75-81 George Street, Richmond

Healthy Streets Audit Report

WYG Limited

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Canadian & Arcadia Ltd

75-81 George Street, Richmond

Healthy Streets Audit

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1 Introduction

General

1.1 WYG is commissioned by Canadian & Arcadia Ltd (the 'Applicant') on request of the London Borough of Richmond upon Thames (LBRuT) to carry out a Healthy Streets Audit in support of the proposed mixed-use development at 75-81 George Street, Richmond, TW9 1HA within LBRuT (the 'site').

1.2 The LBRuT are the Local Planning Authority (LPA) responsible for determining planning applications within the area and are also the Local Highways Authority (LHA).

1.3 A Transport Assessment (TA) and Framework Travel Plan (FTP) have been produced to support the development and have been submitted as part of the planning application to LBRuT on 31st July 2019. LBRuT Highways have since requested a Healthy Streets Audit to be produced which this report addresses.

1.4 The content of this Healthy Streets Audit is in accordance with Transport for London (TfL) guidance and the scope of the audit was agreed with LBRuT via email on 14th October 2019 which is provided in **Appendix A** for reference. The development does not involve any changes to the streets in the vicinity of the site and therefore only the existing situation can be assessed.

Background and Site Location

1.5 The site is located on the northern side of George Street (A307), in Richmond town centre. The site is located in an area of predominately retail and commercial land uses comprising Richmond town centre. The site is bound by Golden Court to the east, George Street to the southeast, King Street to the southwest and commercial/residential properties to the north off Paved Court. The existing site is currently occupied by a House of Fraser department store and measures a total Gross Floor Area (GFA) of 7,312m^2 over five floors (including basement).

1.6 The site frontage is on George Street which provides all pedestrian and cycle access. Vehicular access can be gained via a servicing entrance on King Street. A loading bay is located on King Street, adjacent to the servicing entrance.

1.7 A strategic location plan, showing the situation of the site in the context of the wider surrounding area, is provided in **Figure 1.1**.

Figure 1.1 Strategic Location Plan

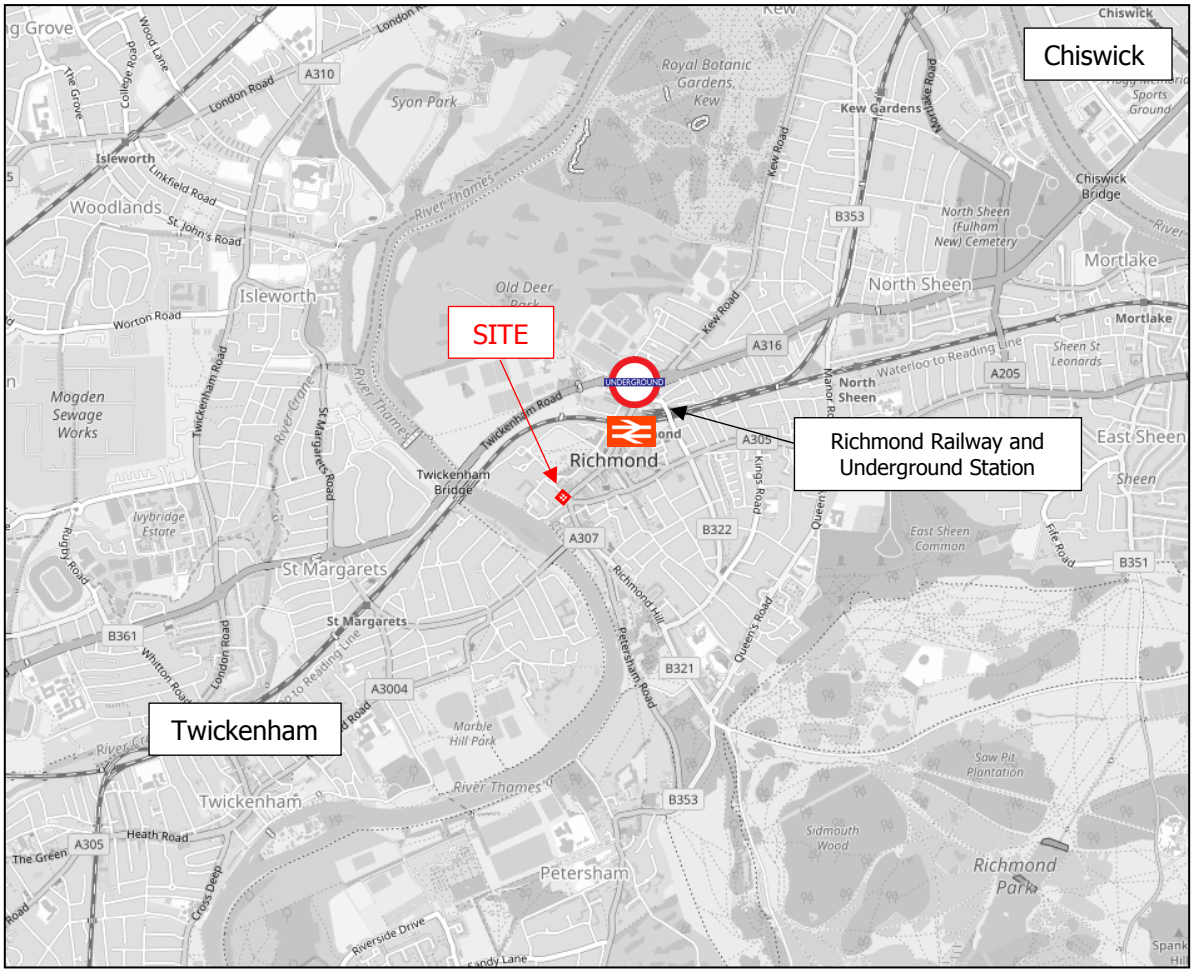


Image Source: OpenStreetMap with WYG Annotations, March 2019

Proposed Development

1.8 A description of the proposed development is as follows:

Erection of additional storey at fourth floor (with associated roof terrace) and plant room above; 2nd floor rear extension; replacement of roof to the adjacent existing single storey extension at rear to include roof light; enclosed staircase to rear; terraces to rear; and associated plant. Other elevational alterations include; removal of canopy to 80 George Street; new shopfronts to 4 Paved Court, Golden Court entrance, and King Street and George Street frontages; new fenestration throughout; and new canopies.

Change of use of 80 George Street from A1 (retail) to mixed use comprising: Class B1 to the existing floors 2,3 and the new fourth floor; Flexible Class A1 and Class B1 (existing floor 1); Class A1 (existing ground); Flexible Class A1 and Class D2 (existing basement); and Change of use of 16 Paved Court/20 King Street to Class B1 (existing floors 1,2).

1.9 New and refurbished pedestrian accesses will be provided off Golden Court, King Street and George Street. The development will be car-free; therefore, no car parking is currently proposed. The development will provide cycle parking and changing facilities in the basement. The loading bay on King Street will be retained to serve the development.

Report Structure

1.10 Following this introductory chapter, the remainder of this report is structured as follows:

- **Chapter 2: Policy Review –** Provides a review of the relevant current and emerging national, regional and local policies that are relevant to the Healthy Streets process;
- **Chapter 3: Methodology** – Outlines the method that has been followed to undertake this Healthy Streets audit;
- **Chapter 4: Route 1 Between Richmond Rail and Underground Station and the Site (George Street)** – Sets out the Healthy Streets indicator scores and reasons for the scores given to this route;
- **Chapter 5: Route 2 - Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street)** – Sets out the Healthy Streets indicator scores and reasons for the scores given to this route;
- **Chapter 6: Route 3 - Between the Ferry Port and the Site (Water Lane)** – Sets out the Healthy Streets indicator scores and reasons for the scores given to this route;
- **Chapter 7: Route 4 - Between Red Lion Street and the Bus Station (Church Terrace, Wakefield Road, Lewis Road)** – Sets out the Healthy Streets indicator scores and reasons for the scores given to this route;
- **Chapter 8: Route 5 - Between Bridge Street and the Site (Hill Street)** – Sets out the Healthy Streets indicator scores and reasons for the scores given to this route;
- **Chapter 9: Summary and Conclusion** – Provides a summary and draws conclusions by highlighting the key points raised within this audit.

1.11 All technical Appendices are included at the end of this audit report for information.

2 Policy Review

General

2.1 This chapter sets out current policy and guidance context on Healthy Streets.

National

- National Planning Policy Framework (NPPF) (February 2019).

Regional

- Draft London Plan (July 2019);
- The London Plan (March 2016); and,
- The Mayor's Transport Strategy (2018);

Local

- LBRuT Local Plan (July 2018).

National Policy

National Planning Policy Framework (NPPF) (February 2019)

2.2 This document sets out the Government's planning policies for England and how these should be applied, providing a framework within which locally-prepared plans for housing and other development can be produced. This is an update of the version of the July 2018 NPPF and involves minor amendments following on from technical consultations.

2.3 Paragraph 91 identifies the need to achieve healthy, inclusive and safe places which:

"a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;
b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and;
c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling."

Summary

2.4 In summary, the proposed development is in accordance with National Policy as it is a mixed-use development which places a priority on pedestrian and cycle movements, and public transport rather than the private vehicle, through the provision of long-stay and short-stay cycle parking, and a number of pedestrian entrances. The development is to remain car-free which is consistent with the existing development.

Regional Policy

Draft London Plan (July 2019)

2.5 A draft London Plan with the Mayor's suggested changes was published in July 2019. Although the document is still in draft form and will not be finalised or fully come into effect until spring 2020, its publication demonstrates the direction in which regional policy is moving in relation to – amongst other issues – sustainable travel modes and parking provision. The draft London Plan is a Replacement Plan, meaning that it is not an alteration or update to previous plans. It is focuses on the concept of 'Good Growth', growth that is socially and economically inclusive and environmentally sustainable.

2.6 Chapter Ten of the London Plan is entitled 'Transport' and sets out nine polices with regards to transportation that are intended to support London's Good Growth. This includes Policy T2 – Healthy Streets which states:

"Development proposals and Development Plans should deliver patterns of land use that facilitate residents making shorter, regular trips by walking or cycling."

2.7 This policy supports the Healthy Streets Approach that aims to create a healthy and inclusive environment in which people choose to walk, cycle and use public transport. It also establishes the Mayor's vision to reduce road danger so that no deaths or serious injuries occur on London's streets.

The London Plan (March 2016)

2.8 The London Plan is the overall strategic plan for London and sets out fully integrated economic, environmental, transport and social frameworks for the development of the capital until 2031.

2.9 Policy 3.2 'Improving health and addressing health inequalities' sets out the importance of healthy neighbourhoods and assessing the impact on health and wellbeing of communities as a result of development. This policy states that Boroughs should *"promote the effective management of places that are safe, accessible and encourage social cohesion".*

The Mayor's Transport Strategy (2018)

2.10 The Mayor's Transport Strategy outlines what the Mayor sees as London's main challenges over the next 25 years; these include car dependency, population growth, demand for new homes, historically car-centric design of parts of the city and limited space for road building.

2.11 The Mayor's vision for London involves reducing the need to use cars and making more Londoners walk and cycle. Sustainable growth is also set out as part of the vision, growing London's economy but also improving the lives of people who live in London.

2.12 The Mayor's aim for 2041 is for 80 per cent of Londoners' trips to be on foot, by cycle or by using public transport. Currently, approximately 64 per cent of journeys are made by these modes of transport.

2.13 The document outlines the Mayor's strategy on transport in London from 2018 to 2041, which includes Healthy Streets and Healthy People.

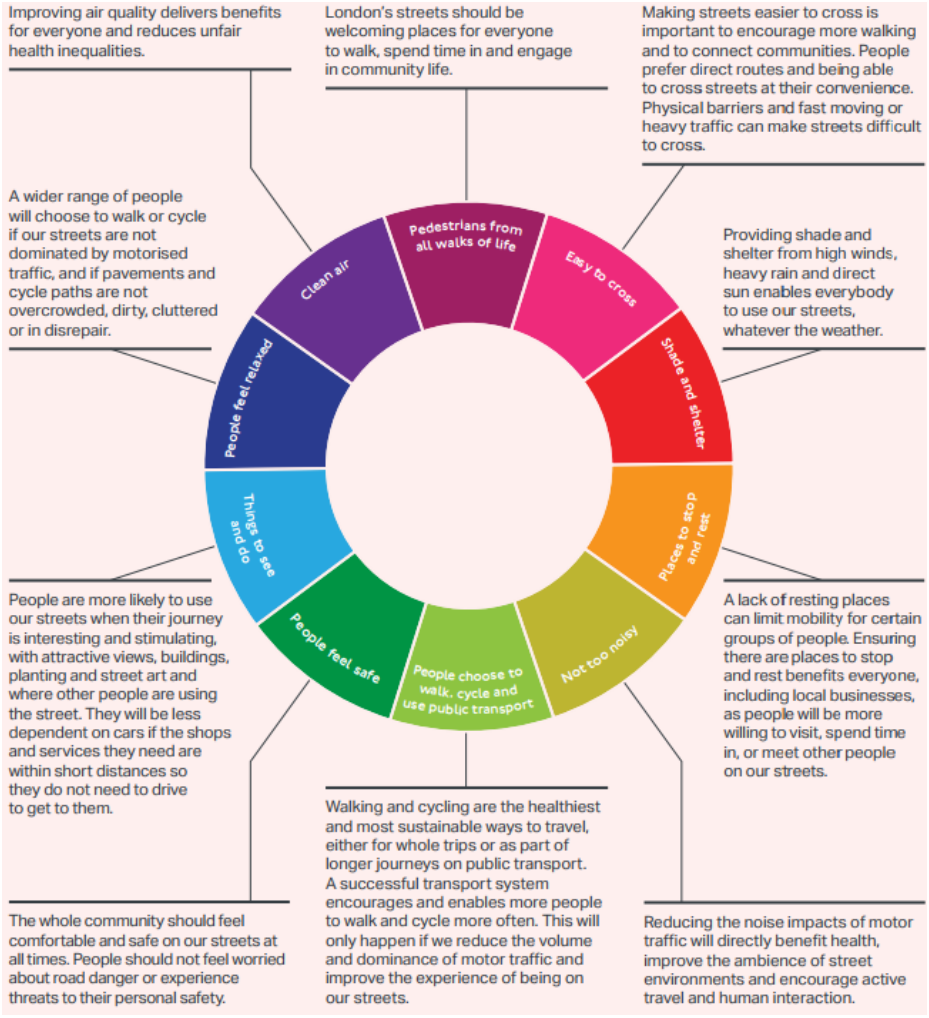
Healthy Streets and Healthy People

- All Londoners to do at least the 20 minutes of active travel they need to stay healthy each day;
- No one to be killed in or by a London bus by 2030, and for deaths and serious injuries from all road collisions to be eliminated from the streets by 2041;
- All taxis and private hire vehicles to be zero emission capable by 2033, for all buses to be zero emission by 2037, for all new road vehicles driven in London to be zero emission by 2040, and for London's entire transport system to be zero emission by 2050; and

- Reduce freight traffic in the central London morning peak by 10 per cent on current levels by 2026, and to reduce total London traffic by 10-15 per cent by 2041.

2.14 The Mayor's Transport Strategy focusses on the Healthy Streets approach. This approach, created by Transport for London, sets out all elements that make up a healthy street. **Figure 2.1** shows the diagram used to show the 'Ten Healthy Streets Indicators'.

Figure 2.1 Healthy Streets Indicators



Source: GLA, DRAFT Mayor's Transport Strategy, June 2017

2.15 The document further addresses the health benefits that could be gained by changing the way Londoners travel. It highlights the effect of active travel on the risk of diabetes and other diseases, noting that if all Londoners walked or cycled for 20 minutes a day, this would deliver at least an additional 60,000 years of healthy life in preventable illness and early death each year.

2.16 Policy 9 of the strategy sets out part of how the Healthy Streets approach will be used:

"The Mayor, through TfL and the boroughs, will use the Healthy Streets Approach to direct complementary public transport and street improvements to provide an attractive whole journey experience that will facilitate mode shift away from the car."

2.17 As part of the shift away from the car, the Mayor states investment will be made into active travel; 'Policy 1 – Active Travel' states:

"The Mayor, through TfL and the boroughs, and working with other transport providers, will seek to make London a city where people choose to walk and cycle more often by improving street environments, making it easier for everyone to get around on foot and by bike, and promoting the benefits of active travel. The Mayor's aim is that, by 2041, all Londoners do at least the 20 minutes of active travel they need to stay healthy each day".

2.18 Road safety policy is set out in the Mayor's Transport Strategy as well; 'Policy 2 – Vision Zero' states the following:

"The Mayor, through TfL, the boroughs, police and enforcement authorities, will adopt Vision Zero for road danger in London. The Mayor's aim is for no one to be killed in or by a London bus by 2030, and for all deaths and serious injuries from road collisions to be eliminated from London's streets by 2041."

2.19 Air quality is stated on multiple occasions and is one of the Mayor's main focusses; 'Policy 6 – A zero carbon city' states the following:

"The Mayor, through TfL and the boroughs, and working with other transport providers, will seek to make London's transport network zero carbon by 2050, which will also deliver further improvements in air quality, by transforming London's streets and transport infrastructure so as to enable zero emission operation, and by supporting and accelerating the uptake of ultra-low and zero emission technologies".

Transport for London Healthy Streets Approach

2.20 The Healthy Streets Approach has been adopted by TfL to improve air quality, reduce congestion and help make London's diverse communities greener, healthier and more attractive places to live, work, play and do business. A package of documents and tools have been published to guide developers and consultants in the Healthy Streets Audit process as outlined below:

- **Healthy Streets for London:** Sets out the need for encouraging Healthy Streets and adopting the Healthy Streets Approach. The document introduces the Healthy Streets Indicators, includes statistics on how active travel reduces the risk of health related issues, identifies opportunities for active travel and outlines investment in Healthy Streets.
- **Guide to the Healthy Streets Indicators:** Sets out a series of questions against each Healthy Streets Indicator to highlight the many factors that influence how well a street is performing.
- **Healthy Streets Explained:** Provides a guide on the Healthy Streets Approach and how to apply it by setting out responses to frequently asked questions.
- **Healthy Streets Check for Designers:** A spreadsheet tool to support designers in quantifying how healthy a street is. This is primarily used to compare proposed changes against the existing situation, however as only minor changes are being proposed to building facades for this development, we have used it as a way of presenting how "Healthy" the streets surrounding the sites currently are.
- **Healthy Streets Survey:** A guide on the Healthy Streets survey which is an on-street questionnaire which asks people walking and spending time on a street about how they perceive the street. It is designed to capture the real-life experience of people on London's streets in relation to the ten Healthy Streets indicators. The results give a measurable performance of London's streets which can be compared across locations and over time.
- **Small change, Big impact**: A practical guide to delivering temporary, light touch and low-cost projects to change the way a street looks and feels. The guide includes case studies on successful innovative public realm improvement schemes.

Summary

2.21 In summary, the proposed development is in accordance to Regional Policy as it is to remain car-free which is line with current London Plan policy for new retail development, whereby it should make use of existing public off-street provision and no parking is to be proposed in town centre locations. The site is located in an area with a high PTAL rating of 6a, therefore has good connections to facilitate sustainable and active travel to/from the site. This audit has been carried out in accordance with TfL Healthy Streets guidance.

Local Policy

LBRuT Local Plan (Adopted July 2018)

2.22 The Council's Local Plan sets out policies and guidance for the development of the borough over the next 15 years. It looks ahead to 2033 and identifies where the main developments will take place, and how places within the borough will change, or be protected from change, over that period.

2.23 **Policy LP 30** refers to **Health and Wellbeing**, and states the following:

"A. The Council will support development that results in a pattern of land uses and facilities that encourage:

1. Sustainable modes of travel such as safe cycling routes, attractive walking routes and easy access to public transport to reduce car dependency.
2. Access to green infrastructure, including river corridors, local open spaces as well as leisure, recreation and play facilities to encourage physical activity (...)
6. An inclusive development layout and public realm that considers the needs of all, including the older population and disabled people."

2.24 **Policy LP 44** refers to **Sustainable Travel Choices** and states the following:

"The Council will work in partnership to promote safe, sustainable and accessible transport solutions, which minimise the impacts of development including in relation to congestion, air pollution and carbon dioxide emissions, and maximise opportunities including for health benefits and providing access to services, facilities and employment. The Council will:

A. Location of development

Encourage high trip generating development to be located in areas with good public transport with sufficient capacity, or which are capable of supporting improvements to provide good public transport accessibility and capacity, taking account of local character and context.

B. Walking and cycling

Ensure that new development is designed to maximise permeability within and to the immediate vicinity of the development site through the provision of safe and convenient walking and cycling routes, and to provide opportunities for walking and cycling, including through the provision of links and enhancements to existing networks.

C. Public transport

Ensure that major new developments maximise opportunities to provide safe and convenient access to public transport services. Proposals will be expected to support improvements to existing services and infrastructure where no capacity currently exists or is planned to be provided.

Protect existing public transport interchange facilities unless suitable alternative facilities can be provided which ensure the maintenance of the existing public transport operations. Applications will need to include details setting out how such re-provision will be secured and provided in a timely manner.

D. The road network

Ensure that new development does not have a severe impact on the operation, safety or accessibility to the local or strategic highway networks. Any impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, including in relation to on-street parking, should be mitigated through the provision of, or contributions towards, necessary and relevant transport improvements.

In assessing planning applications the cumulative impacts of development on the transport network will be taken into account. Planning applications will need to be supported by the provision of a Transport Assessment if it is a major development, and a Transport Statement if it is a minor development."

Summary

2.25 In summary, the proposed development is in accordance with Local Policy as it is a car-free development which encourages sustainable travel to/from the site. It is situated in a town centre location with nearby cycle car parking and provides multiple pedestrian access points facilitating active travel.

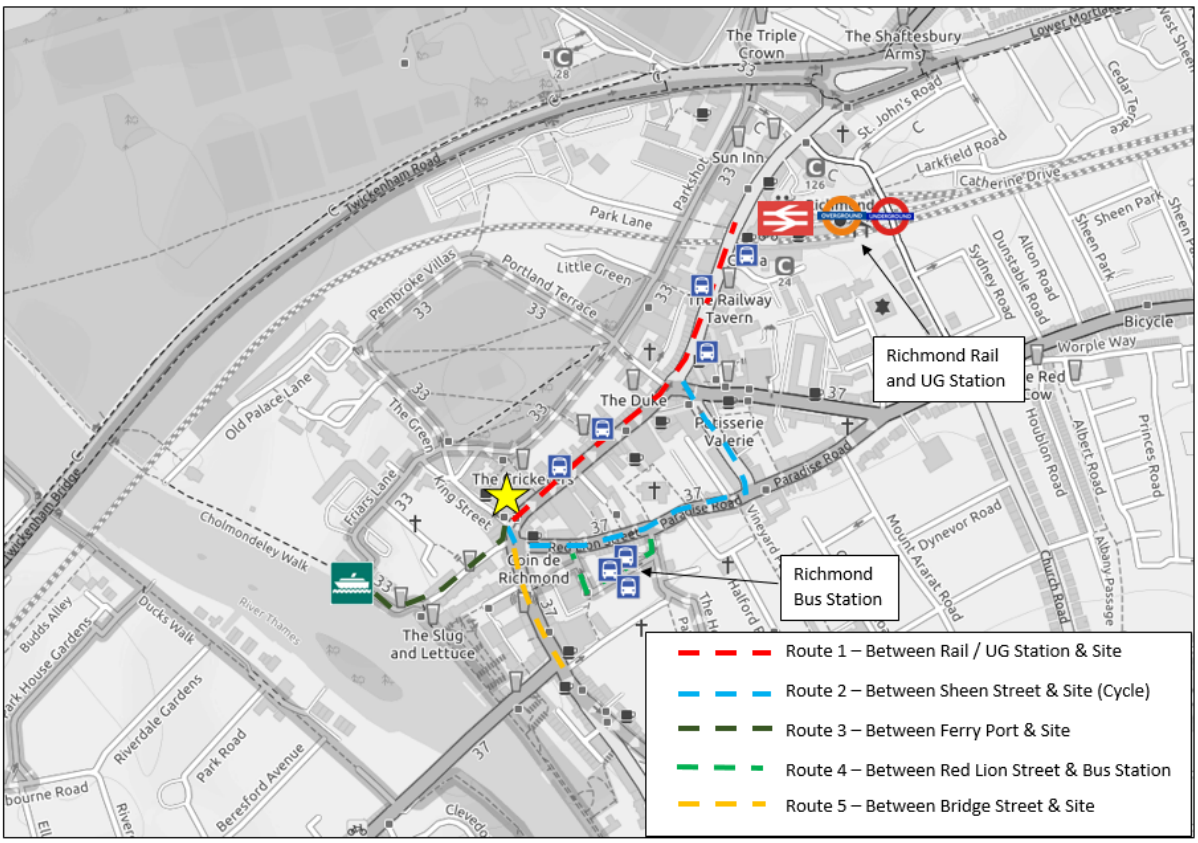
3 Methodology

General

3.1 This chapter of the report sets out the methodology used to score each route in the vicinity of the site against the ten Healthy Streets Indicators.

3.2 **Figure 3.1** shows the five routes that were assessed as part of the Healthy Streets Audit. The yellow star indicates the location of the site. The scope of the survey area was agreed with LBRuT via email on Monday 14th October 2019.

Figure 3.1 Healthy Streets Assessment Study Area



Source: OpenStreetMap, November 2019

3.3 The Healthy Streets Audit has been undertaken for routes which link the site to transport interchanges including rail, bus and ferry services to understand the existing walking and cycling environment for people travelling between key transport interchanges and the site.

3.4 The routes are detailed below:

- **Route 1 – Between Richmond Rail and Underground Station and the Site (George Street):** This is the most direct walking route between Richmond Rail and Underground Station and the development site. There are a number of bus stops along this route.
- **Route 2 – Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street):** This captures the cycle route between Richmond Rail and Underground Station and the development site. Cyclists are prohibited from cycling on the footways and cannot follow the entire Route 1 due to the one-way system in place and therefore need to travel along this route.

- **Route 3 – Between the Ferry Port and the Site (Water Lane):** This is the route between Richmond St. Helena Pier and the site and provides a link to the Riverside walk.
- **Route 4 – Between Red Lion Street and the Bus Station (Church Terrace, Wakefield Road, Lewis Road):** This is the route between Red Lion Street and Richmond bus station.
- **Route 5 – Between Bridge Street and the Site (Hill Street):** This is the route between Bridge Street and the site which LBRuT Highways requested to be included within this audit.

3.5 The Healthy Streets toolkit was used to assess each route against the ten Healthy Streets indicators shown in **Figure 2.1**. This was informed by a Healthy Streets survey carried out during a site visit between 9:00 and 15:00 on Wednesday 23rd October 2019. The weather conditions on the day were cloudy but dry.

3.6 For each route assessed between 26 and 31 metrics were given a score between 3 and 0 to inform the total score for each indicator. The higher the score, the better the provision. The metrics assess the level of provision on each route for sustainable travel (walking, cycling, bus and rail interchanges) as well as the public realm environment. Some metrics are quantifiable and are informed by data whereas others are qualitative and are informed by the assessors' opinion of on-site conditions using professional judgement.

3.7 To inform the quantifiable metrics automatic traffic counters were placed on George Street and Red Lion Street for seven days between Monday 21st October and Sunday 27th October 2019. These recorded vehicle speeds, vehicle class and speed data. The data results are provided in **Appendix B**.

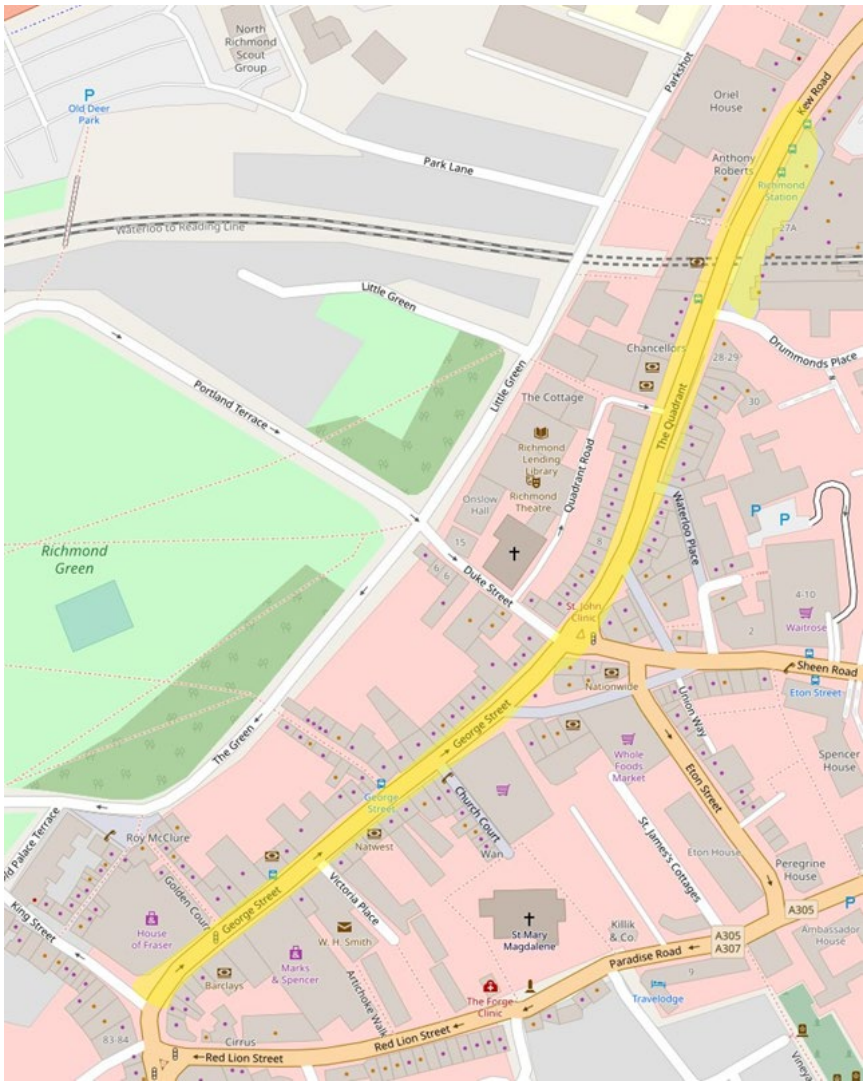
4 Route 1 – Between Richmond Rail and Underground Station and the Site (George Street)

4.1 This chapter provides the Healthy Streets Audit score for Route 1 and an overview of the observations for each of the ten Healthy Streets indicators.

Route Location

4.2 Route 1 runs between Richmond Rail and Underground Station and the site along George Street. A one-way system is in place along this route. **Figure 4.1** shows the route highlighted in yellow and includes the Richmond Rail and Underground Station concourse.

Figure 4.1 Route 1 – Between Richmond Rail and Underground Station and the Site



Source: OpenStreetMap, November 2019

4.3 There are no changes proposed to this route as part of the development and therefore the proposed layout scores the same as the existing layout.

Route Score

4.4 The results of the Healthy Streets Audit for this route are provided in **Figure 4.2**. This route scores a total of 67/100.

Figure 4.2 Route 1 Healthy Streets Audit Score

Name of scheme	75-81 George Street
Segment number	1

Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	67	67
Easy to cross	70	70
Shade and shelter	67	67
Places to stop and rest	73	73
Not too noisy	60	60
People choose to walk, cycle and use public transport	67	67
People feel safe	68	68
Things to see and do	72	72
People feel relaxed	68	68
Clean Air	50	50
Overall Healthy Streets Check score	67	67
Number of 'zero' scores	1	1

4.5 A summary of the scores for each indicator are provided in **Table 4.1**. Table 1 in **Appendix C** provides an explanation for the scores given to each metric and photos are provided in **Appendix D** to illustrate the route against each indicator.

Table 4.1 Indicator Scores for Route 1

Indicator	Total score	Metrics	Reasons for Score
Pedestrians from all walks of life	67	This indicator takes into account all metrics to inform the score.	There was good provision observed for people who are visually impaired, and both the footways and carriageway appeared to be in a good condition. Although the route has relatively good provision for pedestrians and public transport users, there is limited provision for cyclists. Due to the one-way system cyclists are required to divert along Eton Street to reach the site and cyclists are not segregated from general traffic. There was an over-demand for station cycle parking observed during the site visit and cyclists were observed to park against the railings.
Easy to cross	70	This indicator takes into account 10 metrics related to the volume and speed of traffic, crossing provision and quality of footway to inform the score.	There are pelican crossing points at junctions and a pelican crossing is located on George Street adjacent to the site. Side roads are either one-way operation, no entry or are narrow which makes it easy for people to cross. The crossings have dropped kerbs with tactile paving.
Shade and shelter	67	This indicator takes into account two metrics including frequency of trees and the distance between sheltered areas for protection from rain.	There are three mature trees situated on George Street which are equally spaced along the route and provide shade and shelter, there is also shelter provided from shop awnings.
Places to stop and rest	73	This indicator takes into account five metrics including width of walking space, surveillance, vegetation and places to rest.	There are multiple seats provided at the northern end of the route where the station is located. There is also seating provided at bus shelters along the route and informal seating is provided where there are tree planters. The footways are wide and there is ornamental planting which increases the score for this indicator.
Not too noisy	60	This indicator takes into account five metrics including volume of motorised traffic, proportion of large vehicles, planting and measures to encourage reducing private car use.	There is a moderate flow of traffic during the peak hour with the highest peak flow being 531 vehicles travelling through the one-way system on this route. The proportion of large vehicles is at most 0.8% of total traffic which increases the score for this indicator.
People choose to walk, cycle and use public transport	67	This indicator takes into account all metrics to inform the score.	Provision for public transport users and pedestrians is considered good for this route, however cycle parking is limited and cyclists are not segregated from general traffic which reduces the score for this indicator.
People feel safe	68	This indicator takes into account 18 metrics related to the volume and speed of traffic, crossing provision,	The route is lit, and street lighting has been designed to meet British standards. There are

Indicator	Total score	Metrics	Reasons for Score
		quality of public realm, lighting and surveillance to inform the score.	mixed-use buildings with active frontage along the entire route providing informal surveillance.
Things to see and do	72	This indicator takes into account six metrics including planting, resting points and public transport accessibility.	There is planting along the route and seating outside Richmond station and at bus shelters. Step free access is provided to the station and bus stops are relatively close along the route. Wayfinding signs are provided to help visitors navigate around the town centre.
People feel relaxed	68	This indicator takes into account 29 metrics to inform the score.	The public realm environment is considered attractive for visitors to the town centre with excellent public transport links, wide footways, high-quality paving and areas for people to rest.
Clean Air	50	This indicator takes into account the metrics relating to NO2 concentrations and reducing private car use.	There are points along the route which have very high NO2 concentrations of 55 ug/m3. This is typical of a London town centre and is a City-wide issue that the central and regional government is keen to address. There are no timed restrictions in place along the route to prevent vehicle movements which contributes to the lower score.
Overall Score	**67**		

5 Route 2 – Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street)

5.1 This chapter provides the Healthy Streets Audit score for Route 2 and an overview of the observations for each of the ten Healthy Streets indicators.

Route Location

5.2 Route 2 runs between the George Street/ Sheen Street junction and the site along Eton Street, Paradise Road and Red Lion Street. A one-way system is in place along this route. **Figure 5.1** shows the route highlighted in yellow.

Figure 5.1 Route 2 – Between Richmond Rail and Underground Station and the Site

Source: OpenStreetMap, November 2019

5.3 There are no changes proposed to this route as part of the development and therefore the proposed layout scores the same as the existing layout.

Route Score

5.4 The results of the Healthy Streets Audit for this route are provided in **Figure 5.2**. This route scores a total of 71/100.

Figure 5.2 Route 2 Healthy Streets Audit Score

Name of scheme	75-81 George Street
Segment number	2

Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	70	70
Easy to cross	70	70
Shade and shelter	83	83
Places to stop and rest	60	60
Not too noisy	73	73
People choose to walk, cycle and use public transport	70	70
People feel safe	73	73
Things to see and do	67	67
People feel relaxed	72	72
Clean Air	67	67
Overall Healthy Streets Check score	71	71
Number of 'zero' scores	1	1

5.5 A summary of the scores for each indicator are provided in **Table 5.1**. Table 2 in **Appendix C** provides an explanation for the scores given to each metric. Photos are provided in **Appendix D** to illustrate the route against each indicator.

Table 5.1 Indicator Scores for Route 2

Indicator	Total score	Reasons for Score
Pedestrians from all walks of life	70	The footways and carriageway along this route appeared to be in a good condition during the site audit. There are multiple mature trees along this route providing shelter and a 'greening' of the street providing an attractive environment for pedestrians.
Easy to cross	70	There are dropped kerb crossings at junctions with side roads, some of which have tactile paving. Side roads are either one-way operation, no entry or are narrow which makes it easy for people to cross. A raised table is provided at the junction with Halford Road. There is a pelican crossing provided on Red Lion Street, a zebra crossing provided on Eton Street and staggered pelican crossings are located at the Red Lion Street / George Street junction.
Shade and shelter	83	There are multiple mature trees situated along the route with canopies less than 15m apart providing shade and shelter for pedestrians.

Indicator	Total score	Reasons for Score
Places to stop and rest	60	There are not many places for people to stop and rest. There is seating provided on Eton Street near the junction with George Street but no other public seating is provided.
Not too noisy	73	The traffic volume is relatively high during the peak hour with the highest peak flow being 774 vehicles travelling through the one-way system on this route. The proportion of large vehicles is at most 1.1% of total traffic and there are restrictions in place to discourage private car use which increases the score for this indicator.
People choose to walk, cycle and use public transport	70	A bus lane is provided for part of this route which helps reduce bus journey times. The width of the general traffic lane is approximately 4.5m which helps minimise vehicle / cyclist conflict. Cycle parking was observed to exceed demand along this route at the time of the site visit audit. Although the footway is in a good condition, street infrastructure and mature trees narrow the effective footway width.
People feel safe	73	The route is lit, and street lighting has been designed to meet British standards. There are mixed-use buildings with active frontage along the entire route providing informal surveillance. As mentioned, the carriageway is wide which provides a good cycling environment and informal crossing points are provided at side roads.
Things to see and do	67	There are mature trees along the route and seating on Eton Street. Wayfinding signs are provided to help visitors navigate around the town centre. More seating could be provided which would increase the score for this indicator.
People feel relaxed	72	The public realm environment is considered attractive for visitors as the footways are in a good condition and there are mature trees which provide a 'greening' effect along the route. There is good provision for both walking and cycling on this route.
Clean Air	67	There are points along the route which have very high NO2 concentrations of 55 ug/m3. There are timed restrictions in place along the route to prevent vehicle movements and there are many trees which increases the score for this indicator.
Overall Score	**71**	

6 Route 3 – Between the Ferry Port and the Site (Water Lane)

6.1 This chapter provides the Healthy Streets Audit score for Route 3 and an overview of the observations for each of the ten Healthy Streets indicators.

Route Location

6.2 Route 3 runs between George Street and the Riverside. The street is two-way operation but is only wide enough for one vehicle to pass at a time. **Figure 6.1** shows the route highlighted in yellow.

Figure 6.1 Route 3 – Between the Ferry Port and the Site (Water Lane)

Source: OpenStreetMap, November 2019

6.3 There are no changes proposed to this route as part of the development and therefore the proposed layout scores the same as the existing layout.

Route Score

6.4 The results of the Healthy Streets Audit for this route are provided in **Figure 6.2**. This route scores a total of 64/100.

Figure 6.2 Route 3 Healthy Streets Audit Score

Name of scheme	75-81 George Street
Segment number	3

Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	65	65
Easy to cross	77	77
Shade and shelter	33	33
Places to stop and rest	40	40
Not too noisy	73	73
People choose to walk, cycle and use public transport	65	65
People feel safe	65	65
Things to see and do	33	33
People feel relaxed	67	67
Clean Air	58	58
Overall Healthy Streets Check score	64	64
Number of 'zero' scores	3	3

6.5 A summary of the scores for each indicator are provided in **Table 6.1**. Table 3 in **Appendix C** provides an explanation for the scores given to each metric. Photos are provided in **Appendix D** to illustrate the route against each indicator.

Table 6.1 Indicator Scores for Route 3

Indicator	Total score	Reasons for Score
Pedestrians from all walks of life	65	The footways and carriageway along this route are narrow and in a relatively poor condition. Traffic volumes and speed are low on this road which reduces potential conflict with vulnerable road users.
Easy to cross	77	This road is for access only and the total traffic volume on this road is very low. The carriageway width is approximately 2.5m which makes crossing relatively easy and the narrow width also causes vehicles to travel very slowing reducing the risk of collision.
Shade and shelter	33	There is only one tree located at the southern end of the road adjacent to the river, there is no other shelter on this route.
Places to stop and rest	40	There is seating provided at the southern end of the street adjacent to the river, but no other public seating is provided.

Indicator	Total score	Reasons for Score
Not too noisy	73	The traffic volume is low on this route and there is no through access.
People choose to walk, cycle and use public transport	65	There is a low traffic volume and the width of the carriageway is very narrow which reduces vehicle / cyclist / pedestrian conflict. The carriageway is cobbled on this route and some sections are in a fairly poor condition which makes it difficult to cycle.
People feel safe	65	The total traffic volume and speed of traffic is low on this route and therefore walking and cycling on this route is relatively safe. Despite this, when loading activity is taking place there is insufficient width for cyclists to pass on-carriageway and therefore they are required to use the footway.
Things to see and do	33	There is only one tree and limited public seating along this route that are situated adjacent to the river which significantly reduces the score for this indicator. Despite this, the street has a historic character with traditional cobbles and street lighting providing a pleasant environment for visitors.
People feel relaxed	67	The public realm environment is considered attractive for visitors and the low traffic volumes and speed help to create a relaxed atmosphere for active travel
Clean Air	58	There are points along the route which have high NO2 concentrations of 37 ug/m3. There are timed restrictions in place along the route to prevent vehicle movements which increases the score for this indicator.
Overall Score	**64**	

7 Route 4 – Between Red Lion Street and the Bus Station (Church Terrace, Wakefield Road, Lewis Road)

7.1 This chapter provides the Healthy Streets Audit score for Route 4 and an overview of the observations for each of the ten Healthy Streets indicators.

Route Location

7.2 Route 4 runs between Red Lion Street and the bus station. The street is one-way operation, operating as a gyratory system. **Figure 7.1** shows the route highlighted in yellow.

Figure 7.1 Route 4 – Between Red Lion Street and the Bus Station

Source: OpenStreetMap, November 2019

7.3 There are no changes proposed to this route as part of the development and therefore the proposed layout scores the same as the existing layout.

Route Score

7.4 The results of the Healthy Streets Audit for this route are provided in **Figure 7.2**. This route scores a total of 78/100.

Figure 7.2 Route 4 Healthy Streets Audit Score

Name of scheme	75-81 George Street
Segment number	4

Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	77	80
Easy to cross	77	77
Shade and shelter	83	83
Places to stop and rest	67	67
Not too noisy	80	80
People choose to walk, cycle and use public transport	77	80
People feel safe	80	80
Things to see and do	78	78
People feel relaxed	79	82
Clean Air	75	75
Overall Healthy Streets Check score	78	79
Number of 'zero' scores	0	0

7.5 A summary of the scores for each indicator are provided in **Table 7.1**. Table 4 in **Appendix C** provides an explanation for the scores given to each metric. Photos are provided in **Appendix D** to illustrate the route against each indicator.

Table 7.1 Indicator Scores for Route 4

Indicator	Total score	Reasons for Score
Pedestrians from all walks of life	77	The footways and carriageway along this route were observed to be in a good condition. Traffic volumes and speed are low on this road which reduces potential conflict with vulnerable road users.
Easy to cross	77	The road operates as a gyratory system and therefore there is only one direction of traffic flow which makes crossing easier. The sinuous nature of the road reduces vehicle speeds. Uncontrolled crossings are provided with dropped kerbs and tactile paving.
Shade and shelter	83	There are multiple trees located along this route and bus shelters are located at the bus station providing shade and shelter for pedestrians.
Places to stop and rest	67	The width of clear continuous footway space is relatively narrow at some points due to street furniture. Some of the bus shelters have seating which allows a resting point for pedestrians.

Indicator	Total score	Reasons for Score
Not too noisy	80	As mentioned previously, the traffic volume is relatively low on this route and the sinuous nature of the road reduces vehicle speeds. There are loading restrictions in place to discourage private car use which contributes to the high score for this indicator.
People choose to walk, cycle and use public transport	77	The carriageway and footway is in a good condition and the greening of the route provides a pleasant atmosphere for active travel. Cycle parking is provided which meets the observed demand. There is also good provision for bus passengers waiting to board such as real time travel information and step-free access.
People feel safe	80	The total traffic volume and speed of traffic is low on this route and therefore walking and cycling on this route is relatively safe. There is informal surveillance from overlooking mixed-use buildings and from TfL staff in the bus station office. The route is well lit, and the bus shelters are clear to improve personal safety.
Things to see and do	78	There are multiple trees lining the footway and limited public seating is provided. There are also wayfinding posts to help visitors navigate along the route. The public transport interchange provision for the bus station is of a high standard with real time information for passengers.
People feel relaxed	79	The public realm environment is considered attractive for visitors and the low traffic volumes and speed help to create a relaxed atmosphere for active travel.
Clean Air	75	There are points along the route which have high NO2 concentrations of 40 ug/m3. There are timed restrictions in place along the route to prevent vehicle movements and there are multiple trees which increases the score for this indicator.
Overall Score	**78**	

8 Route 5 – Between Bridge Street and the Site (Hill Street)

8.1 This chapter provides the Healthy Streets Audit score for Route 5 and an overview of the observations for each of the ten Healthy Streets indicators.

Route Location

8.2 Route 5 runs between Bridge Street and the site. The street is two-way operation with a 30mph speed limit. **Figure 8.1** shows the route highlighted in yellow.

Figure 8.1 Route 5 – Between Bridge Street and the Site (Hill Street)

Source: OpenStreetMap, November 2019

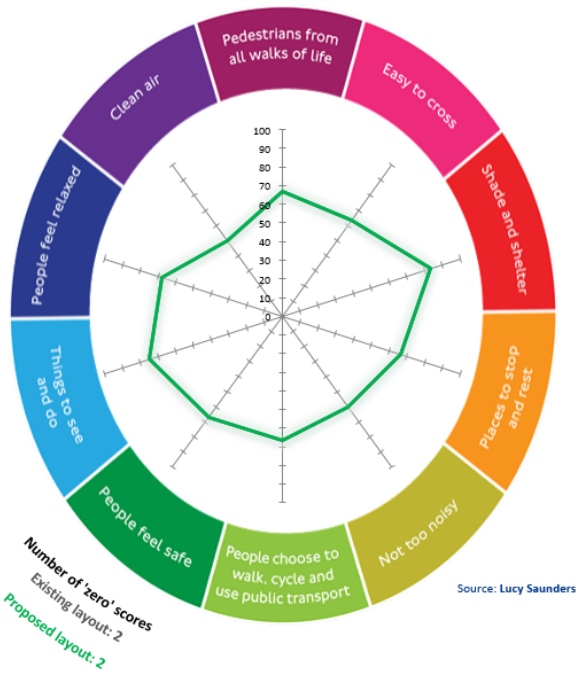
8.3 There are no changes proposed to this route as part of the development and therefore the proposed layout scores the same as the existing layout.

Route Score

8.4 The results of the Healthy Streets Audit for this route are provided in **Figure 8.2**. This route scores a total of 66/100.

Figure 8.2 Route 5 Healthy Streets Audit Score

Name of scheme	75-81 George Street
Segment number	5



Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	67	67
Easy to cross	63	63
Shade and shelter	83	83
Places to stop and rest	67	67
Not too noisy	60	60
People choose to walk, cycle and use public transport	67	67
People feel safe	67	67
Things to see and do	75	75
People feel relaxed	68	68
Clean Air	50	50
Overall Healthy Streets Check score	66	66
Number of 'zero' scores	2	2

8.5 A summary of the scores for each indicator are provided in **Table 8.1**. Table 5 in **Appendix C** provides an explanation for the scores given to each metric. Photos are provided in **Appendix D** to illustrate the route against each indicator.

Table 8.1 Indicator Score for Route 5

Indicator	Total score	Reasons for Score
Pedestrians from all walks of life	67	The footways and carriageway along this route were observed to be in a good condition. There is wayfinding provision for pedestrians and limited seating is provided.
Easy to cross	63	There is a relatively high two-way traffic flow and not all desire lines are met by crossing points such as the northern arm of the Hill Street / Bridge Street junction. Despite this, there are uncontrolled crossing points at side roads with dropped kerbs and tactile paving and a raised tabled pelican crossing is provided in the middle of the route.
Shade and shelter	83	There is a colonnade and oversailing building on the western footway providing continuous shade and shelter.
Places to stop and rest	67	The width of clear continuous footway space is at least 2 metres wide. There is a bench at the northern end of the route where pedestrians can stop and rest, but no other public seating is provided.

Indicator	Total score	Reasons for Score
Not too noisy	60	The traffic volume is relatively high on this route, but the HGV proportion is on average less than 2%. There are no loading restrictions in place to discourage private car use which reduces the score for this indicator.
People choose to walk, cycle and use public transport	67	The walking environment is good due to greening, provision of shelter, wayfinding and crossing provision. Cycle parking is provided which meets the observed demand. The relatively high traffic volume during peak times reduces the score for this indicator.
People feel safe	67	The total traffic volume and speed of traffic is relatively high on this route, however there are measures to discourage turning movements at side roads and in general there is good crossing provision. There is also informal surveillance from overlooking mixed-use buildings and the route is well lit with a high footfall.
Things to see and do	75	There are trees and ornamental planting lining the footway and public seating is provided. There is a wayfinding post and a high quality public realm creating an attractive environment for visitors.
People feel relaxed	68	The public realm environment is considered attractive for visitors which creates a relaxed atmosphere for active travel.
Clean Air	50	There are points along the route which have high NO2 concentrations of >58 ug/m3. There is some greening on this route, however vehicle volumes are relatively high which reduces the score for this indicator.
Overall Score	**66**	

9 Summary and Conclusion

9.1 We have carried out a Healthy Streets Audit in support of the proposed mixed-use development at 75-81 George Street, Richmond, TW9 1HA as requested by LBRuT. The scope of this audit was agreed with LBRuT via email on 14th October 2019.

9.2 This audit has been carried out in accordance with TfL's Healthy Streets guidance and is informed by ATC data and a Healthy Streets survey carried out during a site visit between 9:00 and 15:00 on Wednesday 23rd October 2019.

9.3 Five routes have been assessed and given a score against the ten Healthy Streets indicators. The five routes are as follows:

- Route 1 - Between Richmond Rail and Underground Station and the Site (George Street).
- Route 2 - Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street).
- Route 3 - Between the Ferry Port and the Site (Water Lane).
- Route 4 - Between Red Lion Street and the Bus Station (Church Terrace, Wakefield Road, Lewis Road).
- Route 5 - Between Bridge Street and the Site (Hill Street).

9.4 Route 1 has been given a total score of 67/100. There is a high quality public realm with wide Yorkstone paved footways, seating, active frontage and a 'greening' of the street by ornamental planting and trees. Provision for public transport users is considered excellent with step-free access to bus stops and the station, bus clearways, bus shelters with seating and real time travel information. Regular controlled and uncontrolled crossing points are provided along the route on pedestrian desire lines with provision for disabled users including tactile paving and dropped kerbs. There is frequent loading activity and the volume of traffic contributes to a poor air quality at some locations along the route. The route is not considered good for cyclists as they are mixed with general traffic and the one-way system requires them to divert along Eton Street. There is also an over-demand for cycle parking around the station, however cycle provision at the southern end of the route where the site is located is considered to exceed the current demand.

9.5 Route 2 has been given a total score of 71/100. There are multiple mature trees located along this route with canopies less than 15m apart creating an attractive environment for active travel. Pedestrian provision is good as there are wayfinding posts, footways are in a good condition and there are controlled and uncontrolled crossing points. Cyclists are allowed to use the bus lane and the carriageway is wide which assists cyclists in undertaking manoeuvres. There is also cycle parking provided which was observed to exceed demand. There is limited public seating provided for pedestrians to rest and a relatively high traffic volume during peak times which lowers the score slightly.

9.6 Route 3 has been given a total score of 64/100. There is a very low traffic flow as the road is for access only and the carriageway is very narrow which reduces vehicle speeds and makes crossing the road easy. The carriageway is cobbled with defects which is difficult to navigate for cyclists, however there is good cycle parking at the southern end of the route that exceeds demand. The road has a historic character which is considered appealing to visitors; however, 'greening' of the route could be improved which would increase the score for this route.

9.7 Route 4 has been given a total score of 78/100. There is a low traffic flow and the sinuous nature of road reduces vehicle speeds. The footway and carriageway is in a good condition and uncontrolled crossings are provide with tactile paving and dropped kerbs. The provision for bus passengers is good with bus shelters, seating and real time information at the bus station. There is informal surveillance from overlooking buildings and from TfL staff at the bus station office. The effective footway width is

less than 2m on some sections of the footway due to street infrastructure and more seating could be provided to increase the score for this route.

9.8 Route 5 has been given a total score of 66/100. There is a high quality public realm on this route with wide Yorkstone paved footways, continuous shelter, wayfinding posts and planting. Despite this, there is a relatively high traffic flow during peak times and cyclists are not segregated from general traffic which reduces the score for this route. More seating and crossing provision would increase the score for this route.

9.9 Although there are elements that could be improved on all routes, in general, provision for sustainable travel is very good in the vicinity of the site due primarily to its town centre location. The proposed development at 75-81 George Street is simply a refurbishment of an existing building with a small rooftop extension which does not involve any changes to the existing situation on any of the routes and therefore the existing situation scores the same as the proposed.

9.10 There are no elements of the proposed development that are considered to detrimentally affect the Healthy Streets score and therefore we do not consider there to be any reason why the application should be refused on highways grounds.

Appendix A
LBRUT CORRESPONDENCE

From: Shub, Simon
Sent: 14 October 2019 15:12
To: Sarah Considine
Subject: RE: 75-81 George Street - Scope for additional transport documents

Official

Hi Sarah,

I've received some feedback regarding the study areas. Subject to Richmond Hill up to Bridge Street being added, the area should be ok.

I trust this assists.

Kind Regards,

Simon Shub
Planning Officer Major Projects and Strategic Applications
Serving Richmond and Wandsworth Councils

From: Shub, Simon
Sent: 10 October 2019 10:25
To: Sarah Considine
Subject: RE: 75-81 George Street - Scope for additional transport documents

Official

Hi Sarah,

Thank you for sending this through. I've received notification that the Transport Officer assisting me with this scheme is currently on leave until 16 October 2019, which means, unfortunately, that we may need to wait until his return for confirmation of the study areas.

Kind Regards,

Simon Shub
Planning Officer Major Projects and Strategic Applications
Serving Richmond and Wandsworth Councils

From: Sarah Considine
Sent: 06 October 2019 17:00
To: Shub, Simon
Subject: FW: 75-81 George Street - Scope for additional transport documents

Hi Simon – please see below the response from my transport consultant on the additional information requested by your transport colleagues.

Please can you as your team to confirm the proposed study areas, so we can begin our assessments.

Thanks
Sarah

From: lucy.mascarenhas
Sent: 04 October 2019 11:27
To: Sarah Considine
Cc: doug.mcdougall; jack.smith; alvaro.guzman; Collard, Matthew
Subject: 75-81 George Street - Scope for additional transport documents

Hi Sarah,

I understand you are liaising with the Council on our behalf. Therefore, please could you send the attached proposed study areas for the requested CLoS, PERS and Healthy Streets audits and Collision Analysis to the LBRuT Highways Officer for approval? Once we have confirmation that they are happy with the study areas we can commence with the audits and analysis.

The areas for the audits are based on the location of key public transport links in the site vicinity and the locations of disabled parking, as mentioned within our Transport Assessment. These audits will be undertaken in accordance with TfL guidance.

The area for the collision analysis covers the key walking routes to/from the site and has been informed by the location of collisions within the site vicinity using the crashmap server. The scope of the collision analysis is detailed below.

A technical note will be produced as an Addendum to the Transport Assessment and will cover the following:

- A map showing personal injury collisions occurring over the latest 5 years within the agreed study area, supplied by TfL;
- Summarise collisions by year and severity;
- Identify collision hotspots and trends in collisions at these locations eg. at junctions;
- Assess frequency of collisions by mode to see if there are any trends in collision factors;
- Suggest improvements to reduce collisions within the study area based on the analysis; and,
- Summarise findings.

Kind regards,

Lucy Mascarenhas
Principal Transport Planner

Appendix B
TRAFFIC SURVEY RESULTS

George Street ATC data

Channel 1 - Northeastbound **Vehicle Flow** **Week 1**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday	5 Day Ave	7 Day Ave
1	98	131	135	224	220	98	118	116	146
2	41	67	66	132	80	47	46	53	68
3	26	25	41	67	50	22	28	28	37
4	24	28	35	54	35	26	21	27	32
5	43	36	44	57	45	38	35	39	43
6	151	146	135	111	55	146	136	143	126
7	367	343	330	143	101	364	345	350	285
8	531	504	456	247	174	492	516	500	417
9	499	463	439	336	248	469	470	468	418
10	469	401	389	377	305	390	404	411	391
11	367	371	404	396	370	370	397	382	382
12	390	418	398	495	384	369	415	398	410
13	423	402	453	468	368	370	404	410	413
14	409	438	453	469	337	407	425	426	420
15	390	415	431	441	422	378	364	396	406
16	398	414	464	415	440	405	427	422	423
17	408	427	434	431	420	397	402	414	417
18	427	467	494	419	421	448	451	457	447
19	402	468	444	421	409	423	413	430	426
20	440	428	442	400	377	416	438	433	420
21	386	426	402	361	307	327	319	372	361
22	320	333	361	296	234	253	255	304	293
23	255	279	311	317	165	211	218	255	251
24	215	242	286	321	134	166	149	212	216
7-19	5113	5188	5259	4915	4298	4918	5088	5113	4968
6-22	6626	6718	6794	6115	5317	6278	6445	6572	6328
6-24	7096	7239	7391	6753	5616	6655	6812	7039	6795
0-24	7479	7672	7847	7398	6101	7032	7196	7445	7246

Channel 1 - Northeastbound **Average Speed** **Week 1**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday
1	21.3	20.1	16.4	19.5	18.4	21.5	19.3
2	22.3	20.5	22.0	20.4	22.4	22.3	22.5
3	23.8	19.4	22.3	21.6	22.6	23.3	20.4
4	22.8	18.6	23.8	22.5	22.1	23.4	22.3
5	21.5	20.9	22.8	22.8	22.2	22.2	22.9
6	22.1	21.4	20.3	22.2	22.2	21.5	21.6
7	15.9	18.9	19.9	20.4	21.6	18.4	18.8
8	16.7	16.9	16.6	20.1	20.4	15.6	16.9
9	13.9	14.1	13.6	17.8	19.2	14.7	14.0
10	13.3	14.1	14.8	16.8	18.1	15.3	14.0
11	14.1	13.8	14.5	17.0	16.2	15.5	13.9
12	13.6	14.9	14.9	14.6	16.0	14.8	14.9
13	14.5	14.5	14.7	14.6	15.2	14.1	14.6
14	13.4	14.8	14.8	14.1	14.2	14.8	14.5
15	14.8	14.5	14.0	13.9	13.6	15.4	15.1
16	14.7	14.7	14.1	13.2	14.3	14.0	14.4
17	13.9	14.9	13.3	13.9	14.4	14.1	14.4
18	13.4	14.7	13.9	13.8	14.4	14.4	14.4
19	12.2	14.3	13.9	14.5	17.2	14.8	15.0
20	15.8	15.7	13.6	15.6	18.5	15.2	15.1
21	16.9	16.3	16.3	16.8	18.9	16.8	16.8
22	17.7	17.3	17.9	18.5	15.8	18.0	17.6
23	17.1	19.1	18.7	17.2	17.6	18.5	18.7
24	17.4	19.0	17.7	17.6	19.7	18.7	18.6
10-12	13.9	14.4	14.7	15.7	16.1	15.2	14.4
14-16	14.7	14.6	14.1	13.5	13.9	14.7	14.7
0-24	15.2	15.8	15.5	16.1	16.7	15.8	15.7
						Average	15.8

Channel 1 - Northeastbound **85th Percentile**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday
1	28.7	23.6	24.0	23.7	23.9	28.7	23.2
2	28.5	28.3	28.4	23.9	28.7	28.9	28.5
3	28.6	23.3	28.3	23.8	28.5	28.5	28.3
4	28.3	23.8	28.2	28.0	28.4	28.1	28.3
5	28.3	28.8	28.2	28.5	28.1	28.8	28.0
6	28.8	28.6	28.6	28.9	28.8	28.4	28.5
7	23.0	24.0	28.4	28.4	28.5	23.5	23.2
8	23.8	23.9	23.4	28.7	28.8	23.5	23.9
9	18.8	18.2	18.7	23.5	23.6	18.2	18.6
10	18.7	18.7	18.3	23.5	23.8	18.3	18.8
11	18.0	19.0	18.6	23.5	23.0	18.1	18.9
12	18.4	18.2	18.2	18.4	23.2	18.6	18.3
13	18.9	18.5	18.2	18.4	18.1	18.2	18.5
14	18.8	18.1	18.6	18.3	18.1	18.9	18.1
15	18.4	19.0	18.1	18.1	18.3	18.1	18.6
16	19.0	18.7	18.5	18.2	18.1	18.4	18.4
17	18.9	18.0	18.9	19.0	18.0	18.3	19.0
18	18.1	18.6	18.3	18.1	18.5	18.9	18.1
19	18.9	18.1	18.8	18.4	23.7	18.8	18.9
20	23.4	23.1	18.4	18.4	23.5	23.3	23.6
21	23.5	23.8	23.3	23.5	23.8	23.7	23.3
22	23.8	23.3	23.9	23.2	23.1	23.3	23.1
23	23.1	23.0	23.6	23.5	23.2	23.1	23.5
24	23.6	23.3	23.6	23.3	23.7	23.0	23.2
10-12	18.5	18.4	18.4	18.6	23.5	18.3	19.0
14-16	18.3	18.3	18.1	18.5	18.4	18.8	18.1
0-24	18.6	23.9	18.6	23.2	23.1	23.3	23.0
						85th %ile	22.0

Red Lion Street ATC data

Channel 1 - Westbound **Vehicle Flow** **Week 1**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday	5 Day Ave	7 Day Ave
1	74	114	135	209	247	68	71	92	131
2	48	60	71	182	117	51	50	56	83
3	35	22	38	85	62	31	25	30	43
4	31	24	31	56	44	36	15	27	34
5	30	43	38	32	27	29	39	36	34
6	71	68	83	53	37	68	66	71	64
7	167	180	166	90	81	171	183	173	148
8	396	440	360	197	133	390	418	401	333
9	538	551	472	372	266	495	575	526	467
10	542	477	494	393	354	493	455	492	458
11	497	477	521	440	375	495	471	492	468
12	529	499	588	521	424	493	479	518	505
13	572	540	668	652	350	543	517	568	549
14	611	509	658	617	372	524	504	561	542
15	551	581	616	648	650	513	511	554	581
16	585	624	732	617	612	481	482	581	590
17	661	676	721	616	631	583	595	647	640
18	744	708	745	621	555	592	573	672	648
19	774	685	655	581	431	593	594	660	616
20	602	629	672	507	415	538	553	599	559
21	463	473	524	458	360	387	377	445	435
22	402	417	419	386	277	285	282	361	353
23	346	340	326	401	215	271	271	311	310
24	235	261	350	346	160	173	162	236	241
7-19	7000	6767	7230	6275	5153	6195	6174	6673	6399
6-22	8634	8466	9011	7716	6286	7576	7569	8251	7894
6-24	9215	9067	9687	8463	6661	8020	8002	8798	8445
0-24	9504	9398	10083	9080	7195	8303	8268	9111	8833

Channel 1 - Westbound **Average Speed** **Week 1**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday
1	25.4	23.0	24.8	23.4	23.4	25.4	24.6
2	25.5	24.2	25.5	24.4	25.4	25.0	25.8
3	27.7	25.1	26.0	25.1	24.8	27.5	24.6
4	27.5	25.1	26.3	26.7	24.0	26.8	26.5
5	28.6	24.4	26.9	26.1	26.1	27.9	27.1
6	27.9	24.7	26.2	25.3	25.8	27.7	24.6
7	23.9	23.9	24.1	24.7	23.6	25.0	24.4
8	22.8	21.7	21.6	23.9	24.0	22.7	22.0
9	20.6	20.8	21.2	22.7	22.4	21.0	21.0
10	19.8	20.1	20.0	22.2	20.9	20.6	20.4
11	19.9	18.8	19.4	20.8	19.1	19.9	18.9
12	19.6	16.7	18.1	19.6	16.2	16.6	16.5
13	20.0	13.1	17.5	17.6	13.7	18.6	18.6
14	19.7	14.0	16.8	17.2	11.5	20.1	20.3
15	18.1	18.3	17.2	16.4	17.2	18.3	18.1
16	19.4	17.5	18.2	17.1	17.3	18.6	18.7
17	18.6	18.7	19.0	17.5	17.2	20.1	19.9
18	18.1	18.8	18.8	17.0	19.4	20.8	20.7
19	17.6	18.0	17.9	18.5	21.3	19.8	19.8
20	19.2	18.9	17.8	18.9	21.8	20.3	20.3
21	21.1	21.1	18.9	19.9	22.0	21.8	22.0
22	21.8	21.3	21.5	21.3	22.6	22.0	21.8
23	22.7	22.5	22.2	20.0	23.7	23.3	23.5
24	23.1	22.8	22.6	20.7	24.0	24.1	24.3
10-12	19.8	17.8	18.7	20.1	17.6	18.2	17.7
14-16	18.8	17.9	17.7	16.8	17.3	18.4	18.4
0-24	20.0	19.0	19.3	19.4	19.4	20.5	20.3

Average	19.7

Channel 1 - Westbound **85th Percentile**

Hr Ending	23/10/2019 Wednesday	24/10/2019 Thursday	25/10/2019 Friday	26/10/2019 Saturday	27/10/2019 Sunday	28/10/2019 Monday	29/10/2019 Tuesday
1	33.7	28.6	29.0	28.7	28.9	28.7	28.2
2	33.5	28.3	28.4	28.9	28.7	33.9	33.5
3	33.6	28.3	28.3	28.8	28.5	33.5	28.3
4	33.3	33.8	38.2	28.0	28.4	33.1	28.3
5	38.3	33.8	33.2	33.5	33.1	38.8	33.0
6	33.8	33.6	33.6	33.9	33.8	33.4	28.5
7	28.0	29.0	28.4	28.4	33.5	28.5	28.2
8	28.8	28.9	28.4	28.7	28.8	28.5	28.9
9	23.8	23.2	23.7	28.5	28.6	28.2	23.6
10	23.7	23.7	23.3	28.5	28.8	23.3	23.8
11	23.0	24.0	23.6	23.5	23.0	23.1	23.9
12	23.4	23.2	23.2	23.4	23.2	23.6	23.3
13	23.9	18.5	23.2	23.4	18.1	23.2	23.5
14	23.8	18.1	23.6	23.3	18.1	23.9	23.1
15	23.4	24.0	23.1	18.1	23.3	23.1	23.6
16	24.0	23.7	23.5	23.2	23.1	23.4	23.4
17	23.9	23.0	23.9	24.0	23.0	23.3	24.0
18	23.1	23.6	23.3	23.1	23.5	23.9	23.1
19	23.9	23.1	23.8	23.4	23.7	23.8	23.9
20	23.4	23.1	23.4	23.4	28.5	23.3	23.6
21	28.5	28.8	23.3	23.5	28.8	28.7	28.3
22	28.8	23.3	28.9	23.2	28.1	28.3	28.1
23	28.1	28.0	28.6	23.5	28.2	28.1	28.5
24	28.6	28.3	28.6	23.3	28.7	28.0	28.2
10-12	23.5	23.4	23.4	23.6	23.5	23.3	24.0
14-16	23.3	23.3	23.1	23.5	23.4	23.8	23.1
0-24	23.6	23.9	23.6	23.2	23.1	23.3	23.0

85th %ile	23.4

Appendix C
EXPLANATION OF SCORES AGAINST METRICS FOR EACH ROUTE

Route 1 – Between Richmond Rail and Underground Station and the Site (George Street)

Metric Score	Metric	Reason
Metrics Scoring 3	Noise from larger vehicles	The proportion of large vehicles is 0.8% of total traffic between 7am-7pm
	Sharing of footway with people cycling	No part of the footways are designated for shared use.
	Quality of footway surface	There is an even and level surface for walking throughout which is in a good condition with high quality Yorkstone paving.
	Surveillance of public spaces	There is constant surveillance as the route is fronted on both sides by active frontage and there is a high footfall.
	Lighting	Street lighting meets the British standards.
	Bus stop accessibility	Bus stops are wheelchair accessible, there is ample space for boarding/alighting and bus stop clearways are provided on carriageway.
	Street-to-station step-free access	All entry points to the rail station are step-free.
Metrics Scoring 2	Total volume of two way motorised traffic	The highest recorded peak hour vehicle flow is 531.
	Interaction between large vehicles and people cycling	The proportion of large vehicles was recorded as 0.8% of total traffic between 7am-7pm.
	Speed of motorised traffic	The recorded 85th percentile speed was 22mph.
	Ease of crossing side roads for people walking	Side roads are either one-way operation, no entry or are narrow to encourage slow turning movements.
	Mid-link crossings, to meet pedestrian desire lines	Some pedestrian desire lines are provided with controlled or uncontrolled crossings.
	Type and suitability of pedestrian crossings away from junctions	There are uncontrolled crossings with a conflicting traffic volume of up to 531 vehicles per hour.
	Technology to optimise efficiency of movement	Some detection optimisation technology is in place to detect pedestrians and buses at traffic signals.
	Additional features to support people using controlled crossings	Not all controlled crossings along the route have raised tables or pedestrian countdowns but they do have dropped kerbs, tactile paving and are considered appropriate for the context.
	Width of clear continuous walking space	In general, footways are at least 2.5 to 3m wide along this route.
	Collision risk between people cycling and turning motor vehicles	Cycle movements are not segregated and fewer than 5% of turning movements are undertaken by larger vehicles.
	Quality of carriageway surface	The carriageway surface appears to be in a good condition.
	Street trees	There are street trees with canopies more than 15m apart.

Metric Score	Metric	Reason
	Planting at footway-level (excluding trees)	There are some ornamental flowers and planting along the route.
	Walking distance between sheltered areas protecting from rain.	There is between 50m and 150m apart between sheltered areas. Sheltered area include fixed awnings and bus shelters.
	Factors influencing bus passenger journey time	Buses are mixed with traffic but do not appear to be significantly delayed. There are no bus lay-bys which could delay bus journey times.
	Bus stop connectivity with other public transport services	Bus stops are within 50m and 150m apart.
	Walking distance between resting points	There is public seating outside the station and at bus shelters. There is also informal seating on tree planters.
Metrics Scoring 1	Traffic noise based on peak hour motorised traffic volumes	There is a traffic volume of up to 531 vehicles per hour resulting in c. >70DB at certain times.
	NO2 concentration (from London Atmospheric Emission Inventory)	The highest NO2 concentrations are 55 ug/m3.
	Reducing private car use	There are no timed restrictions in place along the route.
	Impact of kerbside activity on cycling	There was frequent kerbside loading activity taking place along this route during the site visit. This would sometimes hold up traffic momentarily as they struggled to pass loading vehicles.
	Provision of cycle parking.	There were many bicycles observed parked against railings near the station and the station cycle parking was not in a good condition and was nearly at capacity during the time of the site visit. However, this did not appear to be an issue in the vicinity of the site and there were some cycle parking spaces available.
	Support for interchange between cycling and underground/rail	There is insufficient cycle parking to meet demand at the rail station.
Metrics Scoring 0	Effective width for cycling	The carriageway is approximately 3.4m wide and no cycle lanes are provided.

Route 2 – Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street)

Metric Score	Metric	Reason
Metrics Scoring 3	Noise from larger vehicles	The proportion of large vehicles is 1.1% of total traffic between 7am-7pm
	Sharing of footway with people cycling	No part of the footways are designated for shared use.
	Quality of footway surface	There is an even and level surface for walking throughout which is in a good condition with small concrete paving slabs on the footway and asphalt on the carriageway.
	Surveillance of public spaces	There is constant surveillance as the route is fronted on both sides by active frontage and there is a relatively high footfall during peak times.
	Lighting	Street lighting meets the British standards.
	Factors influencing bus passenger journey time	A designated bus lane is provided which reduces bus journey times.
	Effective width for cycling	No cycle lanes are provided but the carriageway is approximately 4.5m wide and cyclists are allowed to use the bus lane.
	Provision of cycle parking	Cycle parking appears to exceed current demand, no bicycles were parked outside of the designated stands.
	Street trees	There are multiple mature trees growing adjacent to or within the footway with canopies less than 15m apart.
Metrics Scoring 2	Total volume of two way motorised traffic	The highest recorded peak hour vehicle flow is 774.
	Interaction between large vehicles and people cycling	The proportion of large vehicles was recorded to be 1.1% of total traffic between 7am-7pm.
	Speed of motorised traffic	The recorded 85th percentile speed was 23mph.
	Ease of crossing side roads for people walking	Side roads are either no entry, with raised tables or are narrow to encourage slow turning movements.
	Mid-link crossings, to meet pedestrian desire lines	Some pedestrian desire lines are provided with uncontrolled crossings.
	Type and suitability of pedestrian crossings away from junctions	There are uncontrolled crossings with a conflicting traffic volume of up to 774 vehicles per hour.
	Technology to optimise efficiency of movement	Some detection optimisation technology is in place to detect pedestrians and buses at traffic signals.
	Collision risk between people cycling and turning motor vehicles	Cycle movements are not segregated and fewer than 5% of turning movements are undertaken by larger vehicles.
	Quality of carriageway surface	The carriageway surface appears to be in a good condition.
	Quality of footway surface	The footway surface appears to be in a good condition.

Metric Score	Metric	Reason
	Planting at footway-level (excluding trees)	There is vegetation planting along the route.
	Reducing private car use	There is a timed restriction in place prohibiting vehicles from using the bus lane Monday to Saturday 7am-7pm.
	Walking distance between sheltered areas protecting from rain.	There is between 50m and 150m apart between sheltered areas. Sheltered areas include tree canopies.
	Additional features to support people using controlled crossings	There is one pelican crossing situated on Red Lion Street and pelican crossings at the George Street / Red Lion Street junction with appropriate provision.
Metrics Scoring 1	Traffic noise based on peak hour motorised traffic volumes	There is a traffic volume of up to 774 vehicles per hour resulting in c. >70DB at certain times.
	NO2 concentration (from London Atmospheric Emission Inventory)	The highest NO2 concentrations are 55 ug/m3.
	Impact of kerbside activity on cycling	There was frequent kerbside loading activity taking place along this route during the site visit.
	Walking distance between resting points	There is limited public seating provided along this route which is more than 150m apart.
Metrics Scoring 0	Width of clear continuous walking space	There are pinch-points on the footway where mature trees are growing, presumably because the trees are considered important in ecological and landscape terms and therefore have not been relocated.

Route 3 – Between the Ferry Port and the Site (Water Lane)

Metric Score	Metric	Reason
Metrics Scoring 3	Noise from larger vehicles	Water lane is too narrow for HGVs.
	Total volume of two way motorised traffic	The highest peak hour vehicle flow is less than 500 vehicles.
	Interaction between large vehicles and people cycling	Water lane is too narrow for HGVs.
	Speed of motorised traffic	The recorded 85th percentile speed is less than 20mph due to the narrow road width.
	Traffic noise based on peak hour motorised traffic volumes	There are fewer than 55 vehicles per hour resulting in c. >58 DB.
	Reducing private car use	There is no through movement for motorised traffic and a right turn ban is in place.
	Ease of crossing side roads for people walking	There are no side roads on Water Lane.
	Type and suitability of pedestrian crossings away from junctions	There are uncontrolled crossings with a conflicting traffic volume of less than 200 vehicles per hour. The carriageway is very narrow making crossing easy.
	Sharing of footway with people cycling	No part of the footways are designated for shared use.
	Collision risk between people cycling and turning motor vehicles	There are no side roads on Water Lane.
	Surveillance of public spaces	There is constant surveillance as the route is fronted on both sides by mixed-use buildings.
	Lighting	Street lighting meets the British standards.
	Provision of cycle parking	Cycle parking appears to exceed current demand, no bicycles were parked outside of the designated stands.
Metrics Scoring 2	NO2 concentration (from London Atmospheric Emission Inventory)	The highest NO2 concentrations are 37 ug/m3.
	Mid-link crossings, to meet pedestrian desire lines	There is one uncontrolled crossing at the junction with George Street, no other uncontrolled crossings are provided.
Metrics Scoring 1	Walking distance between sheltered areas protecting from rain.	There is more than 150m apart between sheltered areas.
	Technology to optimise efficiency of movement	There are no signals along this route, therefore no detection systems are in place.
	Effective width for cycling	No cycle lanes are provided although the carriageway is approximately 2.5m wide therefore vehicles cannot overtake cyclists.
	Quality of footway surface	There are a many minor defects in the footway surface that could cause someone to fall if they are not vigilant.
	Street trees	There is only one tree at the southern end Water Lane adjacent to the river.

Metric Score	Metric	Reason
	Planting at footway-level (excluding trees)	There is no planting along the route.
	Additional features to support people using controlled crossings	There are no controlled crossings along this route.
	Walking distance between resting points	There is limited public seating provided along this route which is more than 150m apart.
Metrics Scoring 0	Width of clear continuous walking space	The footways are less than 2m wide and the cobbled street is not very well maintained.
	Impact of kerbside activity on cycling	Due to the narrow width of the carriageway cyclists cannot maintain 1m clearance from vehicles loading.
	Quality of carriageway surface	The carriageway surface appears to be in a poor condition and is difficult to cycle along due to the cobbles.

Route 4 - Between Red Lion Street and the Bus Station (Church Terrace, Wakefield Road, Lewis Road)

Metric Score	Metric	Reason
Metrics Scoring 3	Noise from larger vehicles	The proportion of large vehicles is less than 5%.
	Total volume of two way motorised traffic	The highest peak hour vehicle flow is less than 500 vehicles.
	Effective width for cycling	The carriageway width is more than 4.5m.
	Speed of motorised traffic	The recorded 85th percentile speed is less than 20mph due to the sinuous road layout and bus station design.
	Traffic noise based on peak hour motorised traffic volumes	There are 55-450 vehicles per hour resulting in c. 58-70 DB.
	Mid-link crossings, to meet pedestrian desire lines	Uncontrolled crossing points are provided at the bus station with dropped kerbs and tactile paving.
	Impact of kerbside activity on cycling	There are loading restrictions and a controlled parking zone, therefore there is limited kerbside activity on this route.
	Type and suitability of pedestrian crossings away from junctions	There are uncontrolled crossings with a conflicting traffic volume of less than 200 vehicles per hour.
	Sharing of footway with people cycling	No part of the footways are designated for shared use.
	Collision risk between people cycling and turning motor vehicles	Turning movements at side roads are minimised.
	Surveillance of public spaces	There is constant surveillance as the route is fronted on both sides by mixed-use buildings.
	Lighting	Street lighting meets the British standards.
	Street trees	There are multiple trees along this route.
	Bus stop connectivity with other public transport services	Bus stops are less than 50m apart.
	Street-to-station step-free access	All entry points to the station are step-free.
Metrics Scoring 2	NO2 concentration (from London Atmospheric Emission Inventory)	The highest NO2 concentrations are 40 ug/m3.
	Interaction between large vehicles and people cycling	The proportion of large vehicles is less than 2% of motorised traffic.
	Reducing private car use	There are some timed restrictions including a loading restriction and controlled parking zone.
	Ease of crossing side roads for people walking	There are features of the road layout that discourage high speeds making crossing easier.
	Quality of carriageway surface	The carriageway surface appears to be in a good condition with very few minor defects.

Metric Score	Metric	Reason
	Quality of footway surface	The footway surface appears to be in a good condition with very few minor defects.
	Provision of cycle parking	Cycle parking appears to meet current demand, no bicycles were parked outside of the designated stands.
	Planting at footway-level (excluding trees)	There is some ornamental planting along the route and hedges.
	Walking distance between sheltered areas protecting from rain.	There is between 50m and 150m apart between sheltered areas. Sheltered areas include bus shelters and tree canopies.
	Factors influencing bus passenger journey time	Buses are mixed with traffic but do not appear to be significantly delayed. There are no bus lay-bys which could delay bus journey times.
Metrics Scoring 1	Support for interchange between cycling and underground/rail	There is sufficient cycle parking to meet demand at the bus station.
	Technology to optimise efficiency of movement	There are no signals along this route, therefore no detection systems are in place.
	Additional features to support people using controlled crossings	There are no controlled crossings along this route.
	Walking distance between resting points	There is limited public seating provided along this route which is more than 150m apart. The main seating is located under bus shelters.
Metrics Scoring 0	Width of clear continuous walking space	Street furniture narrows the effective footway width to less than 2m in some locations.

Route 5– Between Bridge Street and the Site (Hill Street):

Metric Score	Metric	Reason
Metrics Scoring 3	Noise from larger vehicles	The proportion of large vehicles is less than 5%.
	Sharing of footway with people cycling	No part of the footways are designated for shared use.
	Quality of carriageway surface	The carriageway surface appears to be in a good condition with no obvious defects.
	Quality of footway surface	The footway surface appears to be in a good condition with no obvious defects.
	Walking distance between sheltered areas protecting from rain.	There is a colonnade arrangement on the western side of the footway which provides shelter for the majority of this route.
	Surveillance of public spaces	There is constant surveillance as the route is fronted on both sides by mixed-use buildings.
	Lighting	Street lighting meets the British standards.
Metrics Scoring 2	Mid-link crossings, to meet pedestrian desire lines	Crossing points are provided on this route along the majority of desire lines.
	Speed of motorised traffic	The recorded 85th percentile speed is 20-25mph.
	Additional features to support people using controlled crossings	There are controlled and uncontrolled crossings provided with appropriate provision including raised tables, dropped kerbs and/or tactile paving. Crossings are provided on two out of four arms of the Hill Street/Bridge Street roundabout.
	Interaction between large vehicles and people cycling	The proportion of large vehicles is on average less than 2% of motorised traffic between 7am and 7pm.
	Type and suitability of pedestrian crossings away from junctions	A controlled crossing is provided on Hill Street with a crossing distance of less than 15m.
	Ease of crossing side roads for people walking	There are features on side roads that discourage high speeds making crossing easier.
	Street trees	There are trees along this route with canopies spaced more than 15m apart.
	Technology to optimise efficiency of movement	There are detection systems in place at signals.
	Impact of kerbside activity on cycling	There is occasional kerbside activity on this route with a 1m clearance for cyclists.
	Provision of cycle parking	Cycle parking appears to meet current demand, no bicycles were parked outside of the designated stands.
	Planting at footway-level (excluding trees)	There is some ornamental planting along the route.
	Factors influencing bus passenger journey time	Buses are mixed with traffic but do not appear to be significantly delayed. There are no bus lay-bys which could reduce bus journey times.

Metric Score	Metric	Reason
	Collision risk between people cycling and turning motor vehicles	Some side roads have been closed to vehicles.
	Walking distance between resting points	There is public seating provided along this route but resting points are between 50m and 150m apart.
Metrics Scoring 1	Traffic noise based on peak hour motorised traffic volumes	There is a two-way traffic volume of up to 1046 vehicles per hour resulting in c. >70DB at certain times.
	NO2 concentration (from London Atmospheric Emission Inventory)	The highest NO2 concentrations are >58 ug/m3.
	Reducing private car use	There are no timed restrictions on this route.
	Width of clear continuous walking space	There is 2m of clear continuous walking space.
Metrics Scoring 0	Effective width for cycling	The carriageway width is between 3.2 and 3.9m in some locations.
	Total volume of two way motorised traffic	The highest peak hour vehicle flow is just over 1000 vehicles and cyclists are mixed with motorised traffic.

Appendix D
SITE PHOTOS

Route 1 – Between Richmond Rail and Underground Station and the Site (George Street)

Pedestrians from all walks of life

Dropped kerbs and tactile paving are provided at crossing points

Wide Yorkstone paved footways are provided

Easy to cross

Pelican crossing provided directly adjacent to the site on George Street

No entry at side road allows pedestrians to cross with ease

Shade and shelter

Fixed shop awnings provide shelter

Fixed awning outside Richmond rail and underground station provides shelter

Places to stop and rest, People feel relaxed, Things to see and do

Seating outside Richmond rail and underground station

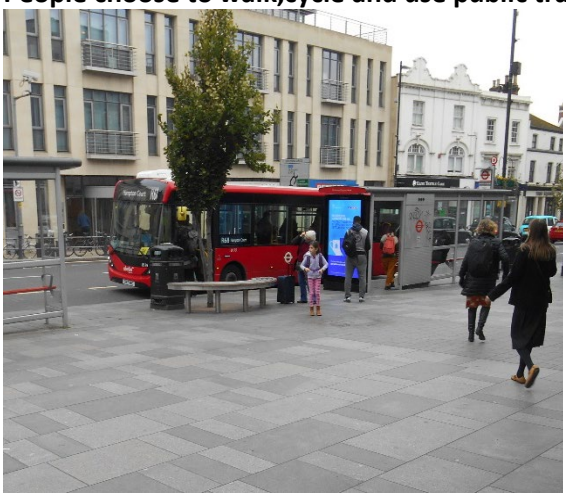
Steps providing informal seating and ornamental planting on street columns

Not too noisy, Clean air

Busy high street with a moderate traffic flow

Large vehicles are allowed along this route but make up a small proportion (0.8%) of total traffic

People choose to walk,cycle and use public transport



Excellent provision for public transport users – bus stops have bus shelters with seating and real time travel information

There is an over demand for cycle parking outside the rail station

People feel safe

Street lighting is designed to British standards

There is active frontage along the entire route providing informal surveillance

Route 2 – Between Sheen Street and the Site (Eton Street, Paradise Road, Red Lion Street)

Pedestrians from all walks of life, People feel safe

Footways and carriageway are in a good condition and the carriageway is wide with ample space for vehicles and cyclists

Shade and shelter

Mature trees provide shade and shelter along this route

Easy to cross

Pelican crossing on Red Lion Street with tactile paving and dropped kerbs

Raised table at side road and uncontrolled crossing with tactile paving and dropped kerbs

Places to stop and rest, People feel relaxed, Things to see and do

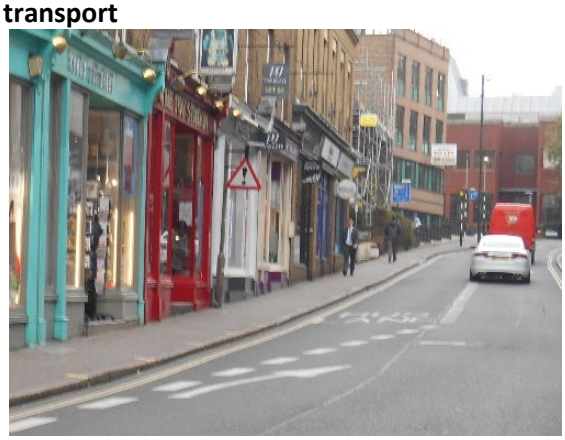
Seating and cycle parking is provided on Eton Street

Wayfinding posts to assist pedestrians and bollards to protect pedestrians on footway

Not too noisy, Clean air

There are restictions in place to reduce loading activity and vehicle traffic including no loading blips and bus lane restrictions

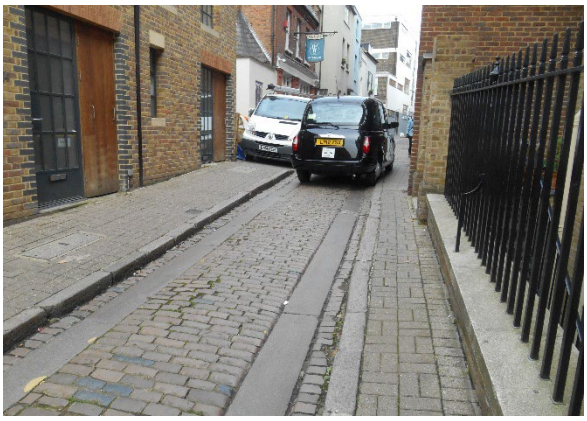
People choose to walk,cycle and use public transport



Bus lane is provided on Paradise Road which reduces bus journey times

Route 3 – Between the Ferry Port and the Site (Water Lane)

Pedestrians from all walks of life

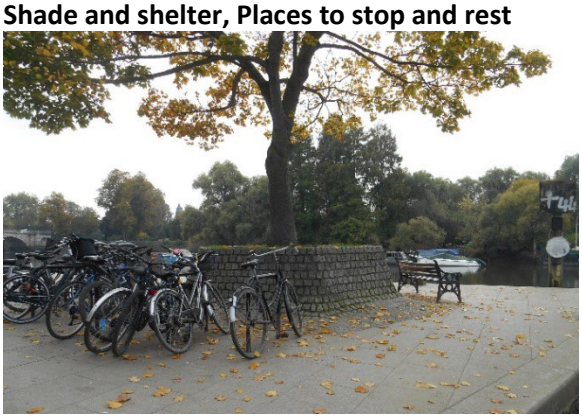


Footways and carriageway are narrow and in a poor condition in some locations

Easy to cross

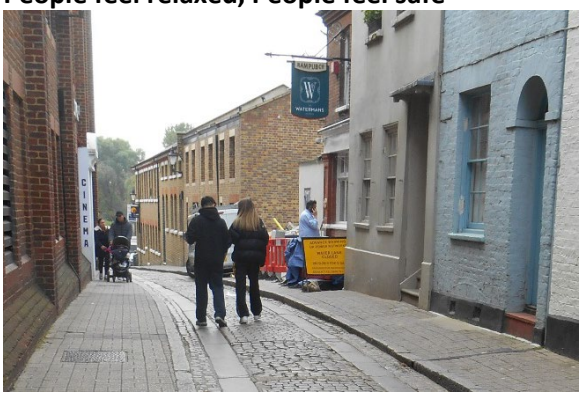
The carriageway is very narrow and traffic flow and speeds are low making crossing easy

Shade and shelter, Places to stop and rest



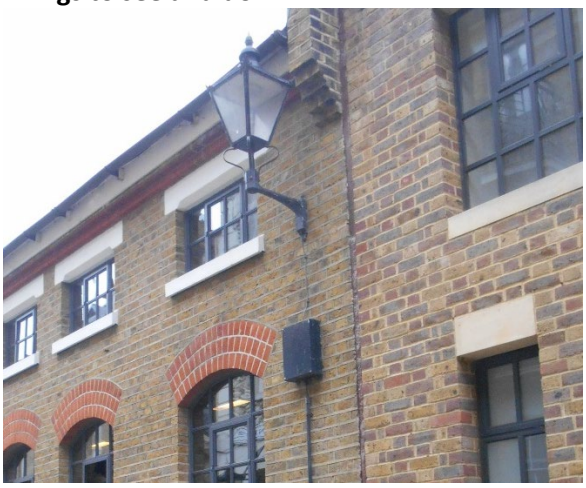
There is a tree and bench situated at the southern end of the route adjacent to the river

People feel relaxed, People feel safe



Low traffic volumes mean people feel relaxed and safe walking along the route

Things to see and do



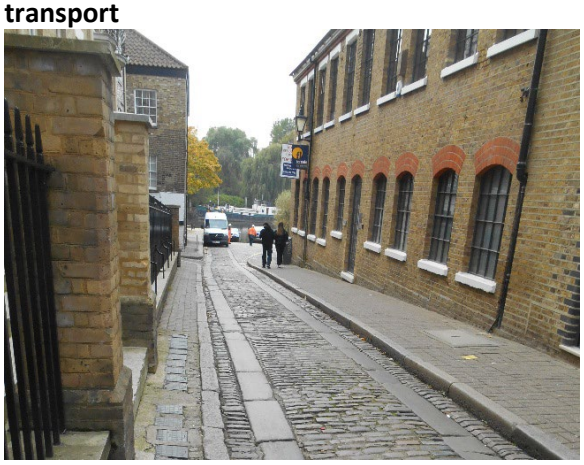
There is ornamental lighting and a historic character of the street which is cobbled and buildings

Pleasant environment along river

Not too noisy, Clean air

There are low traffic volumes and speeds but there is not a lot of greening along Water Lane which reduces the score for these indicators

People choose to walk,cycle and use public transport



There is no through route for vehicles and therefore it makes a pleasant enviornment for active travel

Route 4 – Between Red Lion Street and the Bus Station

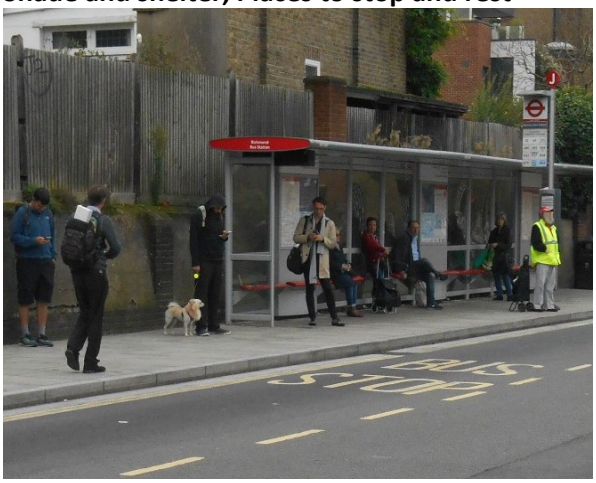
Pedestrians from all walks of life

Footways and carriageway are wide and in a good condition

Easy to cross

Dropped kerbs and tactile paving are provided and traffic volumes and speeds are low

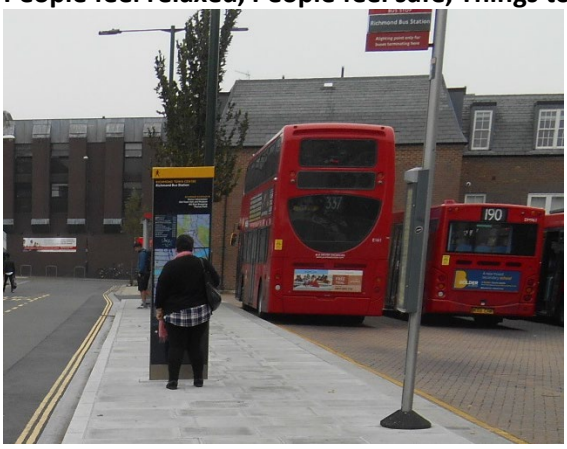
Shade and shelter, Places to stop and rest



There is shelter provided at bus stops and seats are also provided allowing people to rest and seek shade

Multiple trees have been planted along the route providing shade and shelter

People feel relaxed, People feel safe, Things to see and do



Wayfinding posts are provided and there is informal surveillance allowing people to feel safe and relaxed

Street art improves the aesthetic environment and is appealing to visitors

Not too noisy, Clean air

Low traffic volumes, low vehicle speeds and greening of the route provides a pleasant environment

People choose to walk,cycle and use public transport

Cyle parking exceeds demand and planting provides an attractive environment

Route 5 – Between Bridge Street and the Site

Pedestrians from all walks of life

Footways and carriageway are in a good condition.

Easy to cross

A controlled crossing with a raised table, dropped kerb and tactile paving is provided on Hill Street.

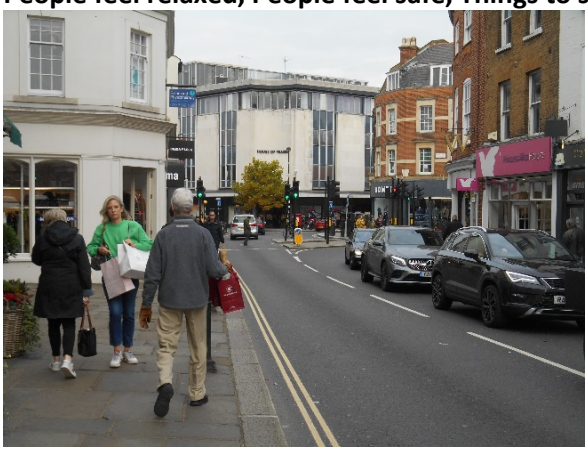
Shade and shelter

There is a colonnade and oversailing building on the western footway providing shade and shelter.

Places to stop and rest

There is public seating provided at the northern end of the route.

People feel relaxed, People feel safe, Things to see and do



There is a high footfall and an attractive environment for people to walk.

Wayfinding posts are provided and there is constant informal surveillance.

Not too noisy, Clean air

There is a relatively high traffic flow but low vehicle speeds and greening of the route provides a pleasant environment.

People choose to walk,cycle and use public transport

Cyle parking exceeds demand and planting provides an attractive environment.