSUED BY	London	T: 020 7467 1470
DATE	Nov 2017	DRAWN JCC
SCALE@A3	1:5	CHECKED FM
STATUS	Construction	APPROVED AH

DWG. NO 4851_464

No dimensions are to be scaled from this drawing.
All dimensions are to be checked on site.
Area measurements for indicative purposes only.

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Sources Ordnance Survey



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Fig. 1.102 - Wayfinding path inset detail

LDĀ DESIGN

New Fetter Place
8-10 New Fetter Lane
London
EC4A 1AZ

www.lda-design.co.uk