



Chamberlayne Road Corridor Study

Issues and Opportunities Report

December 2016

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The Study

The Background

Urban Flow, Deck Social and BDP were commissioned to undertake a community-led and technical review of the road corridor encompassing Chamberlayne Road, Kilburn Lane and Station Terrace in Kensal Rise.

The aim of the study was to establish issues and opportunities that address local concerns and help deliver improvements that meet with council and London-wide transport and environment objectives.

The study area has come under substantial review and scrutiny by the local community in recent years, notably regarding:

- The number of buses and their impact on the local environment and air quality
- Congestion
- Road safety.

A series of community-led studies have identified issues and opportunities for the study area over a 5 year period. This includes an air quality petition and measures to improve bus route 302.

TfL recently led a pinch-point assessment to establish measures to improve bus reliability within the study area.

A number of measures have been implemented in recent years within the study area including a 20mph zone and traffic calming measures.

The Study Area

The corridor is an important orbital route for movement, notably for buses connecting the area with Willesden and the North Circular to the north and central London to the south and west.

The northern section of the corridor, Chamberlayne Road and Station Terrace are characterised by a wide range of local shops, cafes, bars, restaurants, Tesco Express and Kensal Rise station. The southern section of the corridor includes Kilburn Lane (B413), which is a particularly important road for movement, notably its connection to Harrow Road (A404) and central London.



Study Objectives

- Ensure the active participation of local community and user groups in identifying the issues and opportunities for the study area
- Ensure a shared vision of good design and community involvement at all stages of the design process from inception to delivery
- Address the needs of different users
- Adopt a place-based design approach
- Consider bus services, stops and movements in the local area
- Consider the operation of junctions along the corridor and particularly the configuration of traffic signal junctions and pedestrian crossing points to reduce congestion
- Review the suitability of existing waiting and loading restrictions and effectiveness of enforcement
- Develop suitable measures to smooth traffic flows and to address concerns regarding CO2 and NOX levels
- Find a balance between the movement function and other design considerations such as character, legibility, connectivity and environmental quality.



The Study Area

The Challenges

Movement versus Place

Enhancing the corridor presents a substantial challenge as it is both an important strategic corridor and an important local place where people live, go to school, work and spend leisure time.

The tension between the corridor's movement and place functions has resulted in significant negative traffic impact, poor bus reliability, poor provision for pedestrians and cyclists and inadequate spaces for businesses to operate and for people to move freely and enjoy their locality.

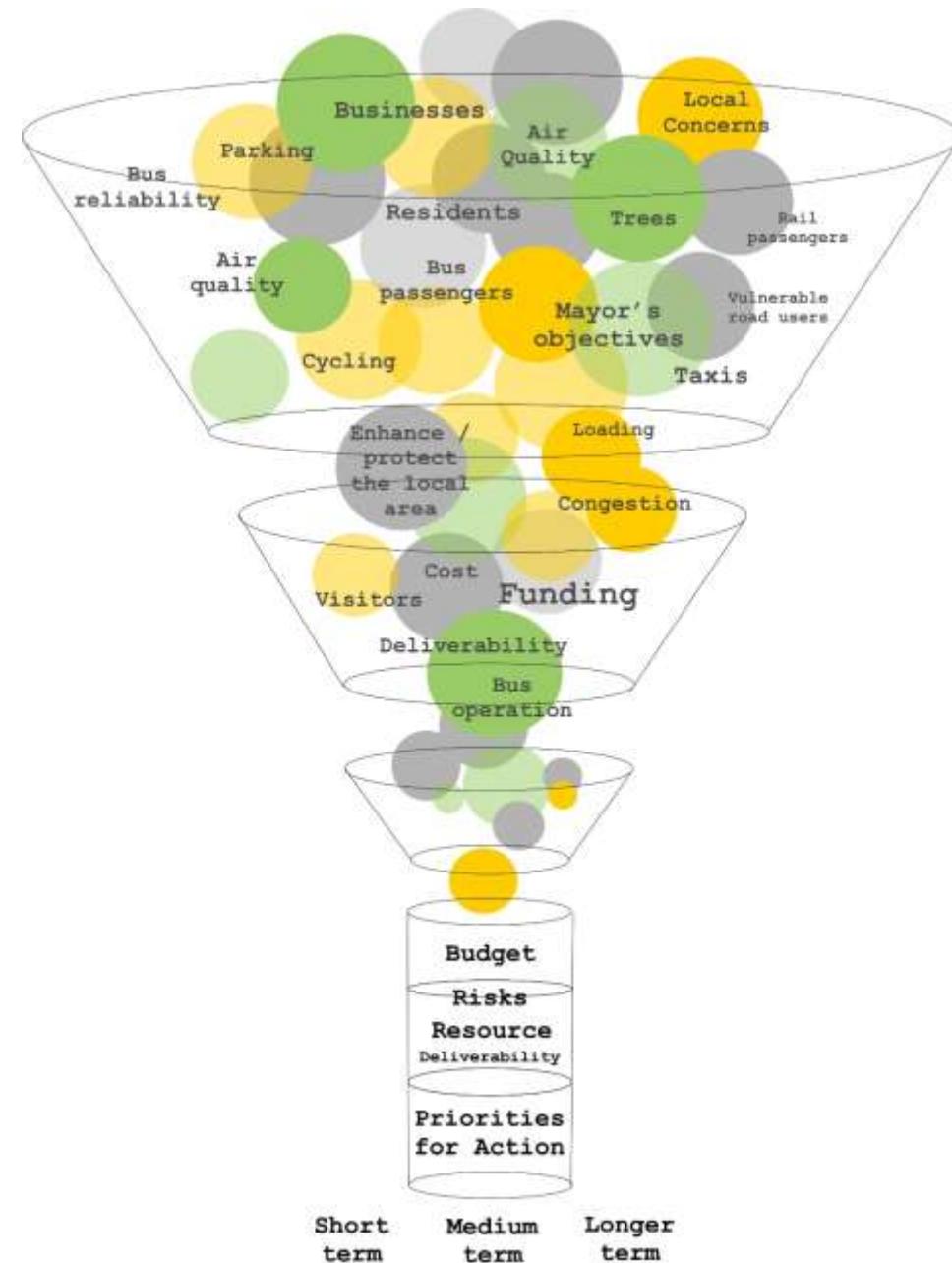
A Prioritised Approach

Given the extent of the corridor, its strategic function, local pressures and funding constraints there is a need to identify and prioritise schemes that could be taken forward. Such prioritised schemes need to; meet important objectives, provide value for money, address the needs and concerns of local residents and businesses, now and in the future.

At present, there is insufficient funding to enable comprehensive wholesale change across the corridor. This is particularly relevant to any changes to existing bus operation, which would require a comprehensive business case and changes to bus service contracts which are both costly and time consuming. However, there are distinct opportunities to better balance movement and place functions that can be accomplished in the short to medium term.

Such opportunities can provide better facilities for local people, businesses, bus users and visitors. These changes will act as a step towards a longer term strategy to address more challenging issues including bus operation, traffic congestion and air quality.

To fully realise this challenge, collaboration and cooperation is required across all stakeholders; the Council, Westminster Council, Transport for London, London Buses, the local community and businesses.



This Report

The aim of this report is to bring together the findings of previous studies, data, local community ideas and issues, and identify a comprehensive set of potential opportunities that can be achieved in the short, medium and longer term that balance the needs of the local community with the needs of sustainable travel and movement.

The Issues and Opportunities

The Existing Issues

Through a comprehensive engagement and consultation process, data analysis, camera surveys and site visits a number of issues have been identified within the study area including:

- The impact of traffic and congestion on this constrained corridor
- Poor bus access and reliability particularly within Station Terrace area
- Poor pedestrian and cyclist environment – narrow, poorly maintained footways and pinch-points
- Poor parking and lack of loading facilities
- Lack of consistent materials, trees and soft landscaping
- Street clutter and poorly maintained private shop fronts and courts.



A place for people

The Overall Opportunities

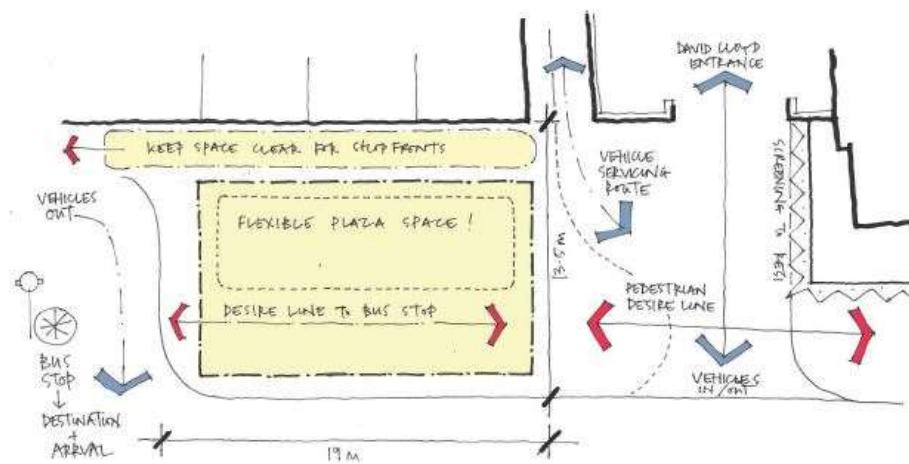
Across the entire corridor there is significant opportunity to improve access and the environment for all users. Such measures could include:

- Retiming / linking the signals to improve traffic flow
- Improving junctions and removing pinch-points for buses and cyclists to improve traffic flow and road safety
- Extending the 20mph zone throughout the corridor
- Improve parking and loading facilities including greater turnover of spaces / possible 'shared' bays to enable businesses to operate effectively and ease congestion during peak times

- Improving bus stop accessibility and reliability
- Decluttering the streets of superfluous street furniture including signs, guard-railing, telephone boxes etc. that degrade the public realm
- Improving the sense of place through repaving and street tree planting.

Station Terrace

Station Terrace represents an area where significant improvements can be sought. However the costs and associated risks for implementing a transformative scheme within this area may be higher than other areas and require careful bus operational planning. This report identifies measures that may be implemented in the short / medium term to realise the larger scale ambition for the longer term.



Designing Flexible Space, Sudbury Hill, BDP

The Long Term Ambition

Movement



Create an environment supporting and promoting pedestrian and cyclist movement



Provide a legible, easily accessible and reliable bus service and stops



Promote an inclusive, accessible and safe environment for all road users



Provide a rationalised and flexible parking and loading environment

Place



Recognise the importance of the community function of the street and spaces for social interaction



Create high quality, flexible and uncluttered streetscape



Create a locally distinctive environment reflecting local character



With sustainable, easy to maintain materials and planting

1. Study Area Context

Study Area Land Uses

Chamberlayne Road / Kilburn Lane is a busy and bustling corridor in the southeast of the London Borough of Brent. Linear in nature, local independent shops and chains (in light blue) are located all along the main road along with restaurants and cafes (in pink).

Some sections are fronted by residential properties (in green) with on-street parking widely available.

Station Terrace includes Kensal Rise overground station, cafes and shops including Tesco Express.

The study area also includes a primary school (in purple – Kensal Rise Primary School) and four churches; Kensal Rise Methodist Church, Church of the Transfiguration Catholic Church Kensal Rise, Kensal Rise Baptist Tabernacle and Parish Church of Saint John the Evangelist (in blue from north to south).



Chamberlayne Road – High Street

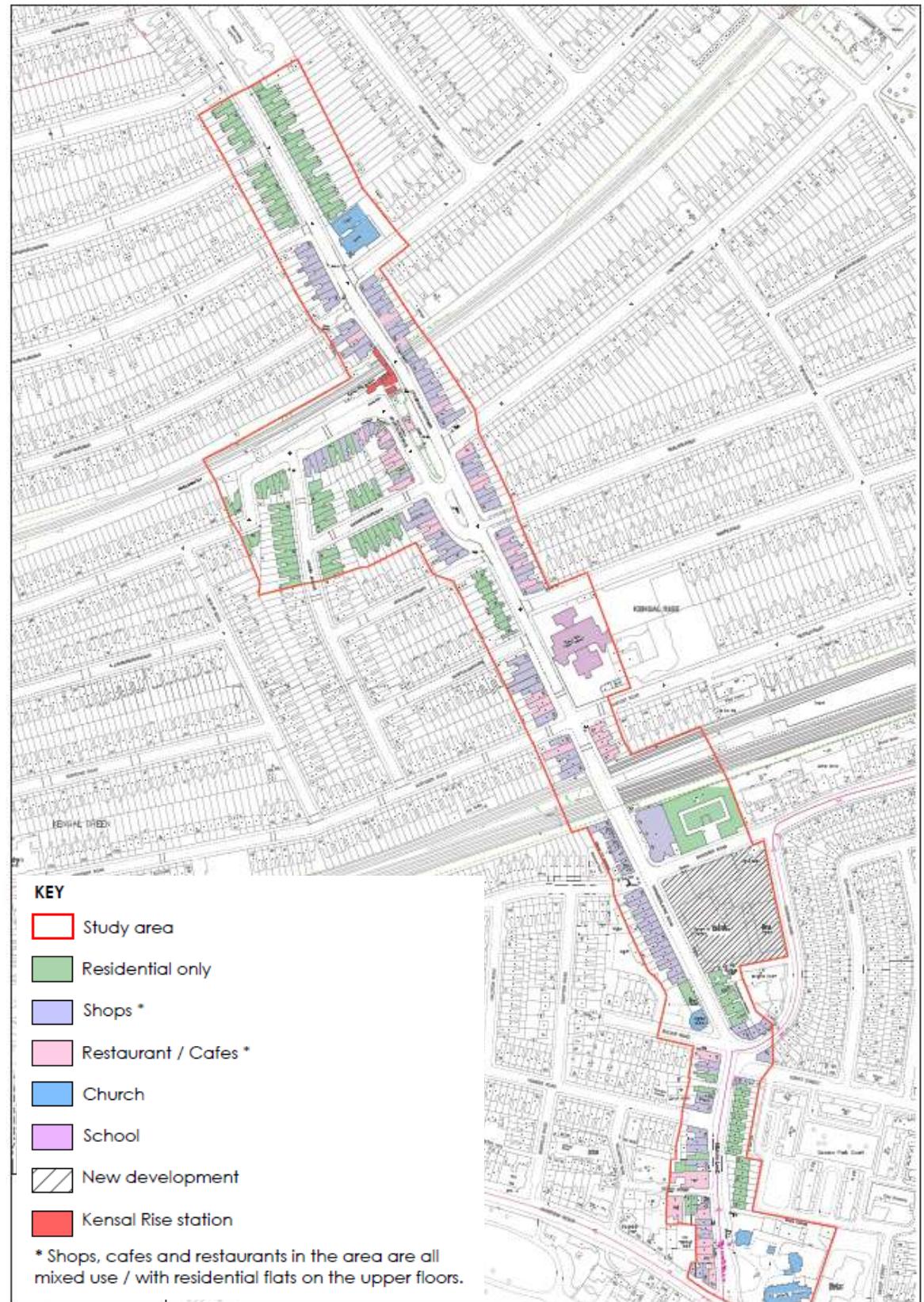


Independent supermarket

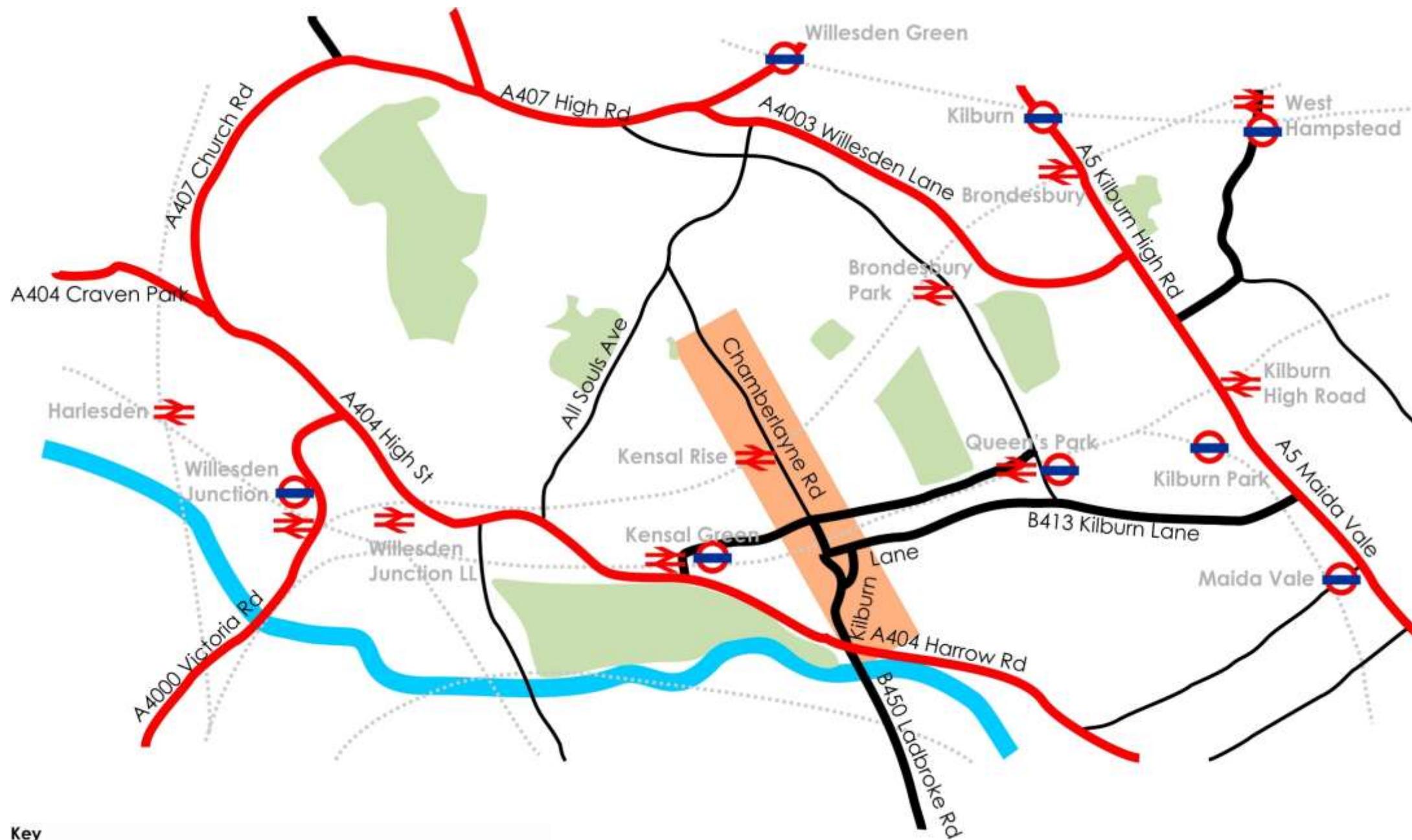


Shops/restaurants on Station Terrace

Study Area Land Uses



Highway and Traffic Management Context



Key	
	Train station
	Tube station
	Green space
	Grand Union Canal - Paddington Branch
	Study area
	Strategic corridor (A roads)
	Distributor road (B roads)
	Local road
	Railway

The corridor forms an important north-south link and alternative route to the A5 to the east and A407 to the west. The northern section of the corridor is a local road with the southern section providing an important distributor route, connecting with the A404 Harrow Road to the south and B413 Kilburn Lane / A5 Maida Vale to the east.

Tube and Overground Services

Services

The area is very well served by public transport with two overground stations (Kensal Rise and Brondesbury Park) and two underground / overground stations (Kensal Green and Queen's Park both served by the Bakerloo line) within a short walking distance (respectively 10 and 15 minutes) from the study area. All stations are located in Travelcard Zone 2.

Kensal Rise overground station provides connections with Euston, Watford Junction, West Hampstead, Richmond and Clapham Junction. Kensal Green and Queen's Park underground stations provide a service with central London (Oxford Circus, Piccadilly Circus, Charing Cross) and Harrow & Wealdstone to the north.

Station Usage

According to 'Station usage 2014-2015' from the Office of Rail and Road (ORR), Kensal Rise is ranked 21 out of 52 in terms of passenger entry/exit overground station data, where 1 is the busiest (Kensington Olympia). In 2014-2015, 2,88 million used Kensal Rise station.

No	Overground Station	Total no. of passengers in 2014/15
1	Kensington Olympia	7,249,102
2	Dalston	6,174,590
...
21	Kensal Rise	2,880,916
...
33	Brondesbury Park	1,838,742
...
51	Walthamstow Queens Road	541,314
52	Penge West	519,590

Source: Office of Rail and Road (ORR) – Station usage 2014-2015

Kensal Rise station Facilities

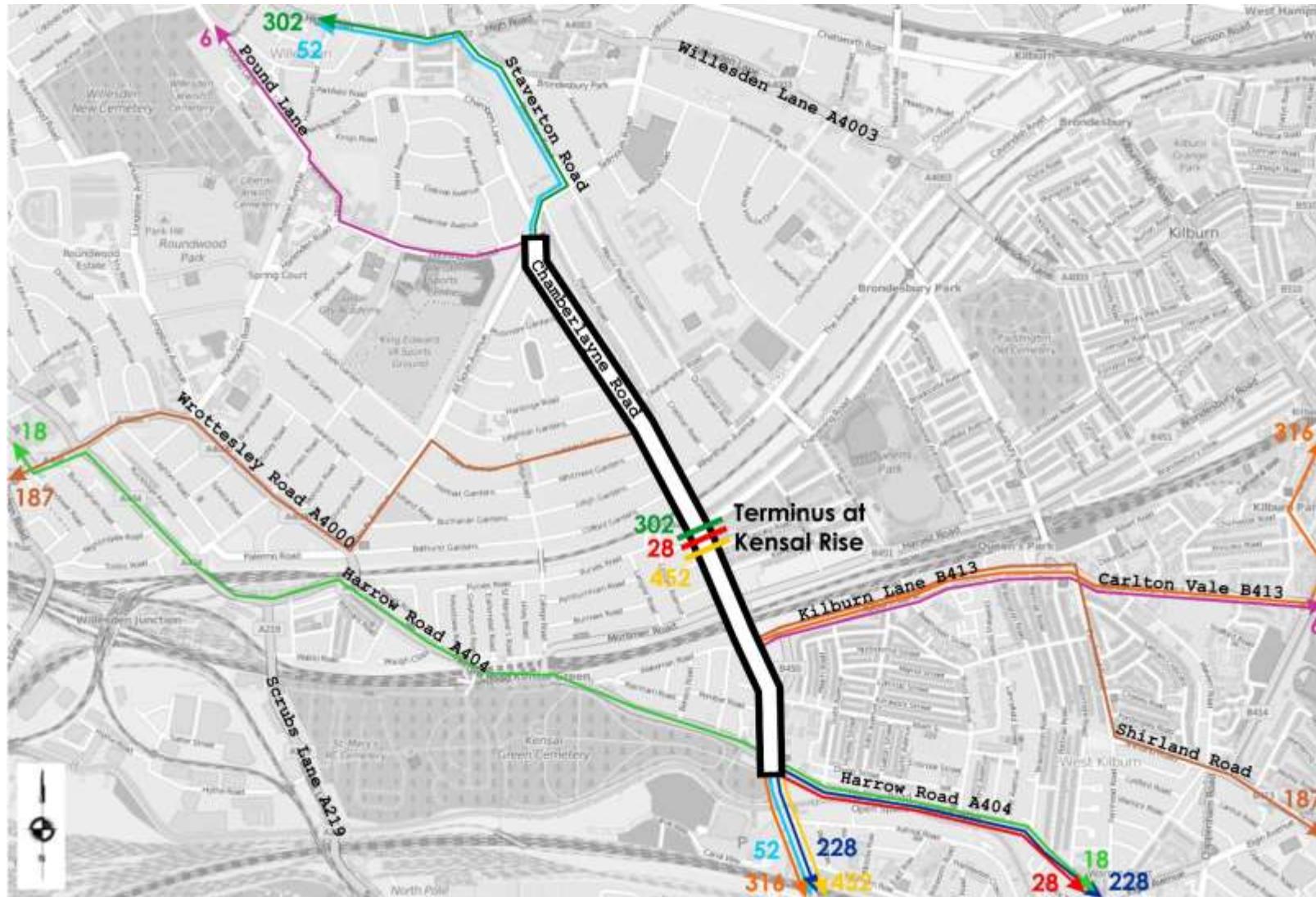
Kensal Rise station is fully accessible with a lift provided on the northern platform and step-free access on the southern platform. The station profile from Chamberlayne Road and Station Terrace is poor. Cycle parking facilities are ad-hoc and insufficient in number. There is no taxi rank in the vicinity of the station.

No	Tube Station	Total no. of passengers in 2015
1	Waterloo	95,138,374
2	King's Cross St Pancras	93,413,018
...
136	Queen's Park	5,771,615
...
217	Kensal Green	2,563,193
...
266	Chigwell	559,061
267	Roding Valley	260,651
268	Tufnell Park (station close)	0

Source: Transport for London (TfL) - Entry and exit figures by station from 2006 (2015 data)



Study Area Bus Services and Frequencies



Key

Study Area

- 6 / Willesden Bus Garage - Aldwych (24h)
- 18 / Sudbury & Harrow Rd - Euston
- 28 / Kensal Rise - Wandsworth Town
- 52 / Willesden Bus Garage - Victoria (24h)
- 187 / Central Middlesex Hospital - Finchley Rd
- 228 / Central Middlesex Hospital - Maida Hill
- 302 / Kensal Rise - Mill Hill Broadway
- 316 / Cricklewood - White City Bus Station
- 452 / Kensal Rise - Wandsworth Rd

Area Wide Bus Frequencies

#	Bus Route No.	Bus Type	Peak Journey Time Frequency
1	6 (24 hours)	Double Decker	6-10
2	18	Double Decker	2-6
3	28	Double Decker	6-10
4	52 (24 hours)	Double Decker	5-9
5	187	Single Decker	11-12
6	228	Single Decker	11-14
7	302	Double Decker	7-10
8	316	Double Decker	8-10
9	452	Double Decker	6-10

The study area offers a comprehensive bus service.

Bus routes 52 serves the entire corridor including Chamberlayne Road and Kilburn Lane (B450). Bus route 52 provides a service between Willesden Bus Garage and Victoria.

Bus route 452 provides a service between Wandsworth Road and Kensal Rise, terminating on Station Terrace.

Bus routes 6 and 187 provide an east-west service between Chamberlayne Road, along Banister Road (B413) and connecting the study area with Willesden Bus Garage (6), Aldwych (6), Central Middlesex Hospital (187) and Finchley Road (187).

Bus route 28 provides a service between Wandsworth Town and Kensal Rise, terminating at Station Terrace, Kensal Rise.

Bus route 316 provides a service on the southern section of the corridor, including Kilburn Lane (B450) and connecting the study area with Cricklewood to the north and White City to the south.

Bus route 302 serves the northern section of the corridor, providing a connection between Mill Hill Broadway and terminating at Kensal Rise.

Bus routes 18 and 228 serve the Harrow Road. Bus Route 18 connects the study area with Sudbury and Harrow Road (Harrow) and Euston (central London).

Study Area Bus Stops

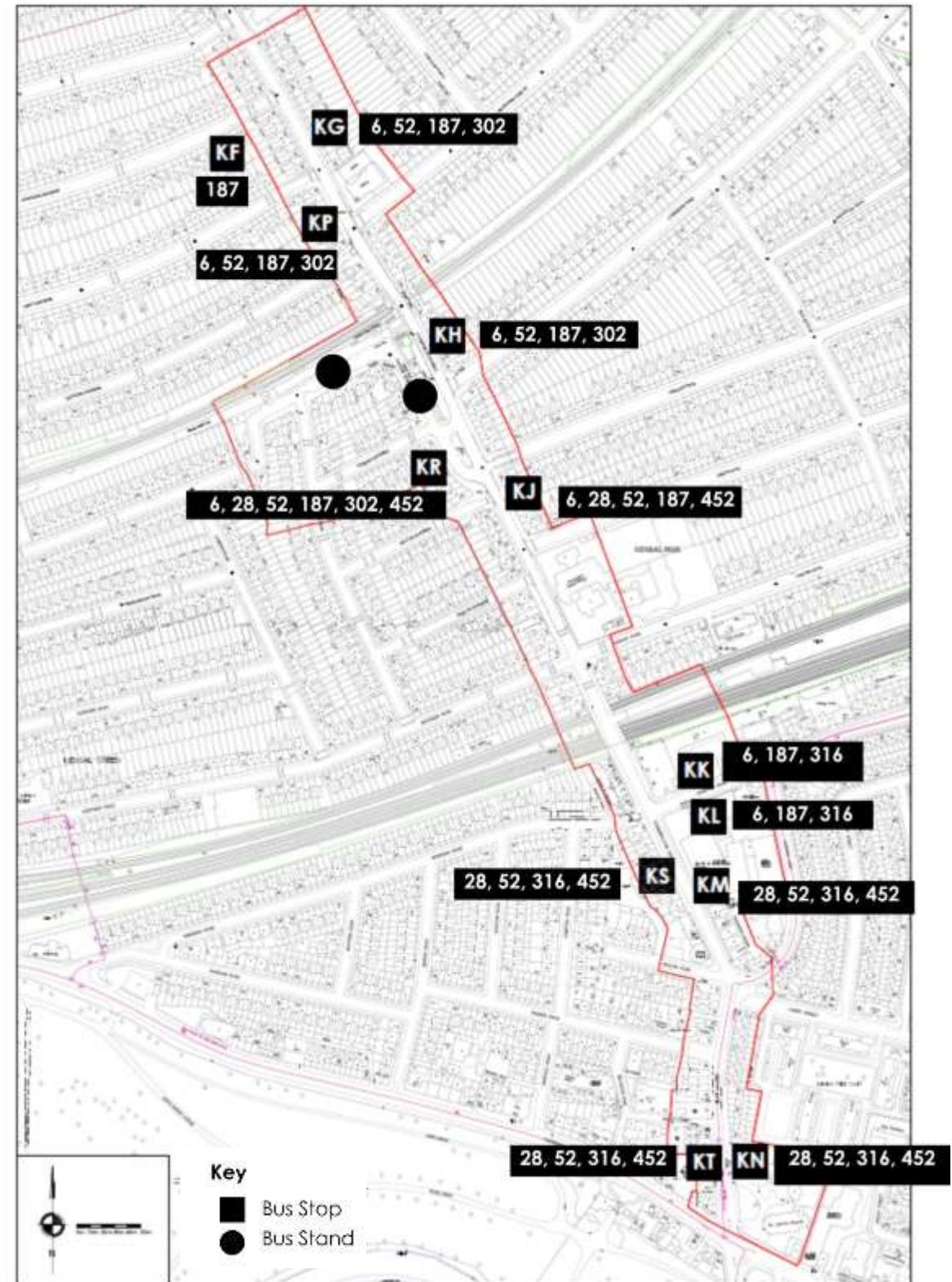
The diagram opposite shows the bus stops and services along the corridor, with images of two of the stops within the study area below.



Bus Stop KJ



Bus Stop KT



Bus Stops and Routes on Station Terrace

The diagram opposite shows the bus movements on Station Terrace and the parallel section of Chamberlayne Road, Dagmar Gardens and Linden Avenue.

The main bus flow through Station Terrace is northbound, with buses entering and leaving the service road area from Chamberlayne Road. This includes routes 6, 52, 187.

Bus routes 28, 302 and 452 terminate at Station Terrace, then access the bus stands on Station Terrace via Dagmar Gardens and Linden Avenue. Approximately 400 buses travel through this residential area per day to reach the bus stands on Station Terrace.

Bus Route 302 Circulation

Bus route 302 provides a service between Mill Hill Broadway and Kensal Rise, terminating in Station Terrace, Kensal Rise.

The diagram to the far right, shows the movements that bus route 302 (in green) undertakes to serve the route. In order to pick up passengers at bus stop KR, the bus has to turn right onto Chamberlayne Road and right again into Station Terrace, which is a difficult manoeuvre due to junction alignment and is often delayed due to the volume of traffic on Chamberlayne Road. Approximately 125 buses have to undertake this manoeuvre each day.

Station Terrace Bus Circulation Patterns



- Key**
- Kensal Rise station
 - Bus Stop
 - Bus Stand
 - One-way only
 - 6 / Willesden Bus Garage - Aldwych (24h)
 - 28 / Kensal Rise - Wandsworth Town
 - 52 / Willesden Bus Garage - Victoria (24h)
 - 187 / Central Middlesex Hospital - Finchley Rd
 - 302 / Kensal Rise - Mill Hill Broadway
 - 452 / Kensal Rise - Wandsworth Rd

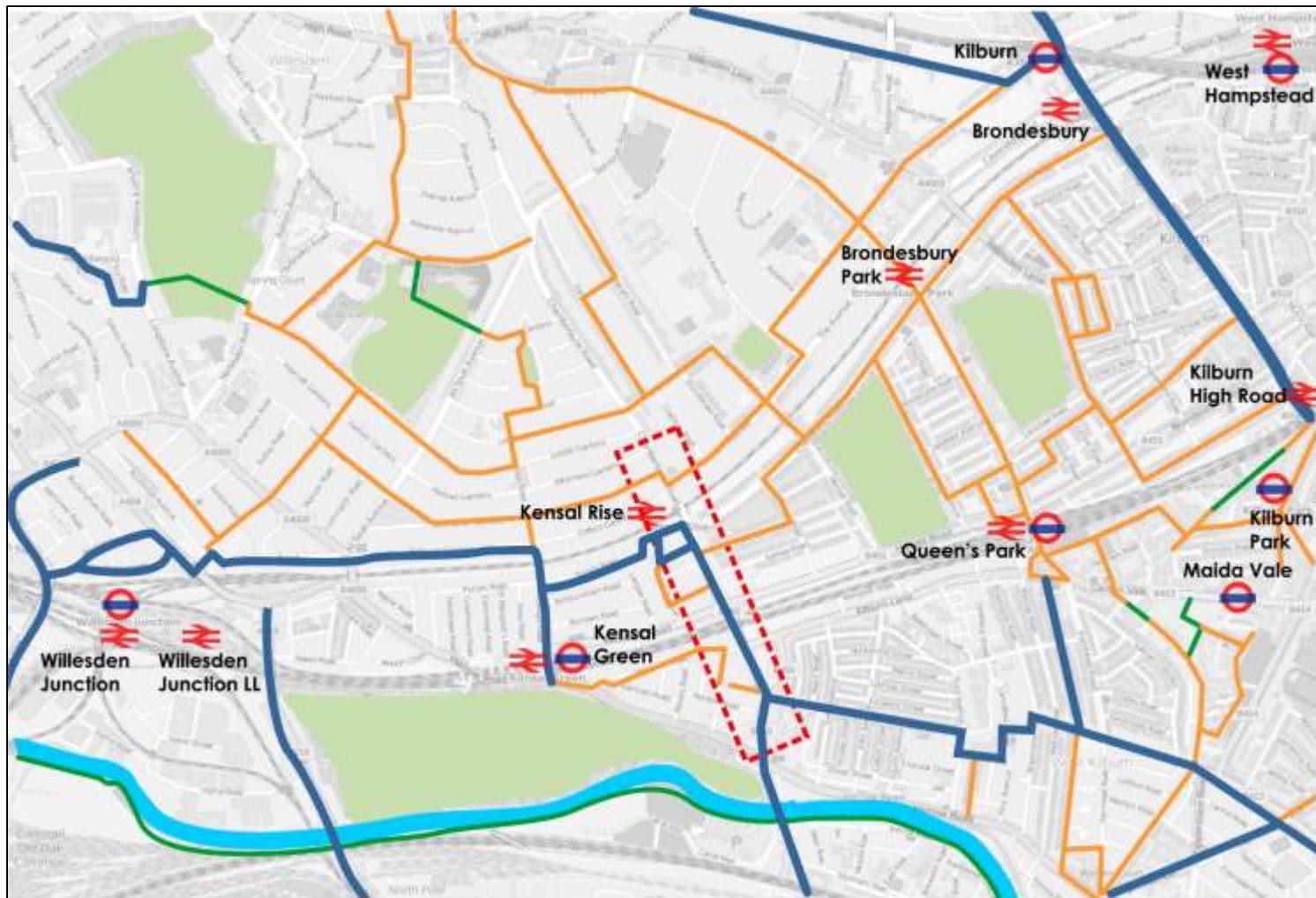
Station Terrace Bus Routes 28, 302 and 452 circulation Patterns



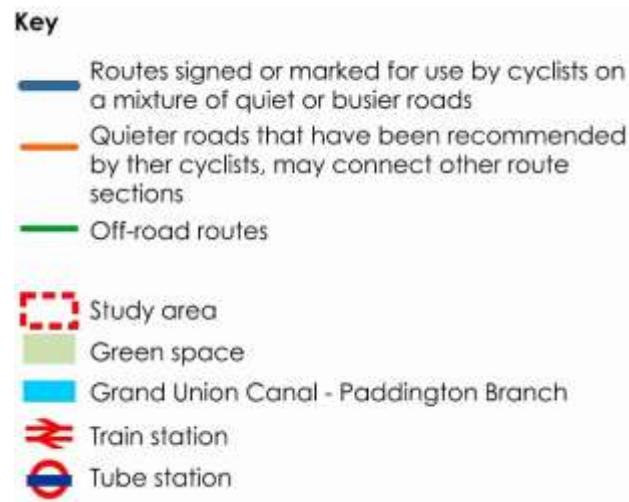
- Movement patterns of terminating buses in Station Terrace**
- Bus 302 in operation
 - Bus 302 not in service
 - Bus 28 and 452 in operation
 - Bus 28 and 452 not in service

The diagram above shows the routes buses (28, 302 and 452) currently undertake when terminating and starting their journeys in Station Terrace.

Cyclist Network and Facilities



Information Source: TfL - London Cycling Guide (No.6 and 7)



Chamberlayne Road and Kilburn Lane provide an important north-south link for cyclists. Currently there is some cycle infrastructure provided on-street, including advanced stoplines and cycle lanes, however these are fragmented and in many cases substandard. They also reduce permeability across the street

There are cycle parking facilities provided within the study area, notably outside shops and near the station. None are sheltered and are of moderate to poor quality.

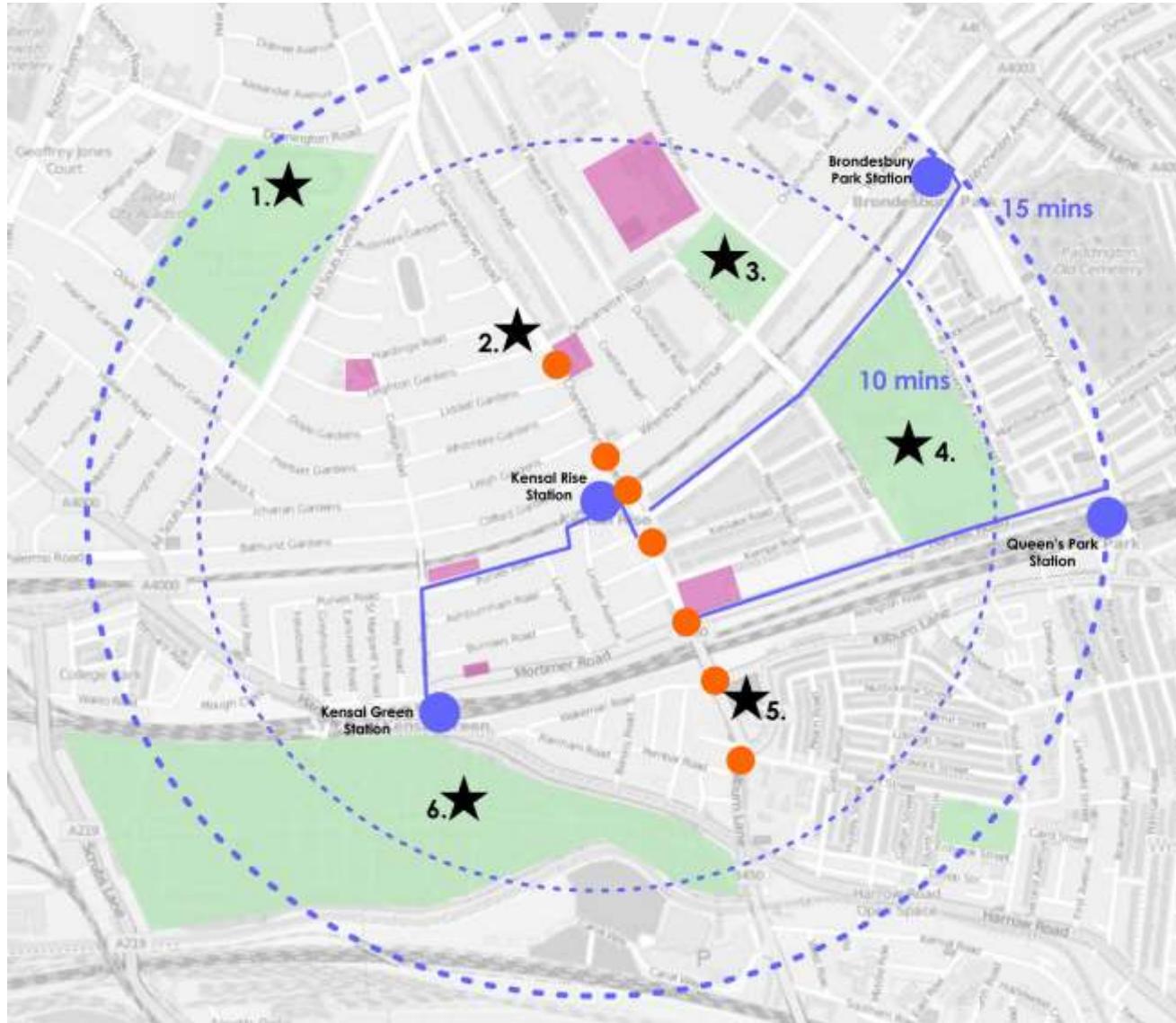


Cycle lanes and stands on Chamberlayne Road



Cycle parking outside Kensal Rise station

Pedestrian Network



KEY

- Station
- Formal pedestrian crossing
- Important pedestrian links to tube and overground station
- Green / open spaces
- School / nursery / college



Important attractors

1. Willesden Sports Centre and Ground
2. Lexi Cinema
3. Queen Park Community School and Tiverton Green
4. Queen's Park
5. New Moberly Sport & Education Centre
6. Kensal Green Cemetery

The study area, is very walkable. Three stations are within 10 to 15 minutes walk from the corridor.

There are many local destinations within a short distance from the corridor including local schools, nurseries and colleges as well as open spaces and parks.

Two important sports centres, Willesden Sports Centre and Ground, and the coming Moberly Sport and Education Centre, are also located within the study area.

There are several, well spaced pedestrian crossings along the length of the corridor ranging from refuge islands to pedestrian islands, to zebra and signalised pedestrian crossings. These crossings largely provide for desire lines and appropriate to the type of road and volumes of pedestrians.



2. Lexi Cinema

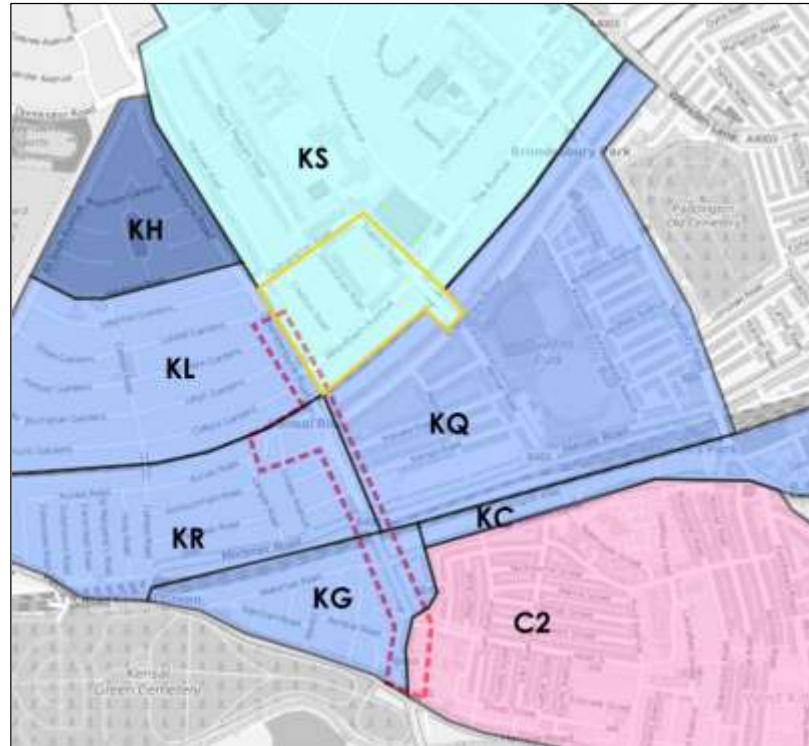


4. Queen's Park

Parking Context

Controlled Parking Zones

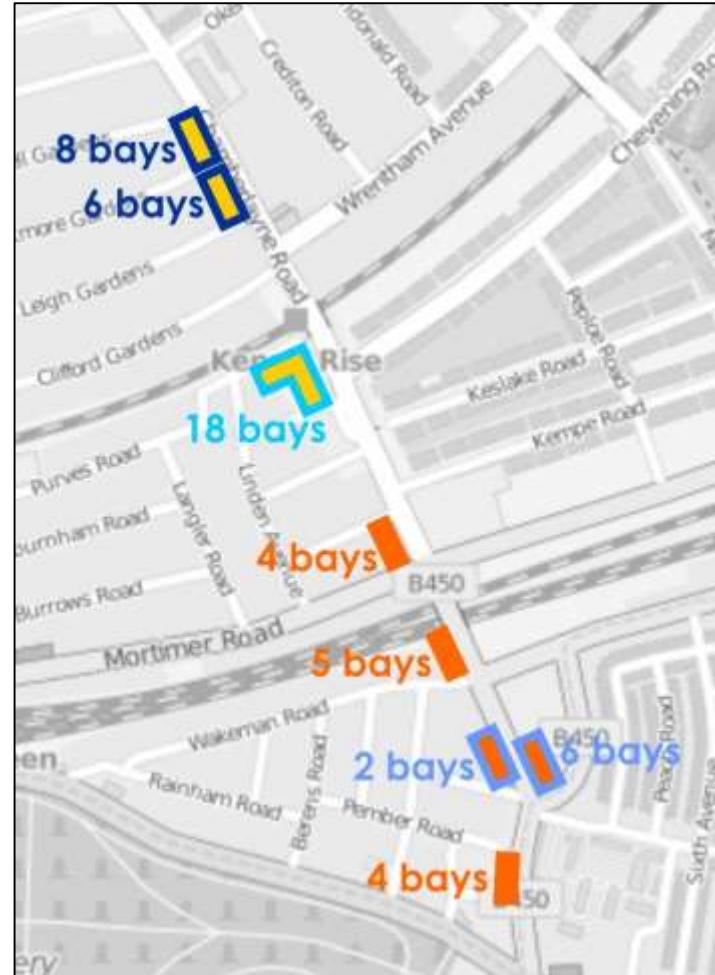
The corridor is covered by three controlled parking zones (CPZ), KG, KR and KL. All of these controlled parking zones have restricted parking between 8.30am and 6.30pm Monday to Friday.



- Key**
- Study area
 - London Borough of Brent
 - 8:30am to 6:30pm - Mon to Fri (KC, KG, KL, KQ, KR)
 - 12pm to 3pm - Mon to Fri (KH)
 - 10am to 3pm - Mon to Fri (KS)
 - 8am to 6:30pm - Mon to Fri (Sub-zone of KS)
 - London Borough of Westminster
 - 8:30am to 6:30pm - Mon to Fri (C2)

Pay and Display Parking

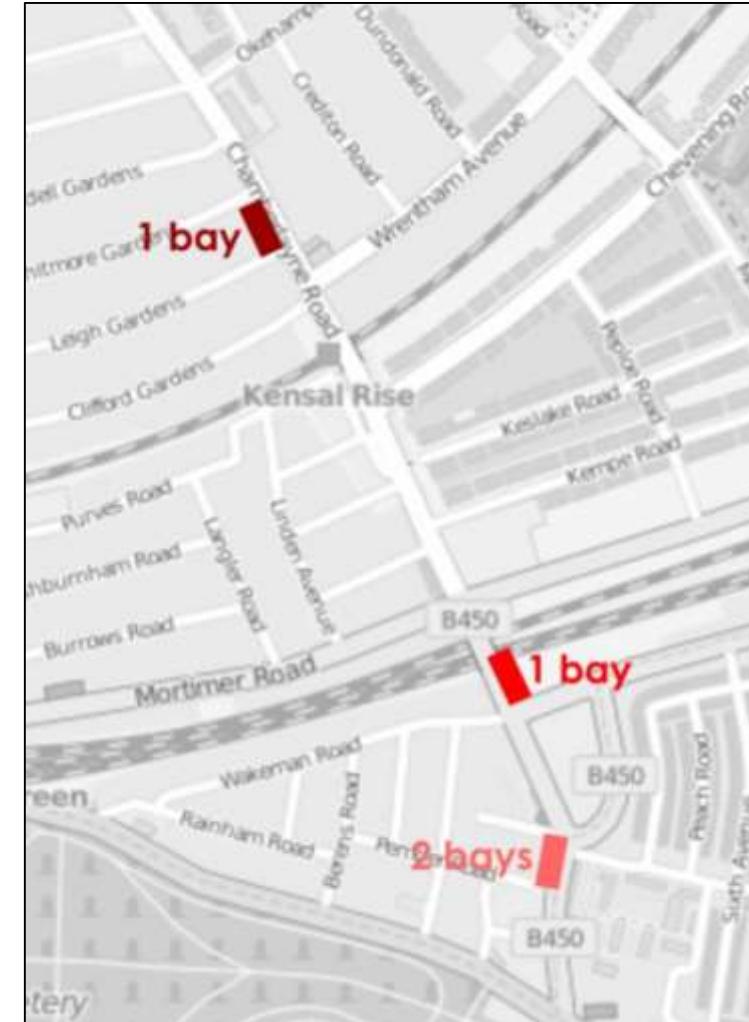
Chamberlayne Road also provides pay and display (at machine) on-street parking.



- Key**
- 'Pay and Display' restrictions
- 32 bays** - Monday - Friday, 8:30am - 6:30pm
Pay at machine, Display ticket
Max stay 4 hours
No return within 2 hours
 - 21 bays** - Monday - Friday, 8:30am - 6:30pm
Pay at machine, Display ticket
Max stay 2 hours
No return within 2 hours
- 'Permit Holder' restrictions
- 14 bays** - Permit holder KL
 - 18 bays** - Permit holder KR
 - 8 bays** - Permit holder KG

Loading Bays

The corridor provides 4 loading bays on the corridor as shown below. There are no formal loading facilities near shops on Station Terrace and Chamberlayne Road between Wrentham Avenue and Kemp Road.



- Key**
- 1 bay** - Loading only
Maximum stay 20mins
 - 1 bay** - Goods vehicle loading only
Monday - Friday
8:30am - 6:30pm
40mins no return within 1 hour
 - 2 bays** - Loading only
Monday - Saturday
8:00am - 6:30pm
30mins no return within 1 hour

Collision Data Analysis

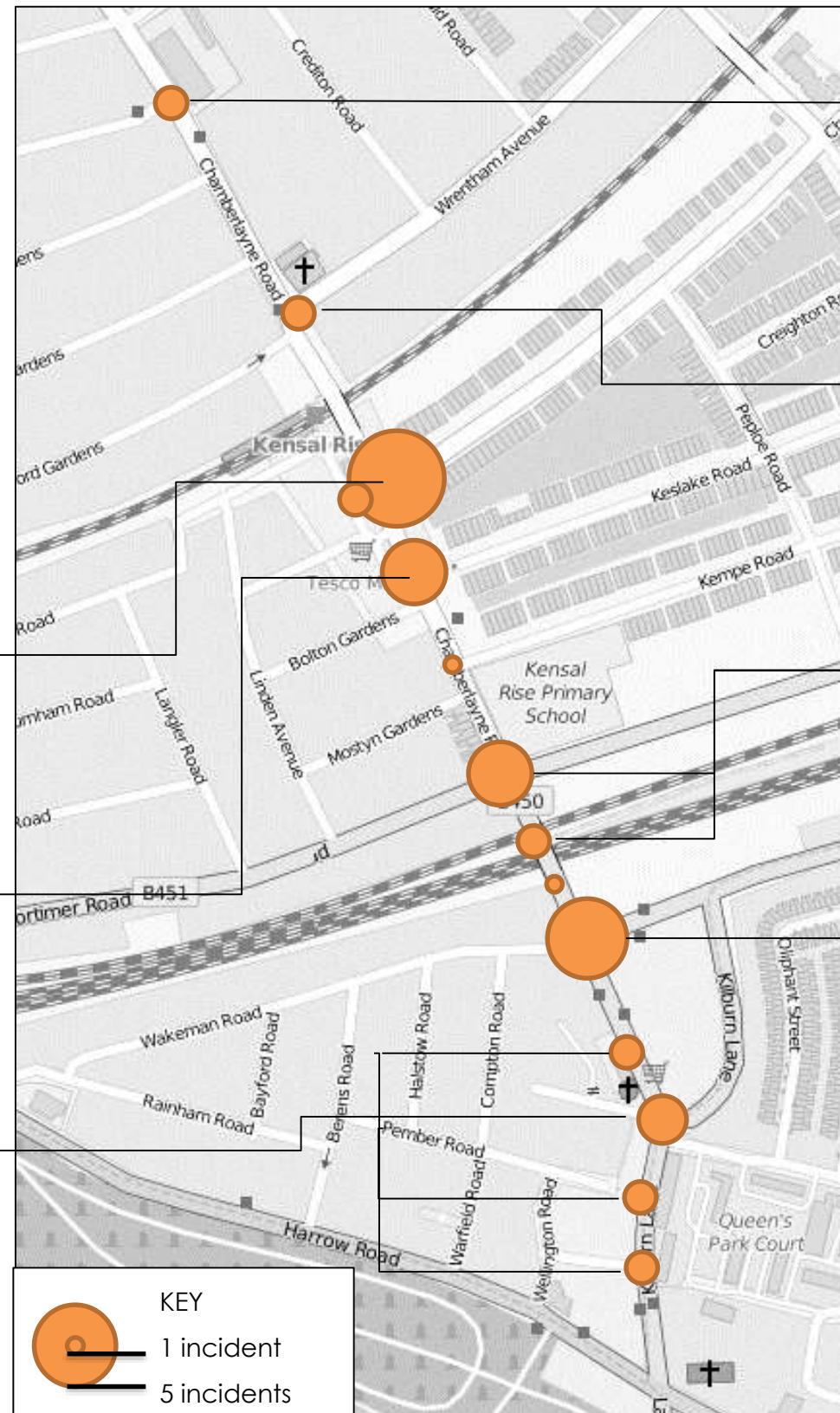
Collision data between December 2013 and December 2015 was reviewed for the local area.

	Fatal	Serious	Slight	Total	%
Pedestrian	1	3	11	15	30%
Pedal Cycle		3	7	10	20%
Powered 2 Wheeler		3	8	11	22%
Car		3	2	5	10%
Bus or Coach			8	8	16%
Taxi			1	1	2%
Total	1	12	37	50	

Chevening Rd / Chamberlayne Rd: 7 collisions occurred of which 1 was serious involving a motorcycle, 2 involved pedestrians and 1 involved a cyclist. They were mainly caused by turning movements and vehicle swerving

South entrance of Station Terrace: 4 bus passengers were injured when the driver lost control of the bus after hitting a broken kerbstone. There was also a slight motorcycle incident and a serious cyclist collision due to overtaking manoeuvre

Kilburn Lane / Chamberlayne Rd: 8 collisions of which 3 involved pedestrians (crossing), 1 involved a cyclist (stopped at zebra crossing and was hit by following car), 1 involved a motorcycle (overtaking manoeuvre) and 1 involved a bus (passenger lost balance).



Whitmore Gdns / Chamberlayne Rd: 2 slight pedestrian / vehicle collisions occurred as the pedestrians walked in front of a stationary bus

Wrentham Ave / Chamberlayne Rd: 2 serious collisions occurred (one of which was with a pedestrian) due to right-turning vehicle movements

Morimer Rd / Harvist Rd / Chamberlayne Rd: 6 collisions all involving cyclists or motorcyclists occurred mainly as a result of an overtaking vehicle

Banister Rd / Chamberlayne Rd: a fatal pedestrian incident occurred on a dry Thursday morning when a pedestrian walked into the path a left-turning vehicle which failed to look properly. The other collisions include either pedestrians crossing the road or cyclists / motorcyclists overtaking.

Bus Related Collision Analysis

	Fatal	Serious	Slight	Total	%
Pedestrian	1	3	11	15	30%
Pedal Cycle		3	7	10	20%
Powered 2 Wheeler		3	8	11	22%
Car		3	2	5	10%
Bus or Coach			8	8	16%
Taxi			1	1	2%
Total	1	12	37	50	

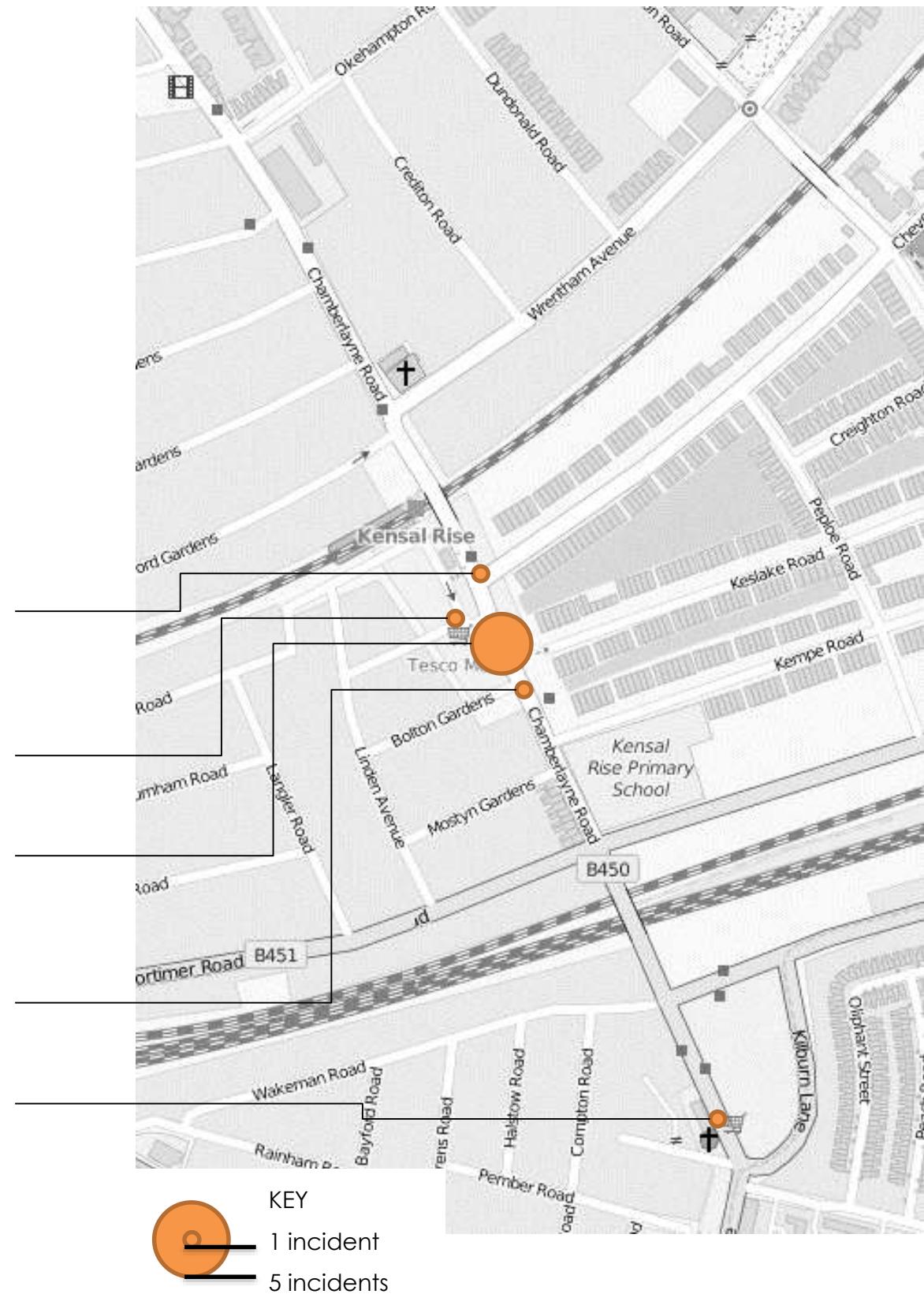
Chevening Rd / Chamberlayne Road: Of the 7 incidents occurred at this junction, one involved a bus passenger losing balance inside the bus and falling.

Dagmar Gardens / Station Terrace: 1 incident involved a passenger drunk on the bus who lost balance and fell.

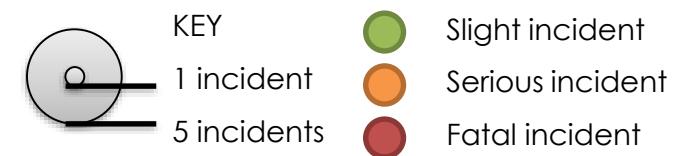
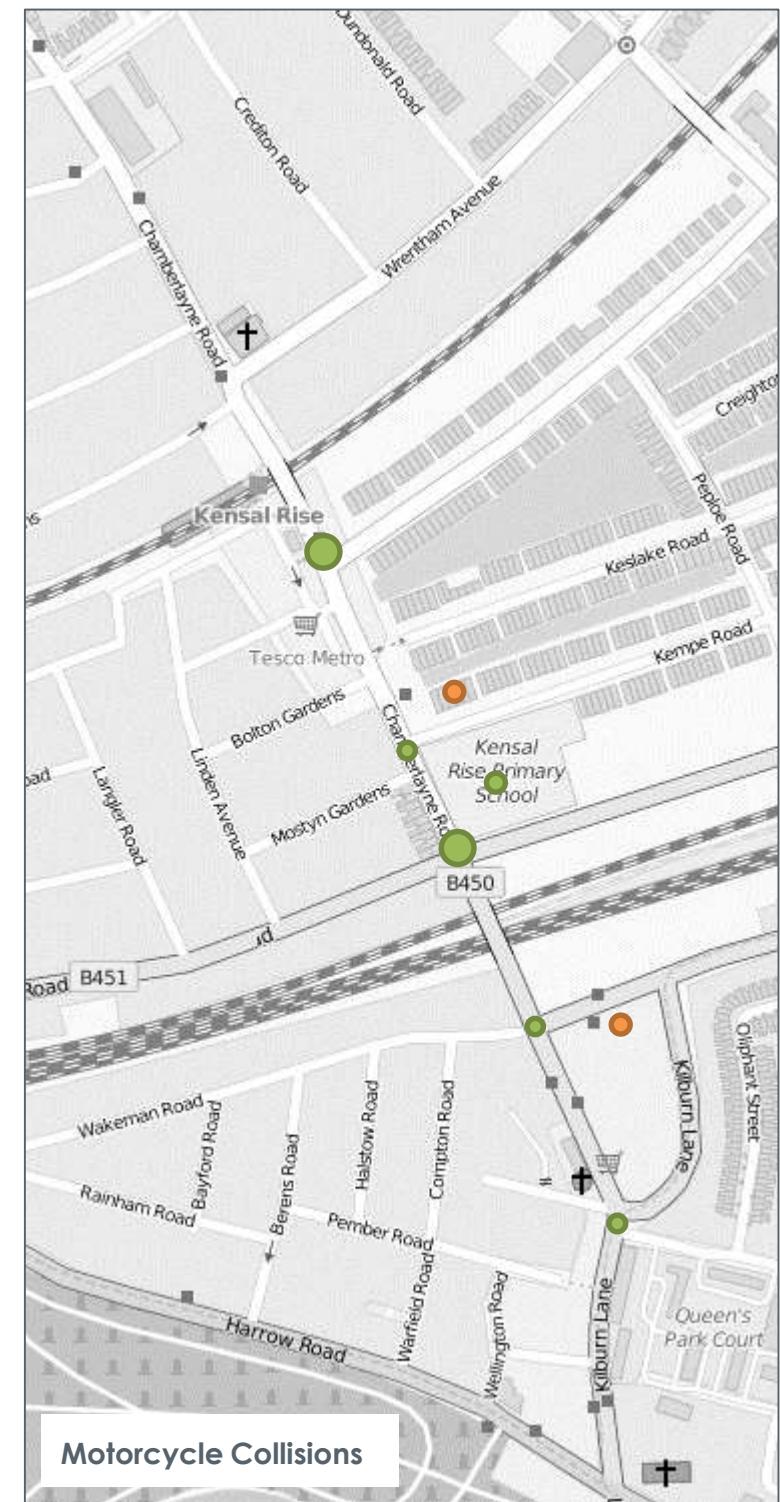
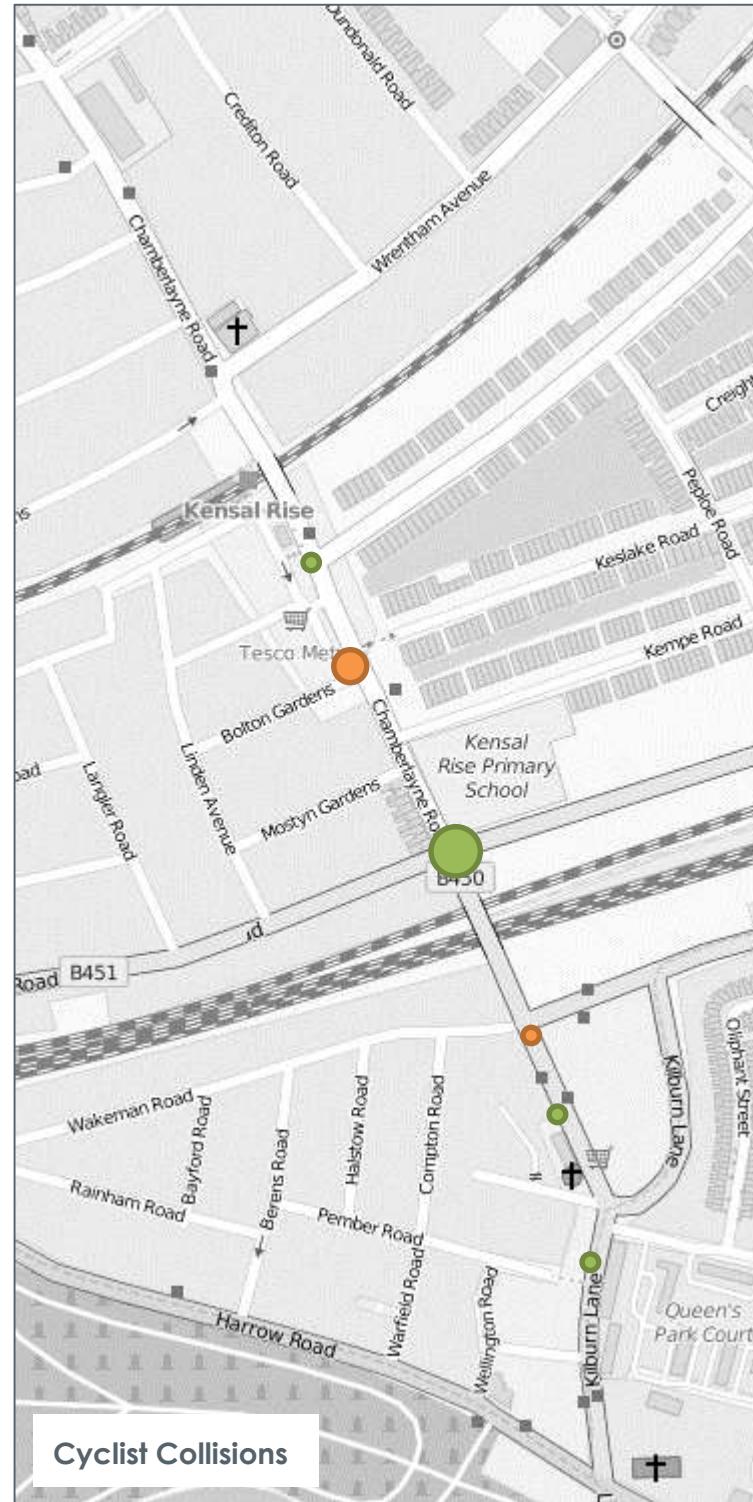
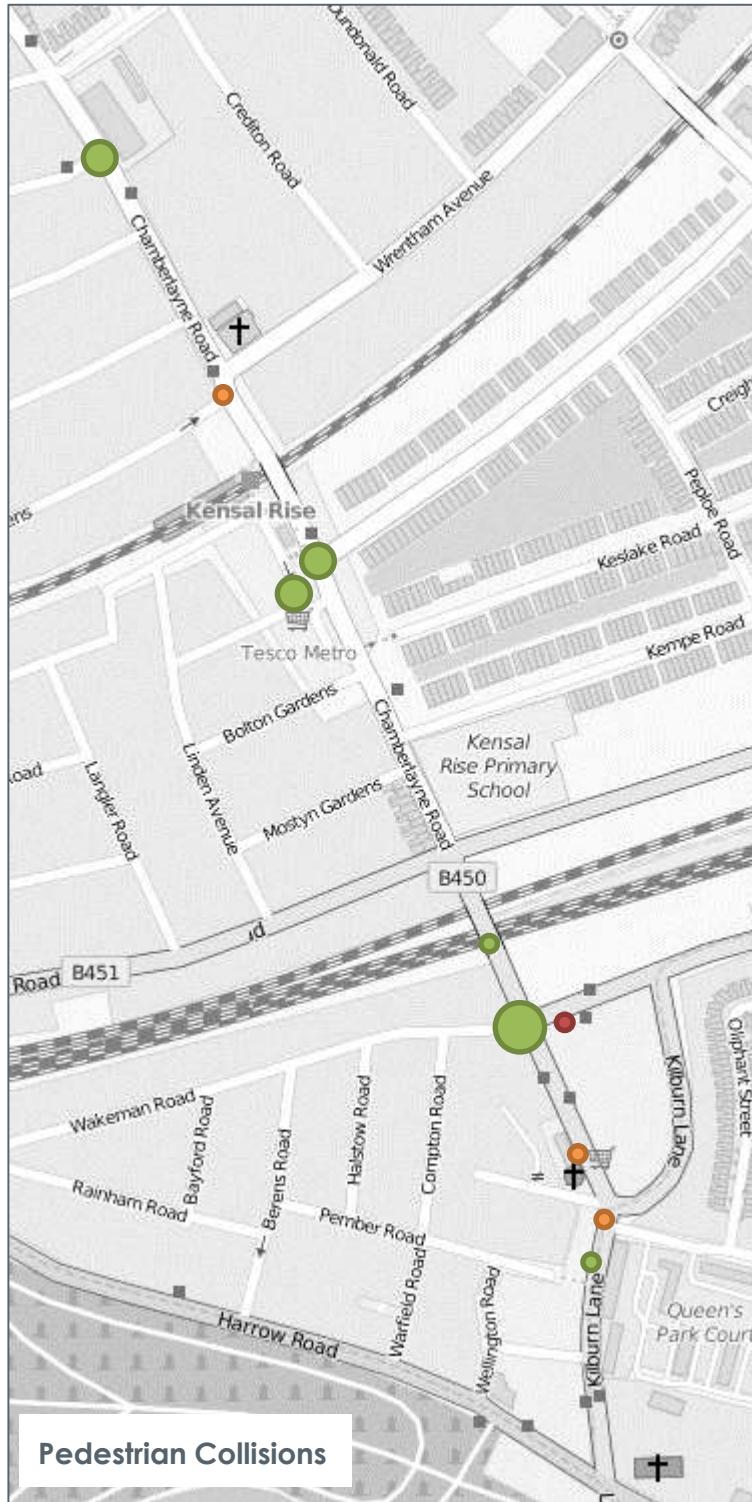
South entrance of Station Terrace: 4 bus passengers were injured when the bus turn left onto Station Terrace and the driver lost control after hitting a broken kerbstone.

Bolton Gardens / Chamberlayne Road: At the bus stop KJ an elderly passenger fell while boarding the bus.

Kilburn Lane / Chamberlayne Rd: this incident occurred 80m north from the Chamberlayne Road / Kilburn Lane junction (most likely in the vicinity of the bus stops) during which a 3 years old lost balance in the bus and fell down the stairs.



Collision Data Analysis by Mode



Study Area Bus Stops, Usage and Reliability

Bus Usage

The diagram opposite shows the average total number of passengers boarding and alighting buses per day from Bus Occupancy Data (BODS) data provided by Transport for London.

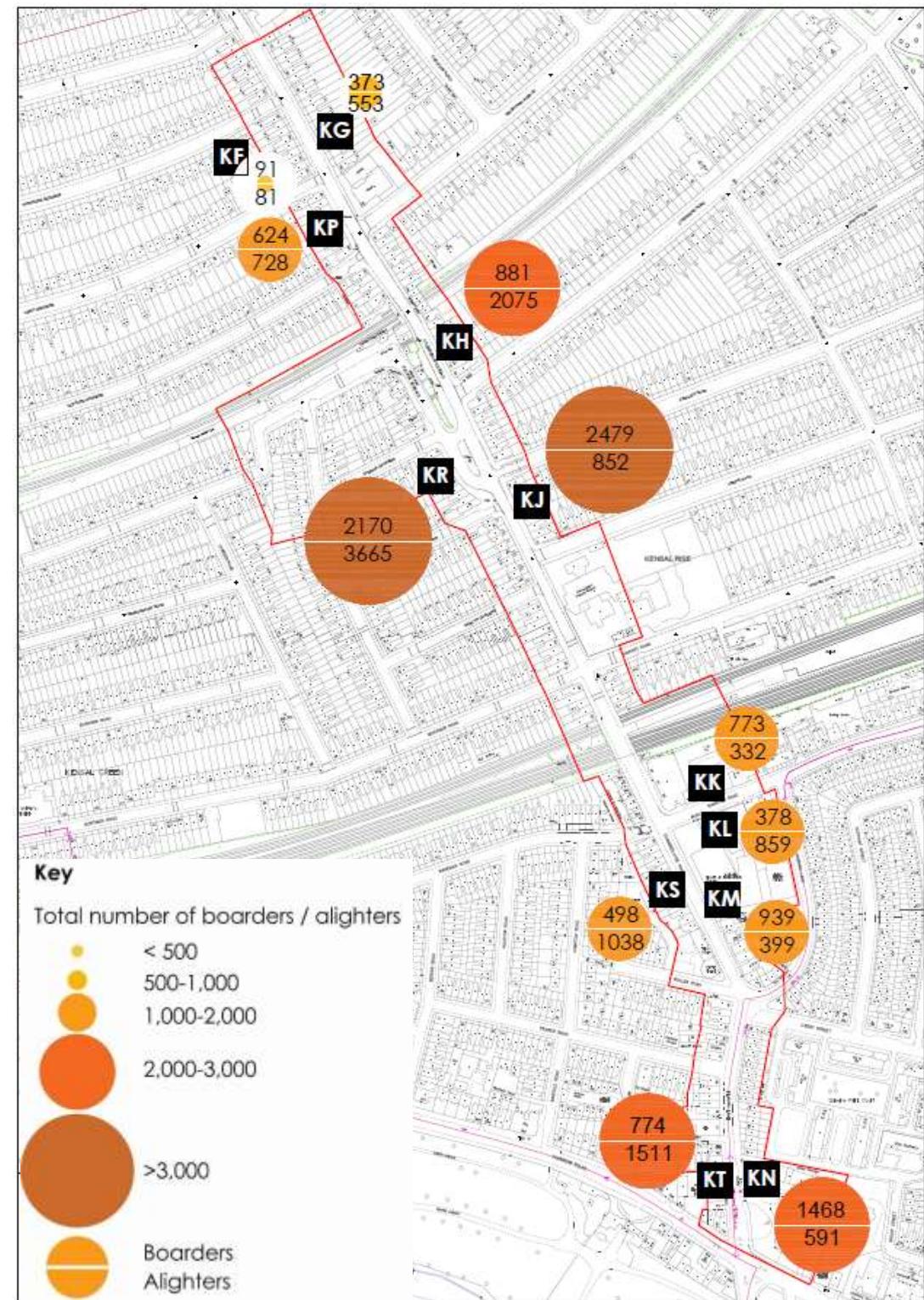
From our review, bus stop KJ and KR are the most heavily used bus stops within the study area. With over 5800 people boarding and alighting at bus stop KR in Station Terrace. Over 3300 people board and alight the southbound bus stop (KJ) throughout the day.

Bus stops KN and KT at the south end of the corridor near the Harrow Road (A404) are also well used, with over 1300 passengers boarding and alighting these stops per day.

Bus stop KH is also well used throughout the day, with over 800 passenger boarding and 2075 alighting. The high number of alighters is likely to be the result of passengers alighting to interchange with Kensal Rise station.

Bus Reliability

From review of TfL's latest 'London Buses Quality of Service Indicators' for LB Brent, bus passengers can expect to wait on average between 3.7 and 5.8 minutes or longer for bus services on the corridor. The highest waiting times are experienced by bus routes 28, 187 and 302.



BODS data for the study area have been collected in 2012 (except for route No.28 – 2014 and route No.187 – 2015).

Traffic Volume and Vehicle Speed

Traffic Volume (TfL, 2012)

Traffic volumes were indicated within this TfL Bus review document (2012), these are shown below. Buses made up 8% of total traffic in 2012.

	All Motor Vehicles	Buses	% Buses
AM Peak 3 hours	2714	232	9%
PM Peak 3 hours	3161	212	7%
All Day	16266	1345	8%

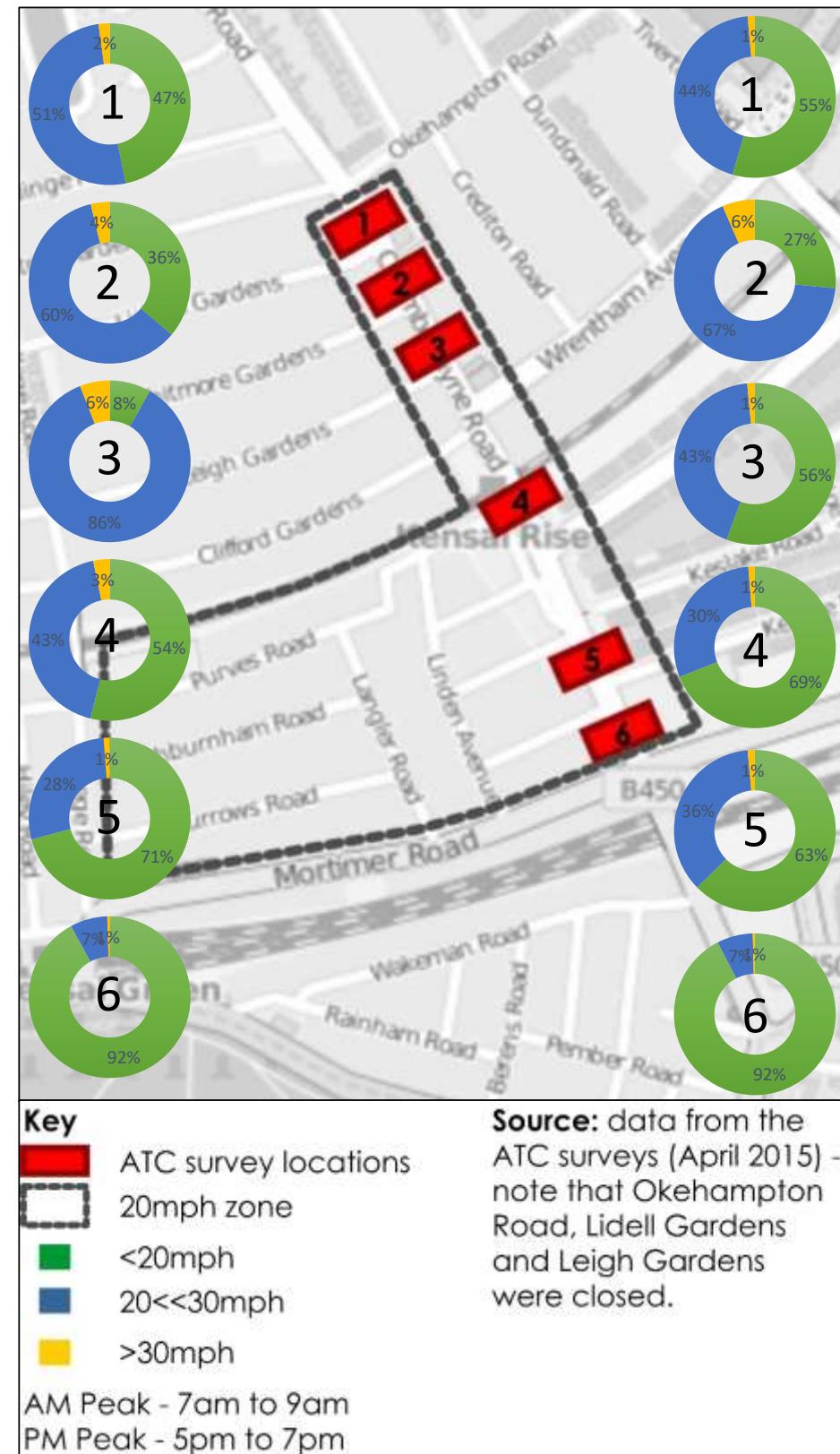
Traffic Volume (Brent Council Survey, 2015)

Count data was recorded in 2015, below summarises the south and northbound typical and peak journey time flows. In 2015 there was a total of 13190 vehicles, lower than the data recorded in 2012.

	Southbound	Northbound
Typical Day (all vehicles)	6768	6422
AM Peak (7am – 9am)	710	429
PM Peak (5pm – 7pm)	781	826

Traffic Speed

The 20mph speed limit is largely well respected with the main section of the corridor, with approximately 90% of vehicles adhering to the speed limit.



2. Relevant Studies, Schemes and Developments

Chamberlayne Road 20mph Zone (Road Safety Scheme)

The scheme aimed to:

- Develop proposals to address the high level of personal injury accidents along the route including speed reduction and traffic congestion
- Improve pedestrian, cyclist and motorcycle safety measures
- Review the existing waiting and loading restrictions to maximise the parking spaces.

The scheme was implemented in early 2014. It included the following elements along the corridor:

- Speed cushions
- 20mph zone signs
- 20mph roundel road markings
- Conversion of the uncontrolled pedestrian crossing (outside No.124 Chamberlayne Road) to a zebra crossing on a raised speed table
- Advisory cycle lanes, cycle logos / road markings
- Existing give-way lines at the Liddell Gardens / Whitmore Gardens junction were moved to improve sight lines
- Build-outs at the Chamberlayne Road / Whitmore Gardens junction
- Decluttering
- Tree planting.

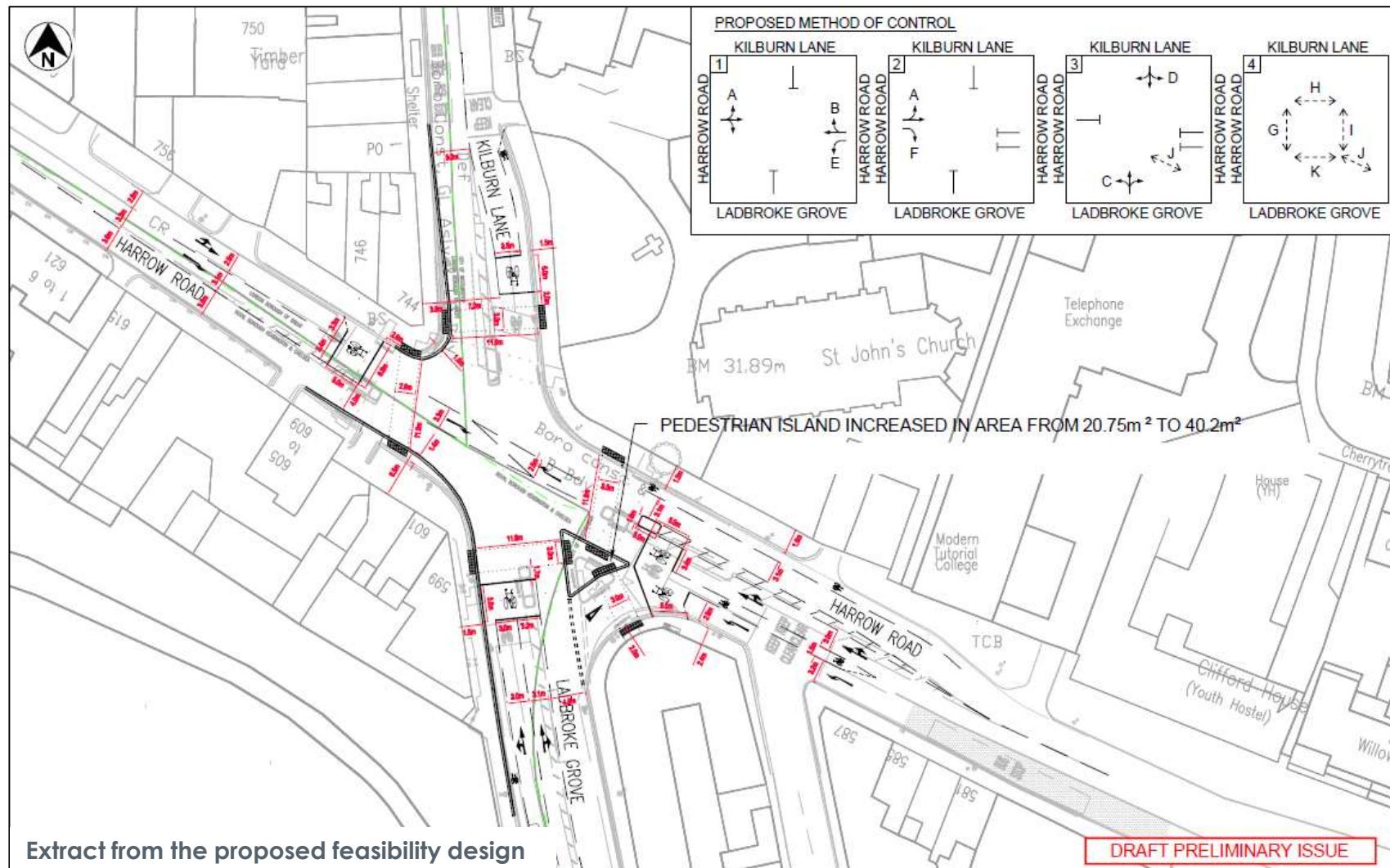


Extract of existing scheme from 20mph Zone project

Our Recommendations

Consideration should be given to extending the 20mph zone for the remainder of the corridor to provide a much calmer, more pedestrian and cyclist friendly environment.

Harrow Road / Ladbroke Grove Junction Improvement Scheme



Feasibility / Preliminary Design (Stage 1 / 2) Study

Transport for London, working with Westminster, Brent and Kensington and Chelsea undertook an in-depth study of the Harrow Road / Ladbroke Grove junction with the objective of improving the pedestrian and cyclist environment including the following:

- An all-red vehicle traffic signal pedestrian crossing stage
- Pedestrian crossings on all junction arms
- One southbound vehicle lane only on Kilburn Lane with a cycle lane feeder to the Advanced Stop Line (ASL) at the traffic signals
- Rebuilding the north-west kerb at the junction and realignment of the carriageway accordingly.

Project Status

At the time of writing, a scheme has been agreed and Transport for London funding allocated to implement signalised pedestrian crossings on all junction arms. The scheme is due to be implemented in 2017.

Chamberlayne Road Bus Lay-By Proposal (2010)



In January 2010, local residents were asked to provide their feedback on the council's proposal for a bus lay-by on Chamberlayne Road. The Bus Lay-By Proposal (outside Kensal Rise station) is shown in the diagram opposite.

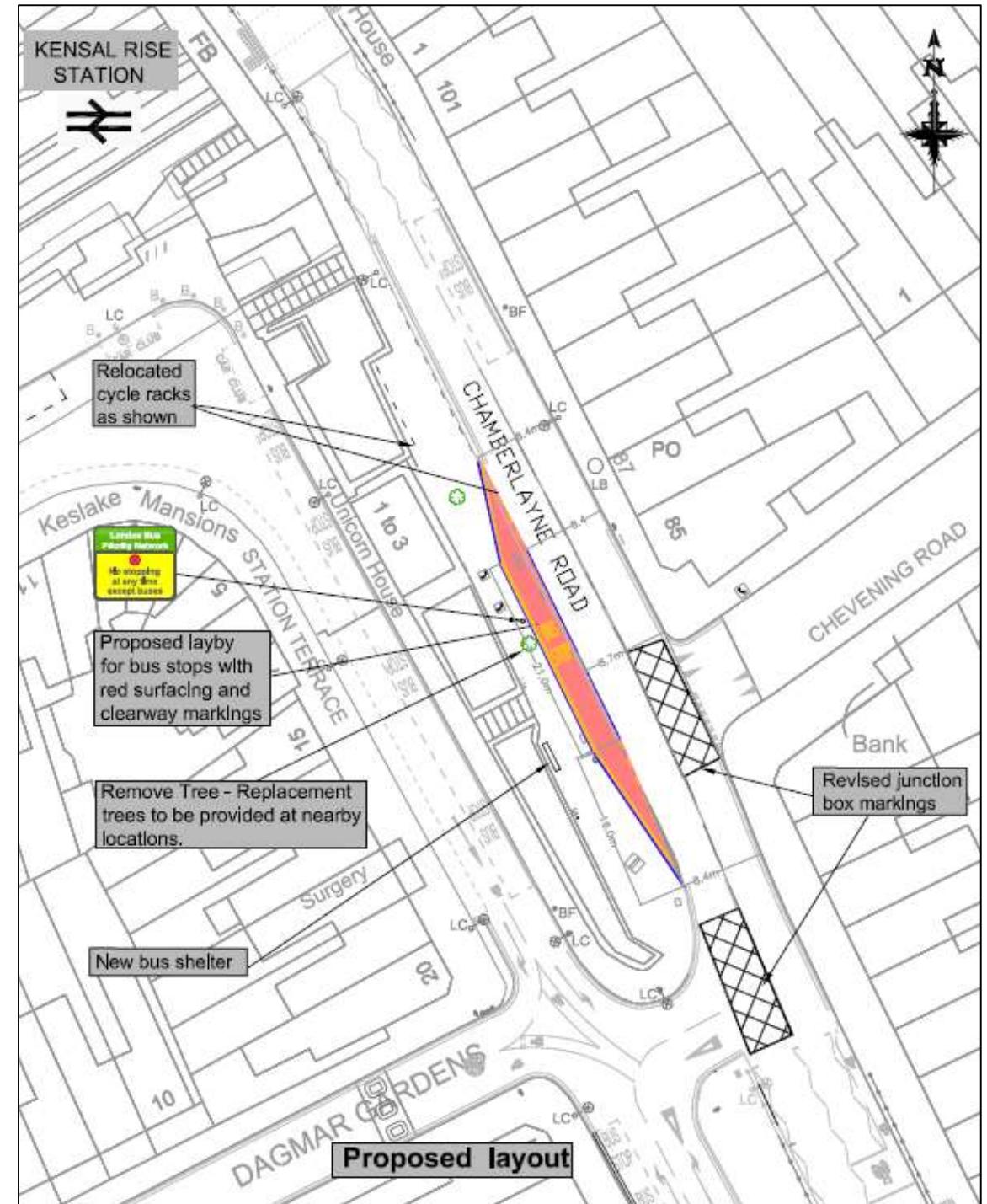
The proposed improvements were to provide a new recessed bus lay-by on Chamberlayne Road north of Station Terrace. This would result in northbound bus routes stopping at this location, rather than within Station Terrace (bus stop KR) thus reducing the impact of buses on Station Terrace and improving bus reliability.

Overall, there was a high level of opposition to the proposal and the scheme was not progressed. The residents opposed a lay-by for bus service 302 on Chamberlayne Road / Kensal Rise Town Centre believing it would:

- Adversely impact air quality, congestion, bus flow, noise pollution, local business and quality of life
- Increase buses queuing on Chamberlayne Rd
- Compromise road safety as the lay-by would be positioned at a hazardous location
- Reduce available footway for pedestrians.

Note

This report revisited the opportunity of introducing a bus stop on Chamberlayne Road in the medium / longer term and identified pros and cons of different options.



Source: Public consultation leaflet (January 2010) and Brent Council consultation response letter

Previous Local Community Bus-Related Concerns

There have been some local concerns regarding the impact of buses on the corridor and that terminate in Station Terrace.

TfL is responsible for bus routes and services, and they are reviewed usually towards the end of 5-7 year contracts, based on demand (origin and destination surveys) and business cases. The Council liaise with TfL and support changes to meet the needs of Brent's communities.

On a number of occasions, TfL has undertaken a review of bus services in the area including looking at the possibility of diverting services away from Chamberlayne Road in response to local requests. This included identifying physical changes and engineering work that would be necessary along the other routes.

However a business case for diverting services was not considered strong enough and no suitable alternative options were found for permanent service diversions along other roads. The estimated costs were in excess of £110,000 at the time, and it is felt that there would have been significant objections during the consultation.



All Souls Avenue Bus Turnaround

Some residents have suggested that the 302 could turn around at All Souls Avenue. This was reviewed and ruled out on the following grounds:

- Significant changes would be required to ensure the roundabout was wide enough, including loss of green space to enable a bus to turn around. See **Appendix B Tracking Report**
- There are no facilities in this area for the bus drivers to use, as provided at the Kensal Rise stop including toilets, tea making facilities etc.
- There is insufficient space for buses to stand.

Note

This report has identified a short, medium and longer term plan to address the bus route 302 'figure of eight' movement on Station Terrace and impact of buses with the surrounding residential streets.

TfL Pinch Point Assessment Study

TfL undertook a bus pinch point assessment (2015) within the study area to identify potential solutions to ease bus movement along the corridor.

Below is a summary of this study and the issues and opportunities identified by Transport for London.

Chamberlayne Road between Buller Road and Banister Road

- Legal and illegal parking on Chamberlayne Road on both sides of the carriageway between Buller Road and Banister Road creates numerous pinch points and delays to traffic and buses along Chamberlayne Road. Parking provision/prohibition is in the form of time controlled parking bays, single yellow lines (with time plate: no waiting between 8am – 6:30pm Monday to Saturday) and double yellow lines (no waiting at any time).
- Traffic signals at Chamberlayne Rd / Mortimer Rd junction causes delay, especially for northbound traffic with some buses taking at least two traffic signal cycles to get through the junction with the queue stretching back through the previous Banister Road junction.
- Southbound, the combination of queuing traffic in the opposite direction and the narrow nature of the road and parked vehicles at various points on both sides of the road result in relatively slow progress by buses (and general traffic) on this section. Cars parked immediately ahead of Banister Road bus stop cause difficulties for the buses when exiting the stop.

Chamberlayne Road between Kensal Rise station and Mortimer Road

- This is a two way narrow connector road between Ladbroke Grove and Willesden Green. Parking provision/prohibition is in the form of time controlled parking bays, single yellow lines (No waiting between 8am – 6:30pm Monday to Saturday) and, short sections of double yellow lines (no parking at any time). Loading restrictions are generally quite relaxed and contribute to traffic delays.

TfL Pinch Point Assessment Recommendations

- Consider banning parking and loading activity on the eastern kerb line Chamberlayne Road or provide inset bays for residential parking bays or loading bays, for example outside 8 to 14 Chamberlayne Road.
- Increase parking and loading restrictions on the approach and exit of all junctions and increase bus stop cages to comply with Bus Stop Accessibility Guidance.

The document statutory utilities alteration requirements. Amendments to parking and loading restrictions would be politically sensitive and are likely to receive objection from local businesses and residents. TfL's believed effectiveness of the scheme was predicted at 30% - and estimated cost £250,000.

Our Recommendations

This report has identified a series of measures including those identified in this TfL Pinch Point Assessment to improve bus reliability and accessibility along the entire corridor, such measures include:

- *Working with TfL and Westminster optimise the signalised junctions including SCOOT to reduce delay during the peak journey times*
- *Addressing the parking and loading restrictions and better enforcement to ensure indiscriminate parking / loading doesn't impact on bus movement*
- *Realigning kerbs to help bus movement*
- *Removing street clutter*
- *Improve parking enforcement.*

Moberly Sports and Education Centre Development Site

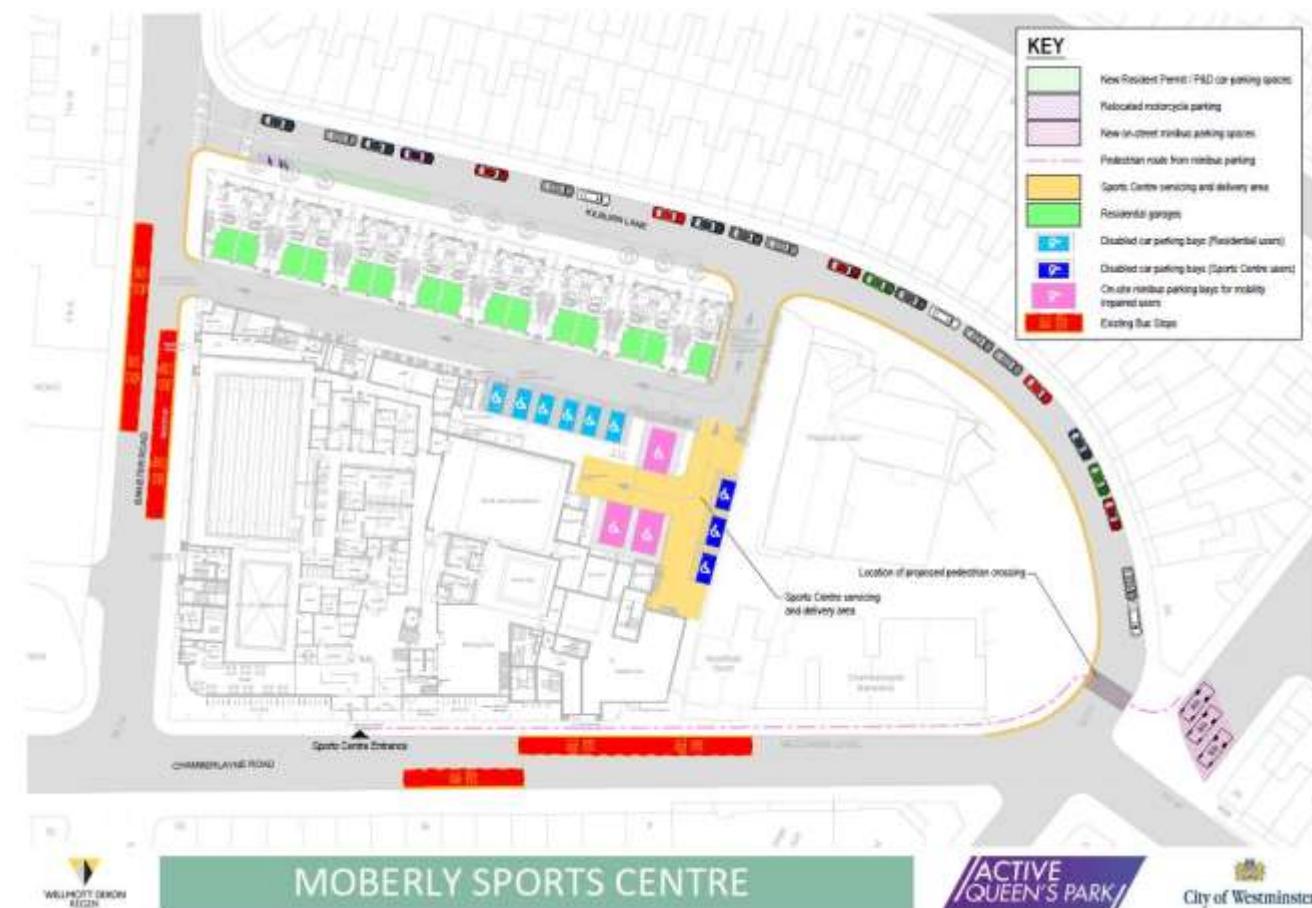
The Moberly Sports Centre, which is located close to the study area on the Banister Road / Chamberlayne Road junction has been demolished to make way for the following:

- 9293 sqm of Sports and Leisure Centre (Use Class D2)
- 56 flats (22 x 1-bed, 34 x 2-bed)
- 240sqm of retail floor space (Use Class A1/A2/A3)
- 15 terraced townhouses (15 x 4-bed)
- Car and cycle parking
- Landscaping.

The development is due to open in spring 2018.

As part of the S38/S278 Agreement with Brent Council, the following works have been agreed to be undertaken on the highway, near and within the study area:

- provision of a raised zebra crossing on Kilburn Lane
- Footway works along the Kilburn Lane frontage of the site, to include replacement of concrete surfacing with modular paving (slabs or blocks), removal of redundant guardrailling and planting of street trees
- Widening and adoption of the footway along the Chamberlayne Road frontage of the site
- Construction of new vehicular accesses to the site onto Kilburn Lane and Banister Road and reinstatement of all existing lengths of vehicular crossover rendered redundant by this footway proposal
- Alterations to existing on-street parking bays around the site to suit new access locations.



Our Recommendations

It is recommended that the development is monitored following completion and where possible additional changes are made to the Banister Road / Chamberlayne Road junction to improve road safety, large vehicle turning movements and ease traffic flow.

Mowbray Development

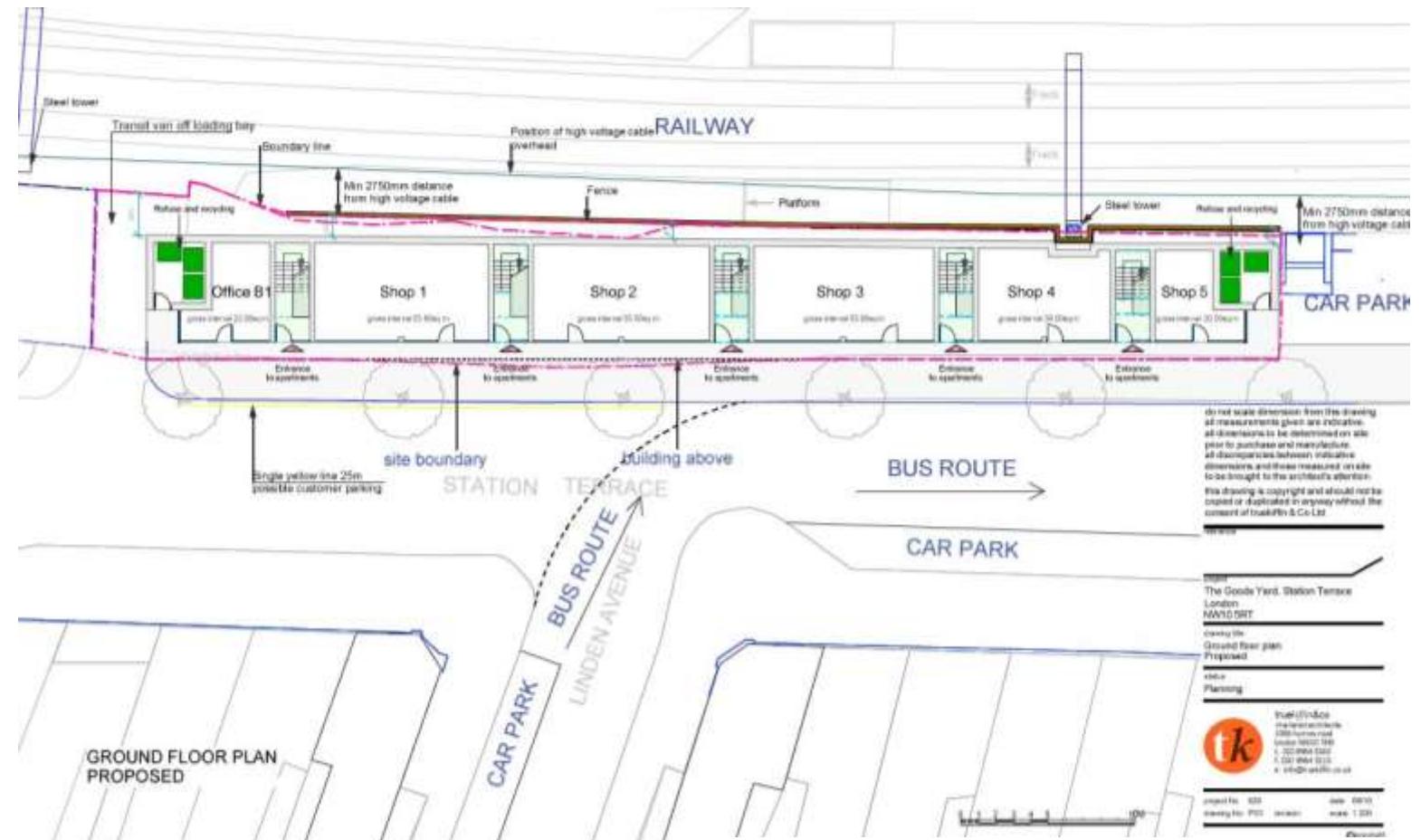
The land presently occupied by containers opposite Linden Avenue is to be redeveloped to include:

- The demolition and removal of existing buildings and structures
- Erection of four storey building comprising nine self-contained flats (7 x 2 bed and 2 x 3 bed)
- Five retail units on the ground floor
- One office unit on the ground floor
- A loading bay.
- The development will be car free.



Recommendations

Careful integration of this development on Station Terrace will be required, including impact on bus stands, access and footways and the public realm.



Proposed Development Layout (ground floor)

Plan extracts from the Approved plans (TrueKiffi@co)

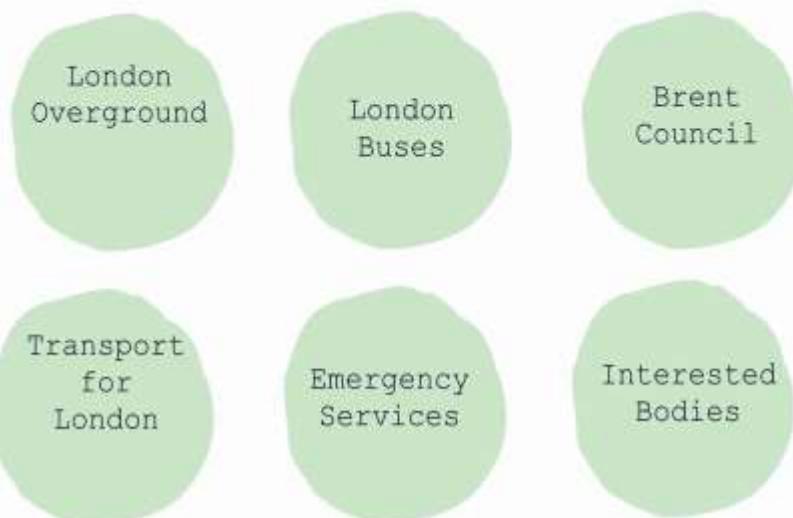
3. Project Public and Technical Stakeholder Engagement

Public and Technical Stakeholder Engagement

Local Stakeholders



Technical Stakeholders



Community Visioning Workshop, Minkies Café, Kensal Rise

It was important to undertake meaningful and inclusive public and technical stakeholder engagement and consultation to enable the local community, TfL, London Buses and other parties to guide the future shape of the area.

Deck Social assisted the team with the two-way process of sharing and exchanging information, listening and responding to suggestions, engendering constructive and dialogue within the local community.

A Communication and Consultation Strategy was developed and a series of methodologies were applied to enable the project and client team to reach local interest groups, associations, demographics, partnerships, organisations and businesses.

Appendix A summarises the engagement outcomes.



Drop-In Community Event, Kensal Rise

Community and Technical Stakeholder Visioning Workshop Outcomes

Appendix A contains a more detailed summary of the two visioning workshops undertaken with the local community and technical stakeholders (TfL, London Buses, Brent Officers) in June 2016.

Overall both workshops were well received. There was consensus in overall views on topics.

Both the community and technical stakeholders gave strong achievable position scores to Place and Street. Access for disabled people also mattered to both groups and a meaningful improvement could be made.

Bus services were viewed very favourably with the service availability valued by the community.

Technical stakeholders viewed the existing bus services as less favourable with a stronger position in terms of improvements that could be achieved compared with the community.

	COMMUNITY										TECHNICAL													COMBINED					
	Community Stakeholders Visioning Workshop										Technical Stakeholders Visioning Workshop													Total					
	Responses										Averages	Gap	Responses													Averages	Gap	Averages	Gap
	1	2	3	4	5	6	7	8	9	10		1	2	3	4	5	6	7	8	9	10	11	12	13					
1 As a destination																													
Present Score	7	5	5	3	6	2	5	5	6	5	4.9		1	3	6	7	5	5	9	6	5	4	5	2	4	4.8		4.8	
Achievable Score	8	10	8	10	8	7	8	8	9	8	8.3	3.5	5	6	7	9	8	8	10	8	8	7	8	3	6	7.2	2.4	7.7	2.8
2 As a place																													
Present Score	8	2	3	3	3	2	3	3	3	2	3.2		1	4	8	6	3	4	3	5	6	4	5	4	4	4.4		3.8	
Achievable Score	9	8	10	6	7	7	10	5	9	7	7.7	4.6	2	8	9	9	8	8	10	9	8	7	7	5	6	7.3	3.0	7.5	3.7
3 Pedestrian environment																													
Present Score	5	5	4	2	3	5	8	5	4	2	4.3		1	3	7	6	4	5	4	4	4	5	4	3	2	4.0		4.1	
Achievable Score	7	6	8	8	8	8	8	8	9	8	7.7	3.5	3	7	8	8	7	8	9	7	8	6	8	6	7	7.1	3.1	7.3	3.2
4 Cyclist environment																													
Present Score	5	5	3	2	3	1	5	6	3	1	3.4		1	1	5	5	4	2	4	3	3	4	5	3	4	3.3		3.4	
Achievable Score	7	5	5	8	6	1	5	6	9	6	5.8	2.4	1	3	6	8	6	7	7	9	6	6	8	6	5	6.0	2.6	5.9	2.5
5 Access for people with disabilities																													
Present Score	4	2	3	2	6	1	5	6	3	1	3.3		1	1	4	4	3	2	3	2	3	5	4	2	4	2.9		3.1	
Achievable Score	7	8	5	10	7	6	5	8	9	4	6.9	3.6	10	4	10	8	8	6	8	6	6	6	7	7	6	7.1	4.2	7.0	3.9
6 Bus services																													
Present Score	10	8	5	8	8	10	10	6	7	8	8.0		5	8	8	4	7	6	8	7	7	6	5	8	6	6.5		7.2	
Achievable Score	8	10	10	10	8	10	10	4	9	6	8.5	0.5	7	9	10	7	8	8	9	9	9	8	8	8	7	8.2	1.7	8.3	1.2
7 Rail services																													
Present Score	8	8	7	8	7	10	5	8	7	4	7.2		3	6	6	7	3	5	3	8	6	8	6	6	6	5.6		6.3	
Achievable Score	10	10	10	10	7	10	9	8	9	6	8.9	1.7	10	10	7	8	8	8	9	9	8	9	8	8	8	8.5	2.8	8.7	2.3
8 Functional street																													
Present Score	3	2	6	5	3	1	5	2	4	3	3.4		4	4	5	6	5	6	4	6	5	6	5	7	5	5.2		4.4	
Achievable Score	6	8	8	9	7	7	8	8	9	7	7.7	4.3	10	6	7	8	6	7	6	7	8	8	8	7	7	7.3	2.1	7.5	3.0

The table above shows the result of the gap identification exercise undertaken at both the Community and Technical Stakeholder Visioning Workshop. **See Appendix A Engagement Summary Report for more information**

Technical stakeholders thought there was a good opportunity to improve the profile and access to Kensal Rise station.

Both groups scored the cyclist environment similarly as substandard but felt there were limited opportunity for improvement due to the area's physical constraints.

What Local People Said...

Traffic Management

- Reduce / discourage / eliminate traffic, especially diesel-fuel vehicles
- Encourage and incentivise low-emission and electric vehicles
- Taxi rank would be ideal
- Improve the road surface
- Slow down of traffic
- Improve the roadworks so that potholes do not reappear as soon as they've finished / Better road repairs
- Narrow the roads
- Stop rat run up Clifford Gardens
- Ban HGV Lorries
- Stop congestion outside Tesco
- Develop station terrace area for better traffic flow
- Fewer traffic lights
- Repair kerb at Station Terrace.

Parking

- Not enough parking bays
- Parking at Station Terrace is an issue
- No more than 2 parking permits per household.

Servicing

- Lorries to undertake deliveries only between 6-7 am or in evenings only.

Bus

- No buses looping past Kensal Rise Station
- Rationalise number of buses on Chamberlayne road / Less 452/52 buses
- Pay attention to buses on Chamberlayne Road and consider alternate routes
- Remove buses from Station Terrace / Abolish bus terminal / Remove bus layby extend bus garage to compensate for this
- Easy access for disabled people on buses
- Bus stops should be less frequently placed
- Less diesel and more hybrid / electric buses
- Smaller buses in non-rush hour to cut pollution
- Priority bus lane
- Buses should stop destroying the road around Dagmar Gardens and Station Terrace
- Move bus stop on Kilburn Lane north / Protect Kilburn Lane bus stop
- Next bus indicator at Tesco bus stop.

Cycling

- More cycle parking (especially at the upper station entrance / on the bridge)
- More cycle lanes
- Remove cycle paths by Tesco
- Chamberlayne Road north/south cycle way.

Pedestrians

- Should re-design all of Station Terrace, make it more pedestrian friendly
- Pedestrianise Station Terrace
- Improve / repair / new pavements
- Need zebra crossings / More pedestrian paths
- Pedestrian lights and crossing at Harrow Rd / Ladbrooke Grove
- Safer crossing on Kilburn Lane.

Public Realm

- More greenery at back of station / More trees and open spaces / layered plants / More frequent weeding of side roads / More flowerbeds
- Design a pedestrianised area outside the Tesco / Partial pedestrianisation
- Sort area between shop fronts and pavement (curtilages) and declutter
- Recycling facilities and green space on Station Terrace
- Celebrate the diversity and creativity of the neighbourhood
- Outside Kensal Rise station would benefit from a more defined area i.e. gardens, shops.
- Station Terrace Island could be smartened up (improve gardens)
- New public area with less traffic.

4. Identified Issues

Link and Place Status

The corridor is characterised by different movement (link) and place functions along its length. Based on the 'Link and Place' methodology* link and place status 'zones' have been assigned to the corridor to assist in determining what relative weight should be given to place and movement functions and where possible, a more balanced approach is undertaken as part of design development.

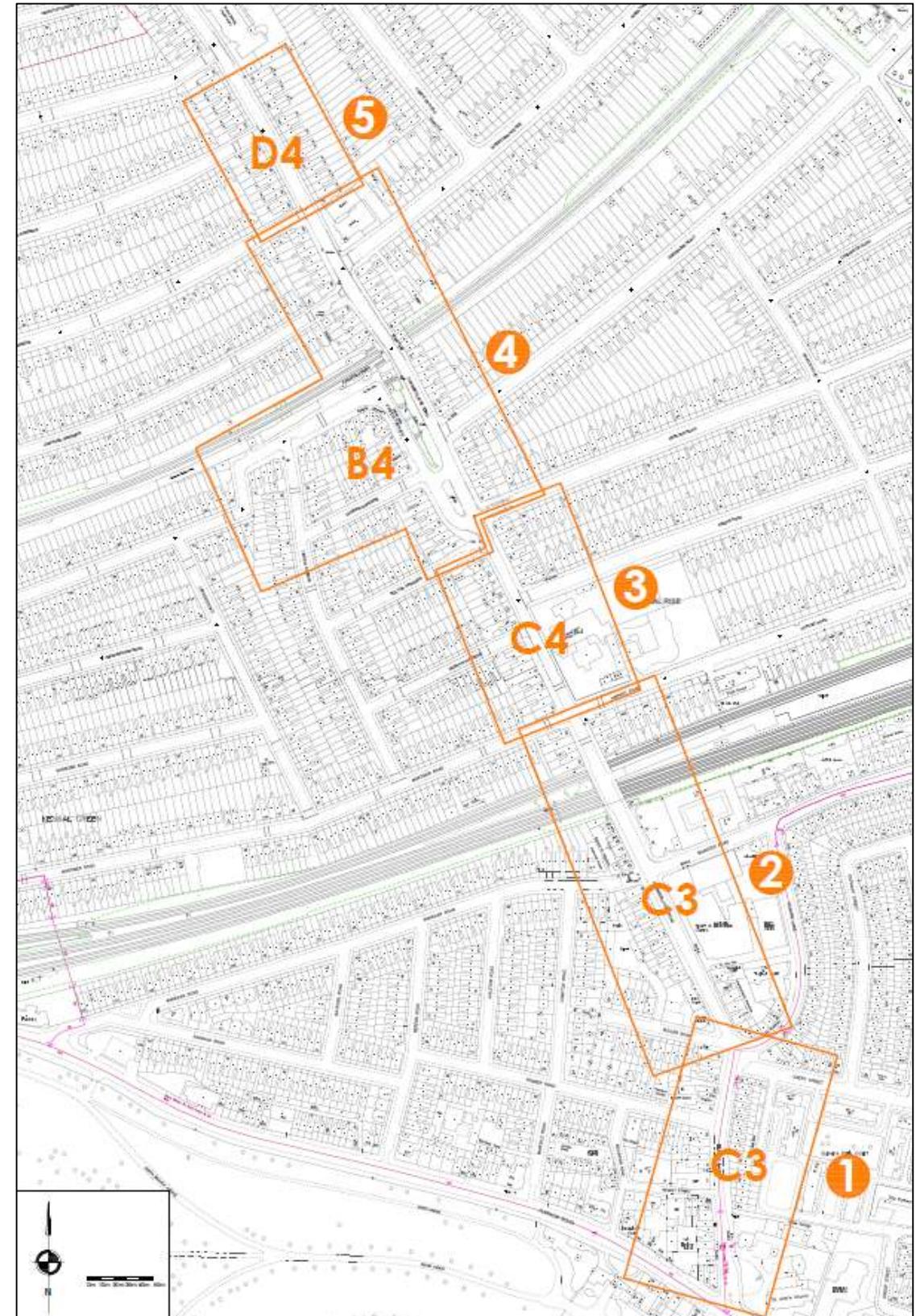
The matrix table below, taken from the Link and Place guidance was applied to the study area. As shown opposite 5 zones were identified for the length of the corridor, which was based on a desktop analysis, site visits and land use review.

In summary, the southern section (between Harrow Road (A404) and Banister Road (B413)) has a greater link status than the northern section. The northern section is characterised with more of a place function, where there are a number of shops and services.

		Place Status					
		A	B	C	D	E	
Link Status	1	A1	B1	C1	D1	E1	Main strategic corridors e.g. A4020
	2	A2	B2	C2	D2	E2	District distributors e.g. A roads
	3	A3	B3	C3	D3	E3	B roads e.g. high streets
	4	A4	B4	C4	D4	E4	Local distributors (in C roads)
	5	A5	B5	C5	D5	E5	Residential streets
		e.g. historic Square	e.g. high st shopping area	e.g. local shopping area	e.g. residential road	e.g. industrial estate	

Source: Link and Place: A guide to Street Planning and Design, 2008

* Link and Place: A Guide to Street Planning and Design, Jones et al, 2008



Identified Issues – Zone 1

The plan opposite shows the overall issues identified from the desktop study, analysis, community engagement and site audits.



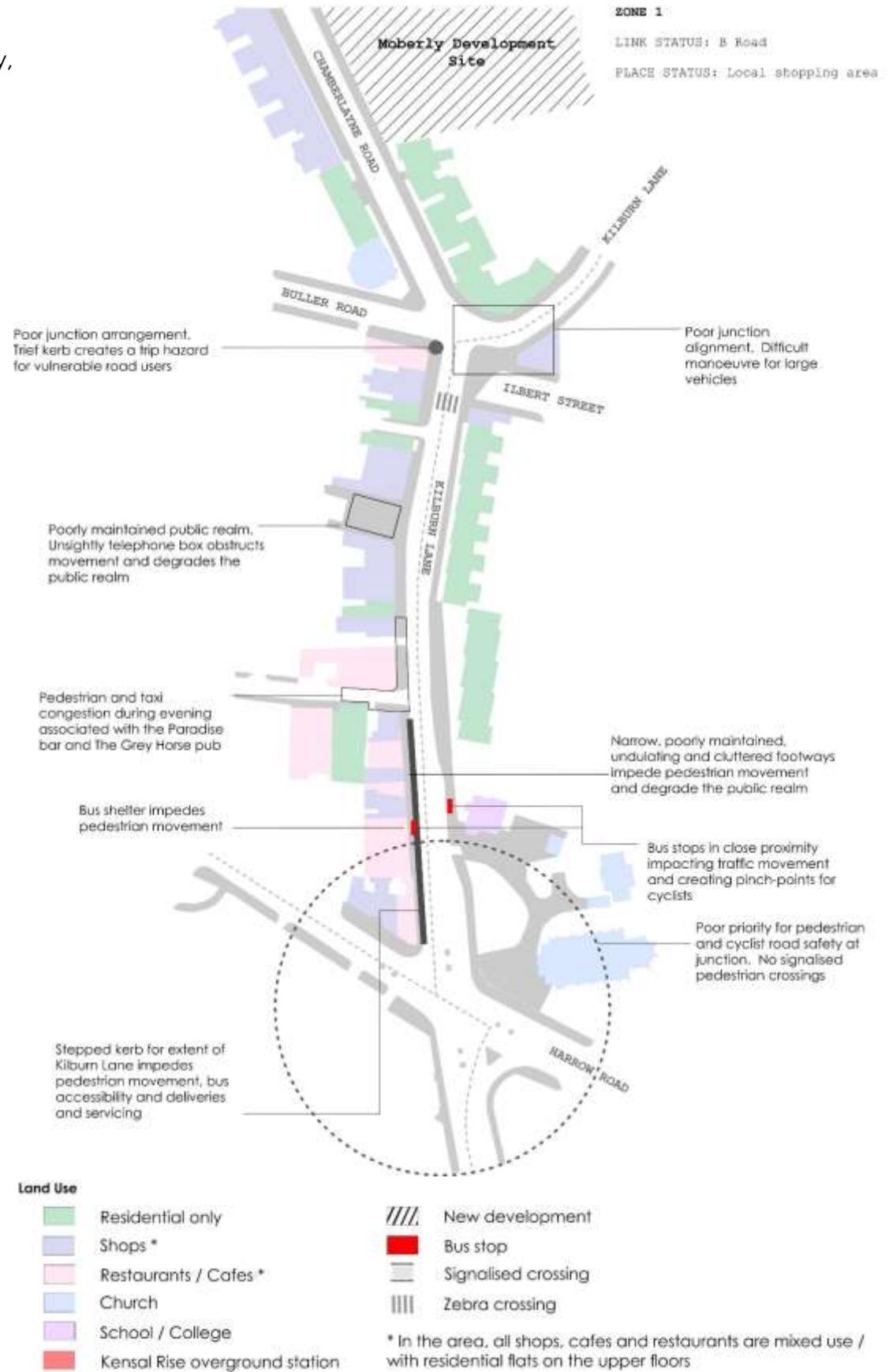
Kilburn Lane / Buller Road poor junction arrangement



Poorly maintained public spaces and lack of soft landscaping



Poor bus accessibility and pedestrian environment near Harrow Road junction



Identified Issues – Zone 2

The plan opposite summarises the overall issues identified from the desktop study, data analysis, community engagement and site audits.



Blank facades create unwelcoming environment for pedestrians

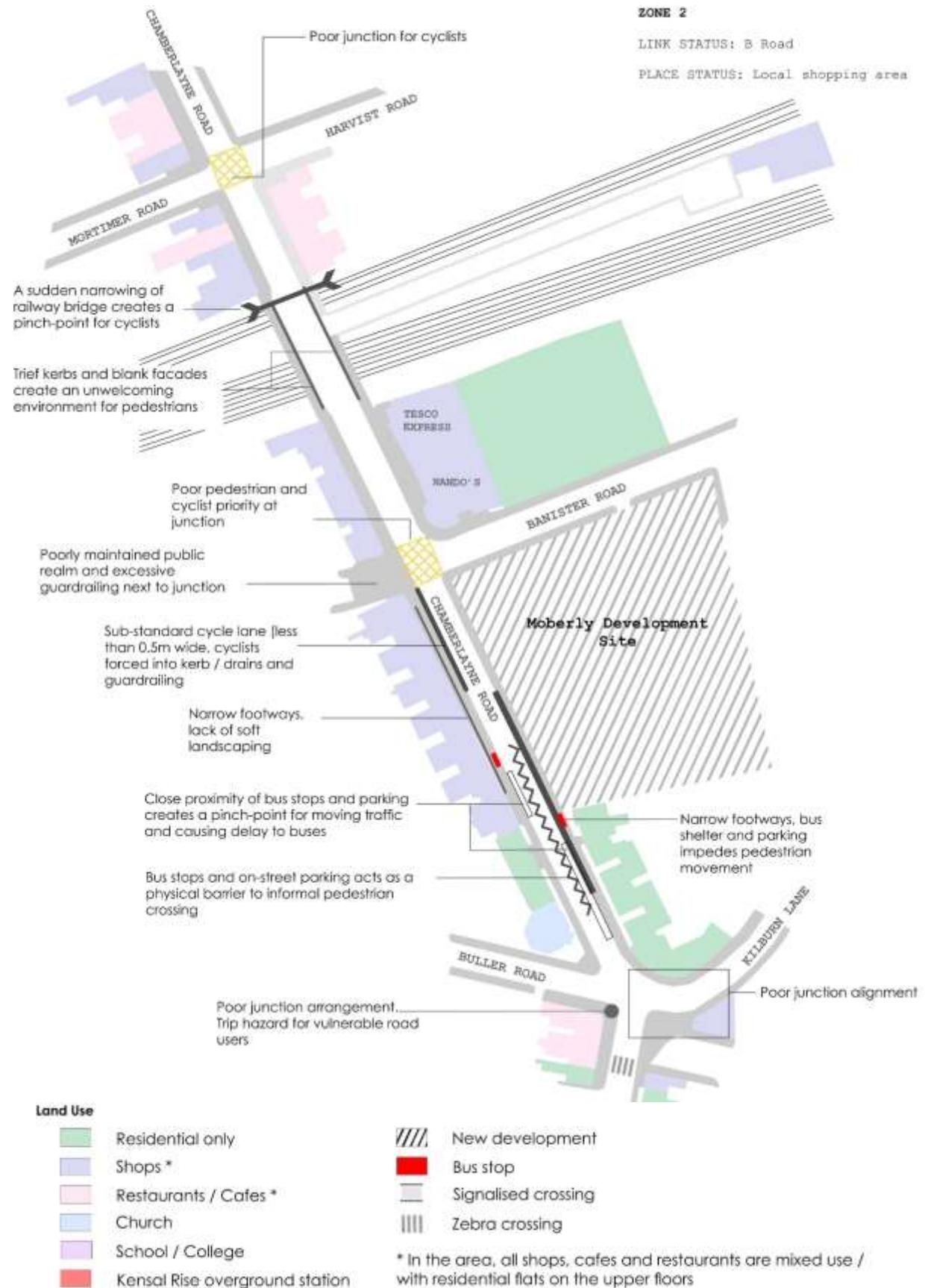


Banister Road junction is wide, dominated by vehicles and poorly aligned for larger vehicles



Parking (restricted and indiscriminate) near the Banister Road junction creates a pinch-point for buses, causing delays

Lack of soft landscaping



Identified Issues – Zone 3

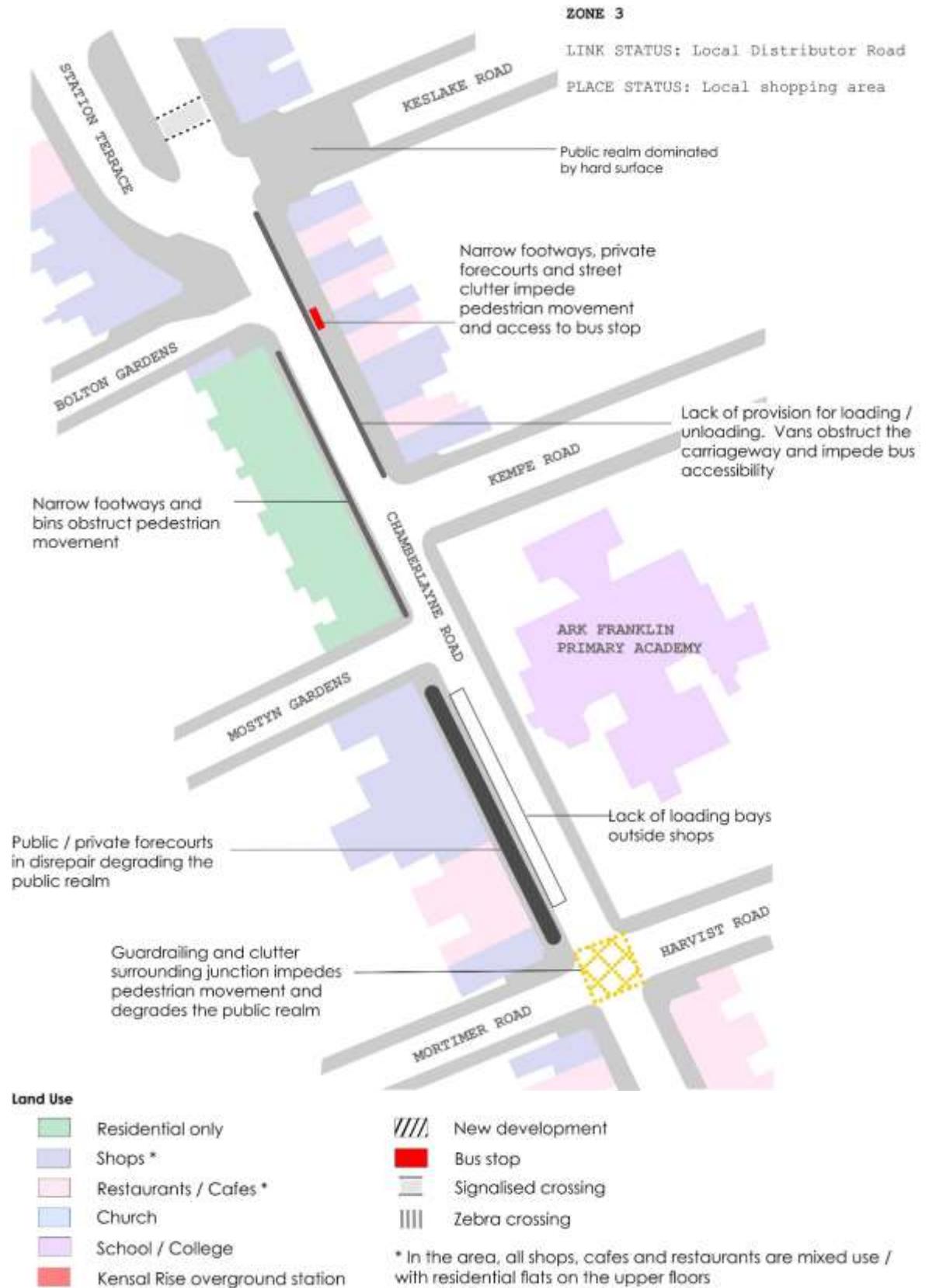
The plan opposite summarises the overall issues identified from the desktop study, data analysis, community engagement and site audits.



Private forecourts and bus stop cause pinch point for pedestrians, particularly wheelchair / pushchair users



Poorly maintained private courts and footways. Street clutter and mismatched footways materials degrade the public realm. Lack of loading facilities and soft landscaping



Identified Issues – Zone 4

The plan opposite summarises the overall issues identified from the desktop study, data analysis, community engagement and site audits.



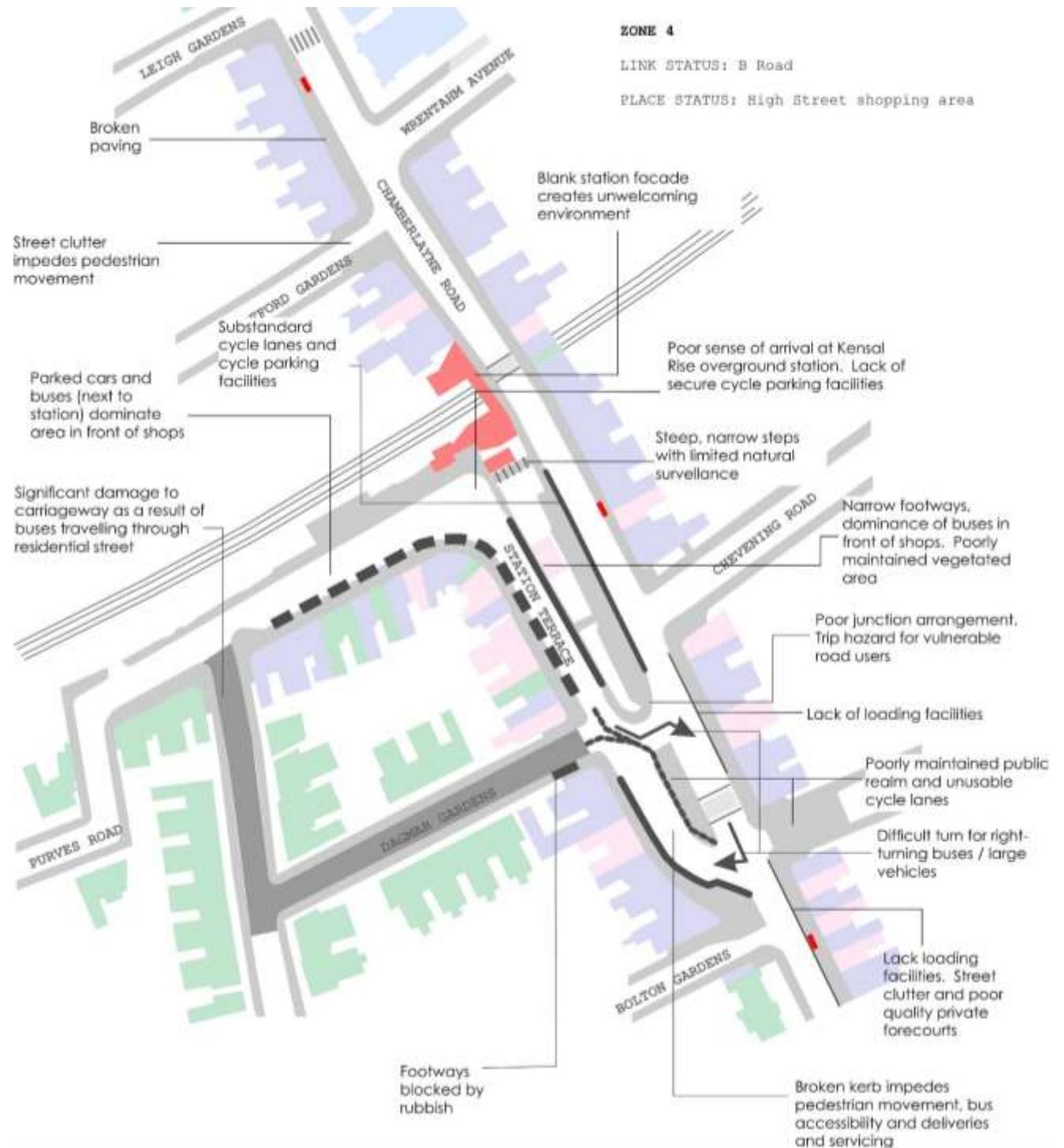
Existing bus arrangements within Station Terrace impact on bus accessibility, reliability, waiting and loading and the public realm



Poor quality street furniture and clutter degrade the public realm



Difficult bus manoeuvres required at Station Terrace



Land Use

- Residential only
- Shops *
- Restaurants / Cafes *
- Church
- School / College
- Kensal Rise overground station

- New development
- Bus stop
- Signalised crossing
- Zebra crossing

* In the area, all shops, cafes and restaurants are mixed use / with residential flats on the upper floors

Station Terrace Camera Survey Observations



Pedestrians

- Pedestrians were observed crossing on the whole length of Station Terrace (between Chamberlayne and Dagmar Gardens) – no specific desire lines as observed (**see no.1**)
- Footage reveals that pedestrians have difficulty crossing the road, especially when Station Terrace is dominated by bus movement or Chamberlayne Road is congested
- Few people have been observed dwelling around the area. Most people are either waiting at the bus stop, shopping or travelling through the area.

Cyclists

- Few cyclists were observed in the area
- The painted cycle lane on Station Terrace was not used.

Traffic

- Traffic delays and congestion on the corridor were observed both on video and site visits (**see no.2**). *Note: Footage were undertaken during ongoing water works on Chamberlayne Road.*

Bus movement

- A substantial number of buses drive through Station Terrace - this area is dominated by vehicles, noise and pollution (**see no.3**)
- IF vehicles are parked on Station Terrace buses are unable to access bus stop KR, and bus queuing extends on Chamberlayne Rd (**see no.4**)
- Traffic congestion around Station Terrace impacts on bus reliability.

Parking, deliveries and servicing

- Significant number of cars and servicing vehicles park on the double yellow lines on Station Terrace – this inhibits pedestrian movements, delays bus services and impedes buses ability to fully align with the footway (**see no.5**)

Identified Issues – Zone 4



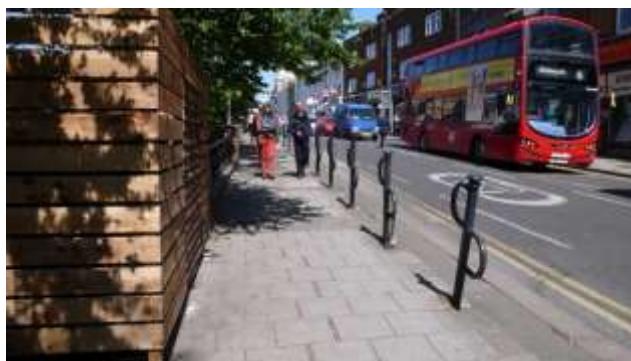
Poor sense of arrival / integration of station within wider area



Existing bus arrangements within Station Terrace impact on local area, are not fully accessible and effect bus reliability



Substandard cycle lanes and cycling stands



Poorly maintained public realm and vegetated areas. Fly tipping and dominance of large bins impacts on the quality of the place.

Identified Issues – Zone 5

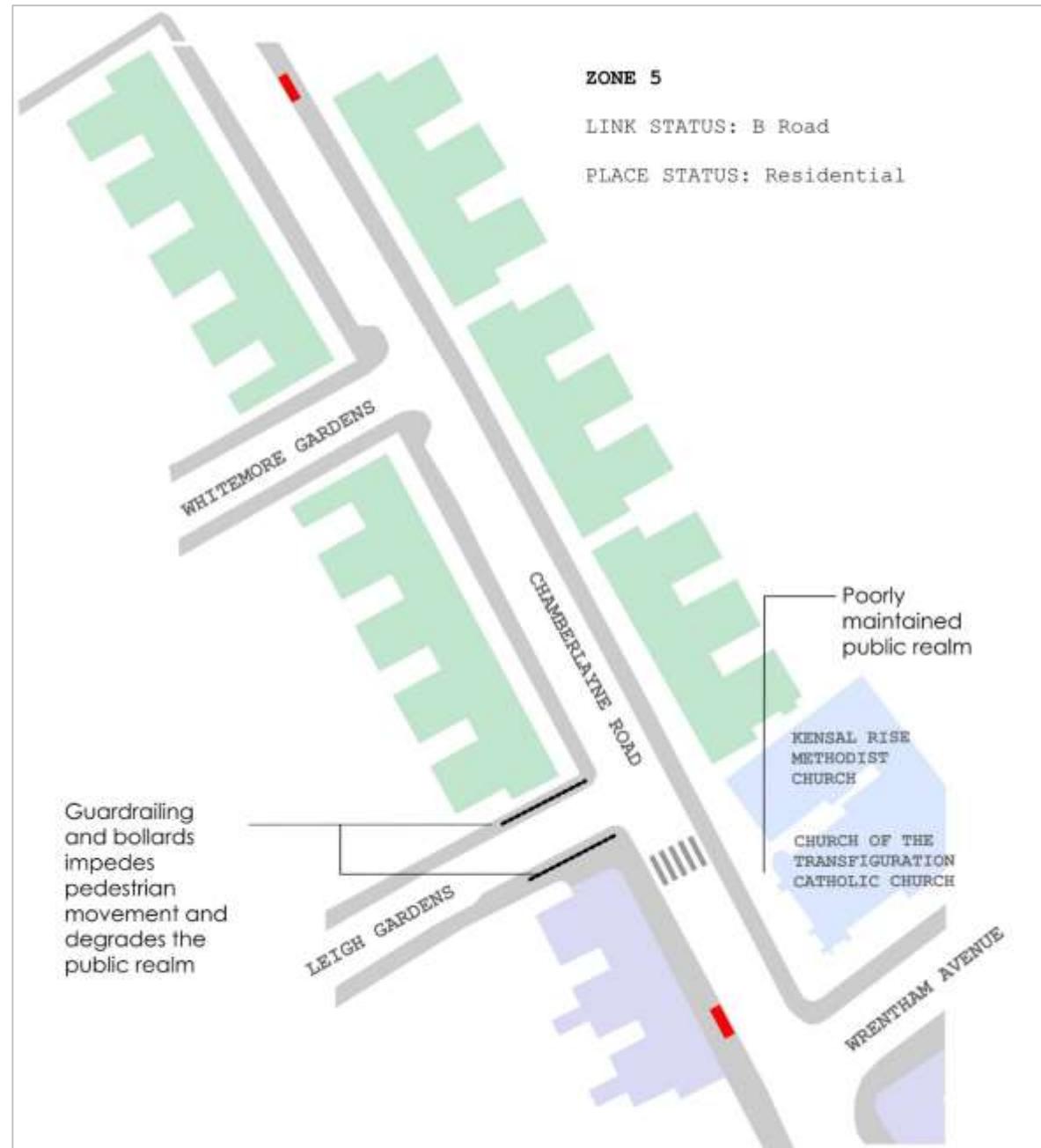
The plan opposite shows the overall issues identified from the desktop study, data analysis, community engagement and site audits.



Street clutter impedes pedestrians and degrades the public realm



Under utilised and maintained public realm. Sign in disrepair



Land Use

- Residential only
- Shops *
- Restaurants / Cafes *
- Churches
- School / College
- Kensal Rise overground station
- New development
- Bus stop
- Signalised crossing
- Zebra crossing

* In the area, all shops, cafes and restaurants are mixed use / with residential flats on the upper floors

Corridor-Wide Bus Accessibility and Reliability Identified Issues

1.



2.



1. Bus stop KT is not fully accessible. A stepped kerb causes difficulty for passengers to board and alight
2. Parking, waiting and loading obstructs bus movement near Banister Road junction
3. Private forecourts encroach on footways and impede passengers waiting at bus stop KJ
4. Traffic congestion around Station Terrace impacts on bus reliability.

3.



4.



1.



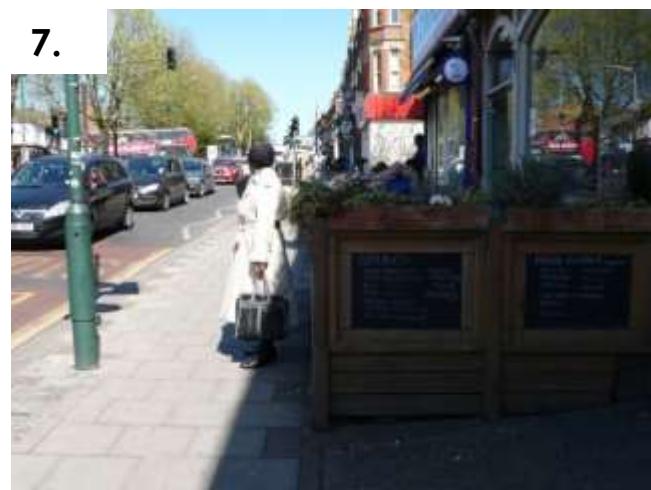
Station Terrace Bus Accessibility and Reliability Identified Issues



1. Waiting and loading and traffic movements impede bus access
2. Poor junction layout and bus service routes create a difficult environment for all road users to navigate
3. Street clutter and poor pedestrian crossings impede safe access to bus stops
4. Poor road alignment, parking and loading impedes buses from fully accessing Station Terrace
5. Lack of bus shelter and seating, conflict with Tesco entrance
6. Bus routes 28, 302 and 452 have to travel down narrow residential areas including Dagmar Avenue and Linden Avenue. The load and volume of buses has resulted in significant damage to the carriageway.



Corridor Wide Public Realm Related Issues



1. Poorly maintained and narrow footways
2. Poorly constructed tree pits and inconsistent materials
3. Vegetated areas poorly maintained (under private ownership)
4. Hard landscaping, lack of street trees
5. Blank facades
6. Street clutter (including bins, telephone boxes, signs, cycle stands, bus shelters, 'A' boards etc.)
7. Private forecourts encroaching on public highway and poorly constructed.

5. Existing Corridor Performance

Existing Overall Performance RAG Assessment

The table below summarises the current performance of the corridor by zone and against the various objectives. Red indicates poor performance, amber is average and green is good performance. The overall rating is based on a thorough review of the existing situation, issues from a desktop review, site visits, camera survey and consultation.

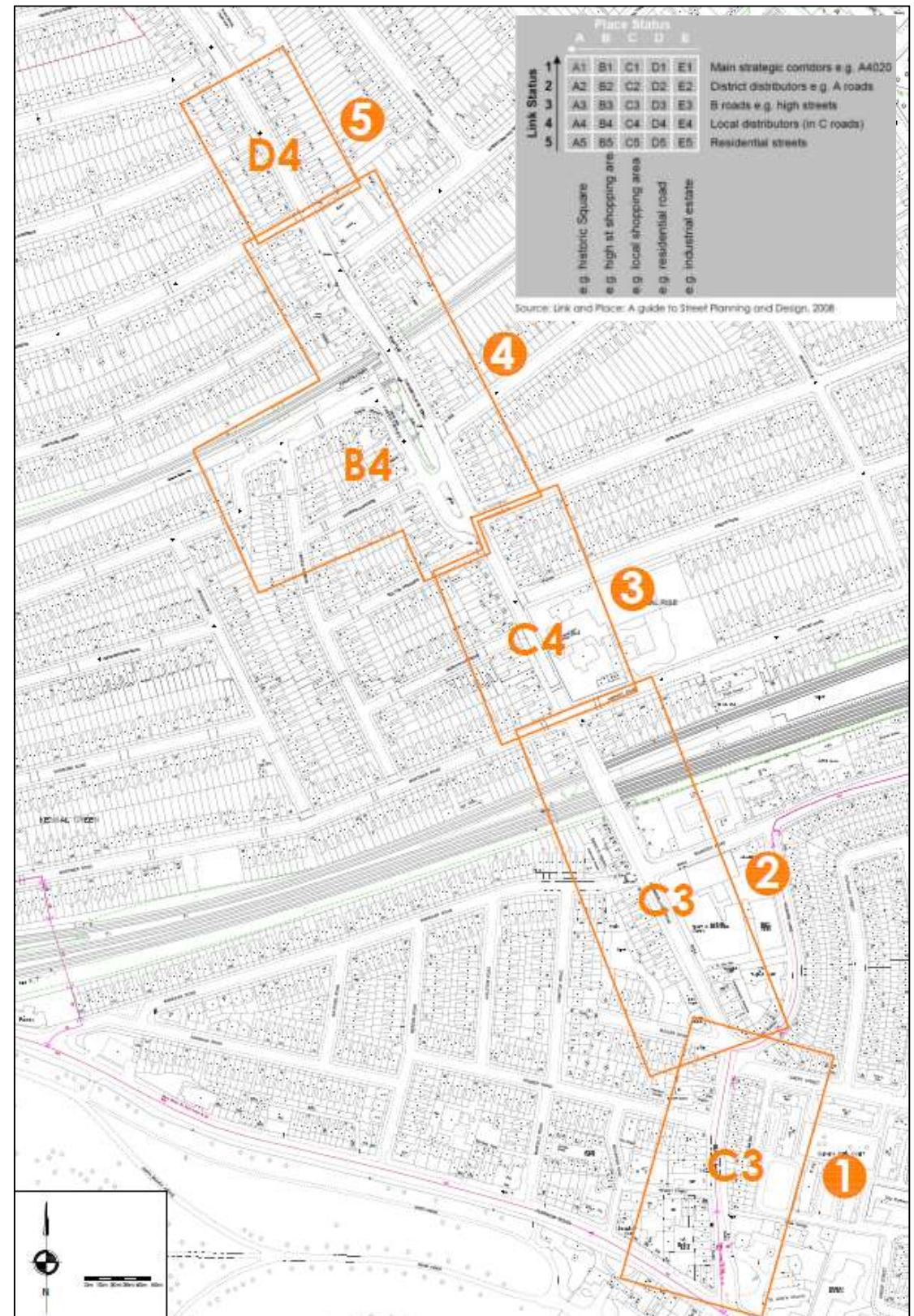
Study Objectives / Link & Place Sections		Link/Place Score:				
		1	2	3	4	5
		C3	C3	C4	B4	D4
Traffic Management & Road Safety	Traffic flow	Amber	Amber	Amber	Red	Amber
	Traffic speed	Amber	Amber	Amber	Red	Amber
	Road safety	Amber	Amber	Amber	Red	Amber
Buses	Bus service reliability	Red	Red	Red	Red	Green
	Bus stop quality	Red	Red	Red	Red	Green
Pedestrians	Pedestrian Environment	Red	Red	Red	Red	Green
	Wayfinding/signs	Amber	Amber	Amber	Red	Green
	Accessibility	Red	Green	Amber	Red	Green
Cyclists	Personal Security	Green	Green	Amber	Red	Green
	Cyclist environment	Amber	Red	Amber	Red	Green
	Wayfinding/signs	Amber	Red	Amber	Red	Green
Public Realm	Cyclist parking facilities	Amber	Red	Amber	Red	Green
	Quality of the public realm	Red	Red	Red	Red	Green
	Sense of place	Amber	Amber	Amber	Red	Green
	Street clutter	Red	Red	Red	Red	Green
Parking	Vegetation / landscaping	Amber	Red	Amber	Red	Green
	Parking provision	Green	Green	Green	Green	Green
Parking	Loading provision	Green	Amber	Red	Red	Green

■ Poor
 ■ Average
 ■ Good

The table shows bus service reliability and bus stop quality, pedestrian environment, quality of public realm are amongst the most poorly performing objectives across the corridor.

Zone 4 (Station Terrace) is the poorest performer in relation to the various objectives, notably buses, pedestrian environment, cyclist environment public realm and servicing provision.

Zone 5, a largely residential areas performs the best against the various objectives.



Buses Current RAG Performance Assessment



Again using the red-amber-green (RAG) assessment, the bus stops along the corridor were assessed according to accessibility, waiting area comfort, information, quality of environment and personal safety.

The assessment reveals that despite the fact that bus stops KR is the most used in the area, has the poorest infrastructure. Bus stop KT has a similar situation.

On the other hand, bus stop KL and KG are less used but provide better facilities.

Bus stops such as KN and KP are also popular (between 1,700 and 2,059 passengers per day) and provide excellent infrastructure.

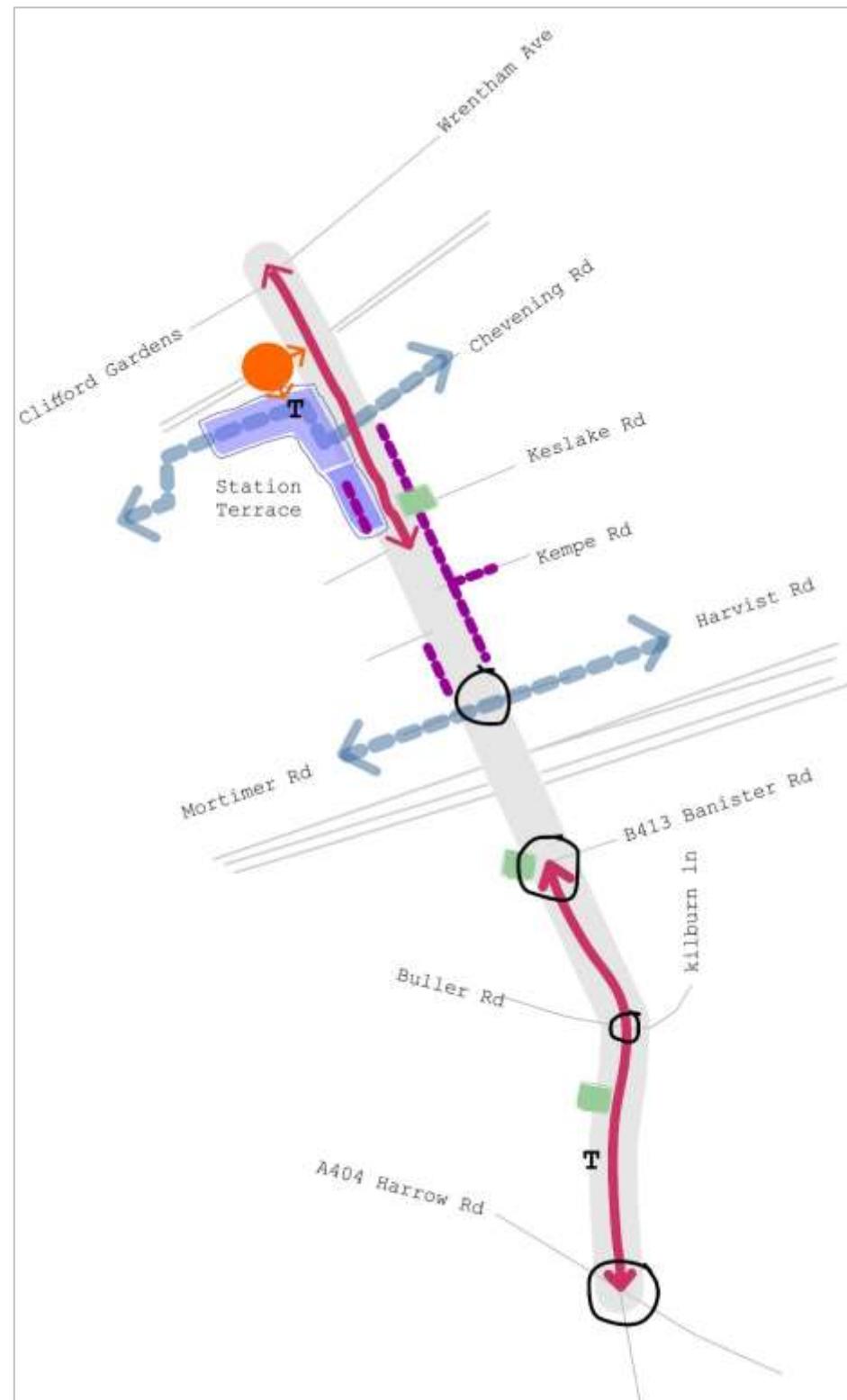
Bus Waiting Area Assessment		KR	KJ	KH	KT	KN	KP	KS	KM	KL	KK	KG
Total boarders and alighters per day		5835	3331	2956	2285	2059	1700	1536	1338	1237	1105	926
Accessibility of the waiting area and public transport (boarding/alighting)	Accessibility via pedestrian crossings	Red	Red	Red	Red	Red	Green	Red	Red	Red	Red	Red
	Dropped / raised kerbs and gaps minimised	Yellow	Yellow	Yellow	Red	Yellow	Green	Yellow	Red	Green	Green	Yellow
	User conflict	Red	Red	Red	Red	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow
	Visible and legible	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow	Yellow
	Footways and surface quality (incl. tactile)	Red	Red	Red	Red	Yellow	Yellow	Red	Yellow	Green	Yellow	Green
	Access and egress points accessible	Red	Green	Green	Yellow	Green	Green	Yellow	Yellow	Green	Green	Green
Waiting area comfort	Shelter and protection from weather	Red	Green									
	Waiting area capacity	Green	Red	Red	Red	Yellow	Green	Green	Yellow	Green	Yellow	Yellow
	Seating visible / easy to reach / suitable	n/a	Yellow	n/a	Red	Green	Green	Green	Yellow	Red	Red	Red
	Nearby facilities	Yellow	Green	Green	Green	Yellow	Green	Green	Yellow	Red	Red	Red
Information at the waiting area	Timetables	Green	Yellow									
	Real time information	Red	Red	Red	Green	Green	Green	Green	Red	Green	Red	Green
Quality of the environment	Sense of Place	Red	Yellow	Yellow	Red	Yellow	Yellow	Red	Red	Red	Red	Green
	Aesthetics	Red	Red	Red	Red	Yellow	Yellow	Red	Red	Red	Red	Green
	Soft Landscape	Red	Yellow	Yellow	Red	Yellow						
	Quality of materials / private frontages	Red	Yellow	Yellow	Red	Yellow						
	Noise	Red										
	Lighting	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Red	Red	Green
	Litter bins provided	Yellow	Red	Red	Green	Green	Green	Green	Green	Green	Red	Red
	Level of cleanliness	Yellow	Yellow	Yellow	Yellow	Green	Red	Yellow	Yellow	Green	Red	Red
Safety perceptions	Safety from traffic	Red	Red	Red	Red	Yellow	Green	Green	Red	Yellow	Red	Yellow
	Evidence of graffiti or vandalism	Green	Yellow	Green	Yellow	Green						
	Evidence of anti-social behaviour	Yellow	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green
	Formal and/or informal surveillance	Green	Red									
	Sightlines	Green										

6. Mode-Based Overall Recommendations

Corridor Wide Overall Opportunities

In line with current placemaking and movement good practice, it is recommended that a number of key principles are applied in the design, construction, adoption and maintenance of the corridor. These key principles are:

- o Recognising the importance of the community function of the street and spaces for social interaction
- o Promoting an inclusive environment that recognises the needs of people of all ages and disabilities and ensure wayfinding and legibility are an integral part of scheme designs
- o Creating an environment that supports pedestrian and cyclist movement and integrates Kensal Rise station
- o Providing a legible, easily accessible and reliable bus service and stops, addressing pinch-points to bus movement
- o Providing a rationalised and effective street delivery environment
- o Creating a locally distinctive street with durable and maintainable materials
- o Creating a high quality and uncluttered streetscape with more green space.



Station Terrace (Zone 4) Overall Opportunities

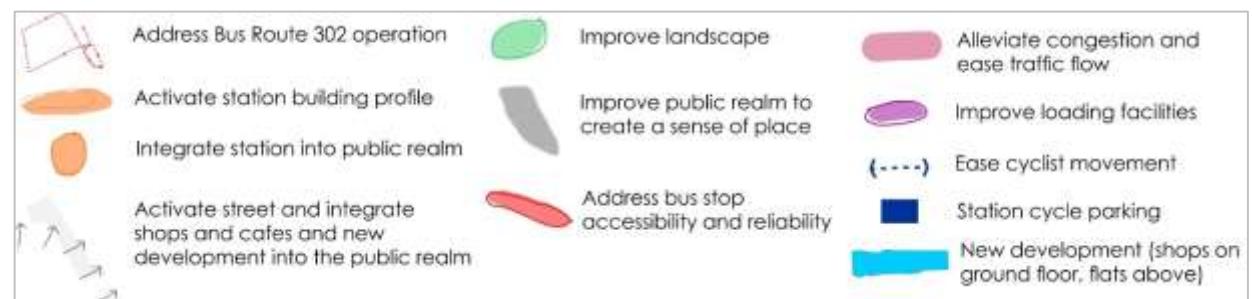
Zone 4 represents the most active area within the corridor both in terms of place and movement functions. The area includes Kensal Rise station, shops, forecourts and cafes, numerous buses, loading activity and cycling infrastructure, all competing for space within a relatively confined area.

As a consequence, infrastructure and facilities are often sub-standard, these include:

- Kensal Rise station's profile is poor
- Bus stops are not fully accessible, routes are convoluted and as a result reliability is poor
- Fragmented, substandard and unusable cycling infrastructure
- Lack of space for businesses to operate notably deliveries
- Enclosed feeling due to constrained carriageways, building heights and traffic volume, particularly large vehicles including buses.

It is advised that the following design principles are applied when planning and designing this area:

- Greater integration and profile raising of Kensal Rise station
- Improve bus operational practices and bus stops, notably route 302
- Improve bus reliability and accessibility for extent of corridor
- Enable businesses to (un)load more efficiently and reduce the impact on movement and ensure parking / loading is enforced
- Improve the pedestrian and cyclist environment including access to quieter alternative routes
- Integrate and expand the green / public spaces
- Address congestion within the study area including better arrangement of infrastructure to ease movement
- Extend the existing 20mph zone to include this section of the corridor.



Corridor-Wide Highway Overall Recommendations

Short term Measures

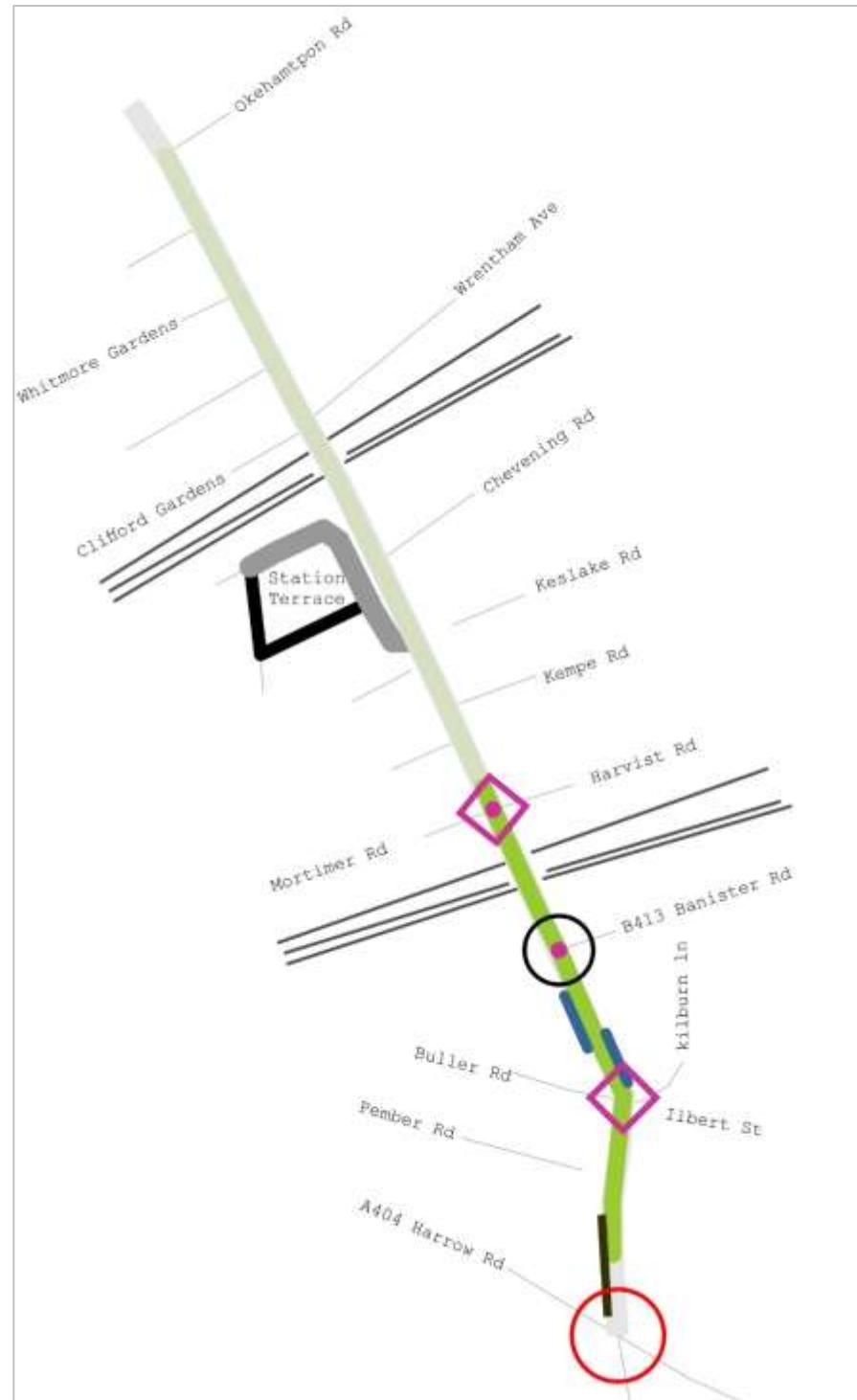
- Where possible, introduce split cycle offset optimisation technique (SCOOT)* at Mortimer Road and Banister Road junctions and link to the Harrow Road junction to reduce delay along the corridor.

Medium Term Measures

- Extend the 20mph zone for the whole Chamberlayne Road / Kilburn Lane corridor
- Introduce shallow raised tables on Station Terrace to calm traffic and improve drivers' behaviour especially at proximity of local attractors and Kensal Rise station
- Review parking restrictions between Kilburn Lane and Banister Road to reduce pinch-points at peak hours and increase bus reliability
- Resurface carriageway to repair damage from buses
- Remove the stepped kerb north of Harrow Road / Kilburn Lane / Ladbroke Grove junction to improve bus accessibility and reduce trip hazard

Longer Term Measures

- Realign junctions to improve large vehicle turning movements
- Consider mini-roundabouts in longer term subject to road safety, pedestrian movement, traffic flow / modelling.



Indicative Timescales to Implement

- Short Term: 1-2 years
- Medium Term: 2-3 years
- Longer Term: 3-5 years+



**SCOOT is a tool for managing and controlling traffic signals in urban areas. It is an adaptive system that responds automatically to fluctuations in traffic flow through the use of on-street detectors embedded in the road reducing delay for all road users.*

Corridor-Wide Parking and Loading Overall Recommendations

The aim should be to create an easy to access and interpret space with a flexible parking and loading regime for the extent of the corridor. Enforcement requires improvement as an immediate task, to reduce congestion and the impact of indiscriminate parking on other road users.

Short Term Measures

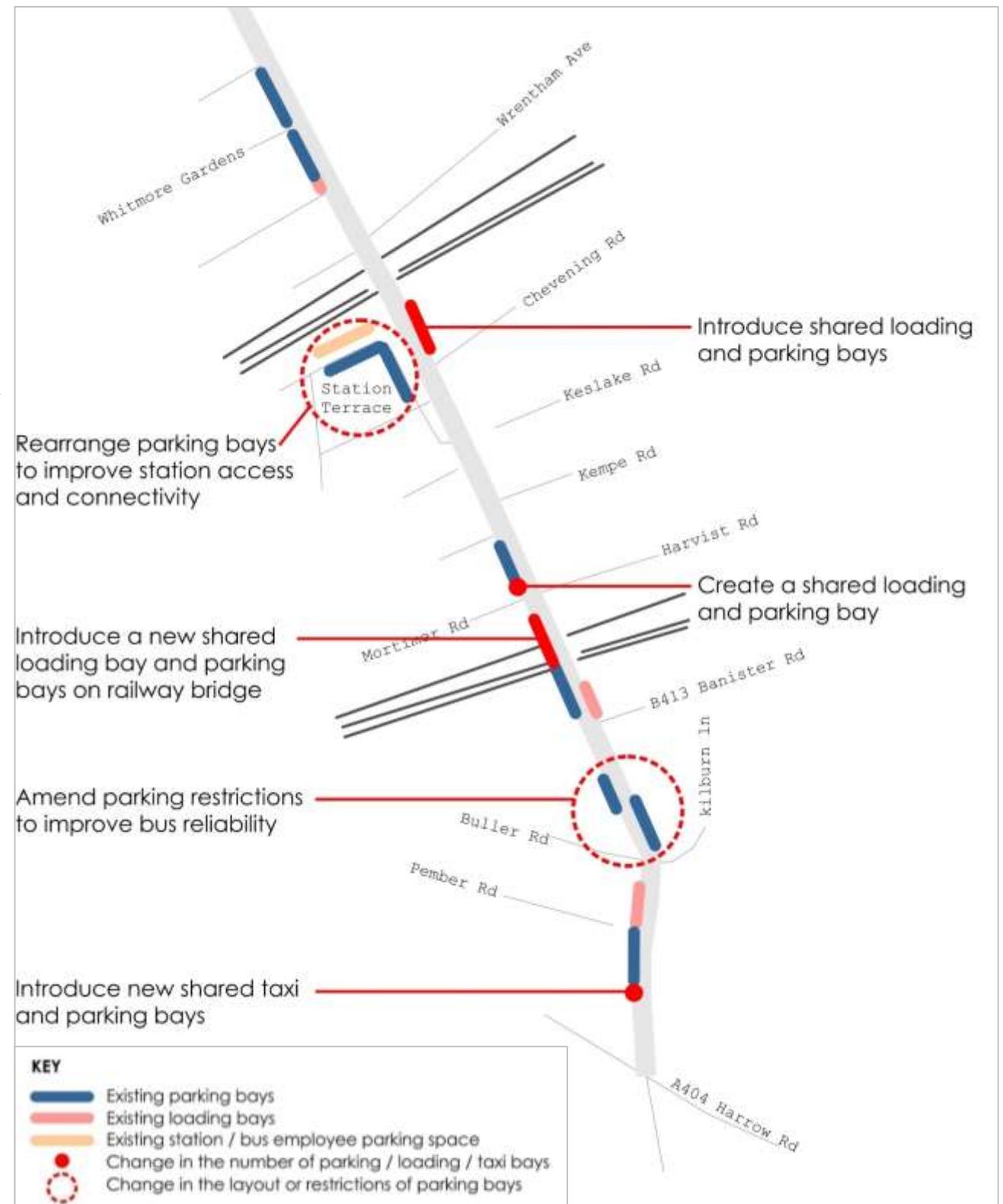
- Rearrange the parking on station terrace to improve station access and connectivity as part of the short term Station Terrace (Zone 4) proposals

Medium Term Measures

- Create shared loading and parking bays / pads that provide flexibility for users, particularly in those width restricted locations on the corridor
- Subject to further review of access / egress movements of large vehicles associated with Travis Perkins, realign the carriageway on the railway bridge between Banister Road and Harvist Road to provide additional parking / loading spaces
- To ease congestion during peak journey times and improve bus reliability, where possible amend the parking restrictions and improve enforcement to minimise the impact of parking on movement, this is particularly an issue on Kilburn Lane near the Banister Road junction.

Long Term Measures

- Considering building out the footway on Chamberlayne Road between Chevening Road and Wrentham Avenue, creating three new shared loading and parking bays. This will provide a greater flexibility for visitors and businesses to operate effectively
- Where possible it is recommended that the parking associated with Kensal Rise station is replaced with secure and sheltered cycle parking
- To reduce street clutter, it is recommended, where possible, to introduce pay by phone parking and the ticket machines removed from the corridor.



Corridor-Wide Overall Bus Considerations

Buses play an important part in the corridor connectivity with wider London. As an important north-south strategic / alternative route for movement, the corridor will continue to play a key role in connecting the wider area with central London.

However, there is an opportunity to better balance the needs of buses with the local context and address the adverse impact the corridor layout has on bus reliability and accessibility.

By addressing the existing bus service operation issues, bus stop location and layouts will both improve bus stop accessibility and reliability and also reduce the impact of buses on the public realm creating more opportunity to create community spaces and help local businesses to thrive.

This is particularly important with relation to Zone 4 the Station Terrace area and Chamberlayne Road, where neither London Buses or the local environment benefit from the existing situation.

Working closely with TfL, London Buses and the local community it is paramount to strike a balance between keeping London moving and connected and the safety and enjoyment of local residents and businesses.

Through careful and thorough consideration of the local area, camera surveys, interrogation of available data, previous studies, discussions with London Buses, TfL and the local community we have identified a strategy to help deal with this situation.

The identified short, medium and longer term bus strategy is as follows:

BUS SERVICE CIRCULATION / OPERATION

Bus Route 302 (short term)

- Address the route circulation to improve bus reliability and road safety

Bus Routes 28 and 452 (Medium term)

- Identify other locations on the network where bus routes 28 and 452 could terminate to enable a better balance of modal needs and address the impact of buses on the residential area in Station Terrace.

'Ghost Buses' (Longer term)

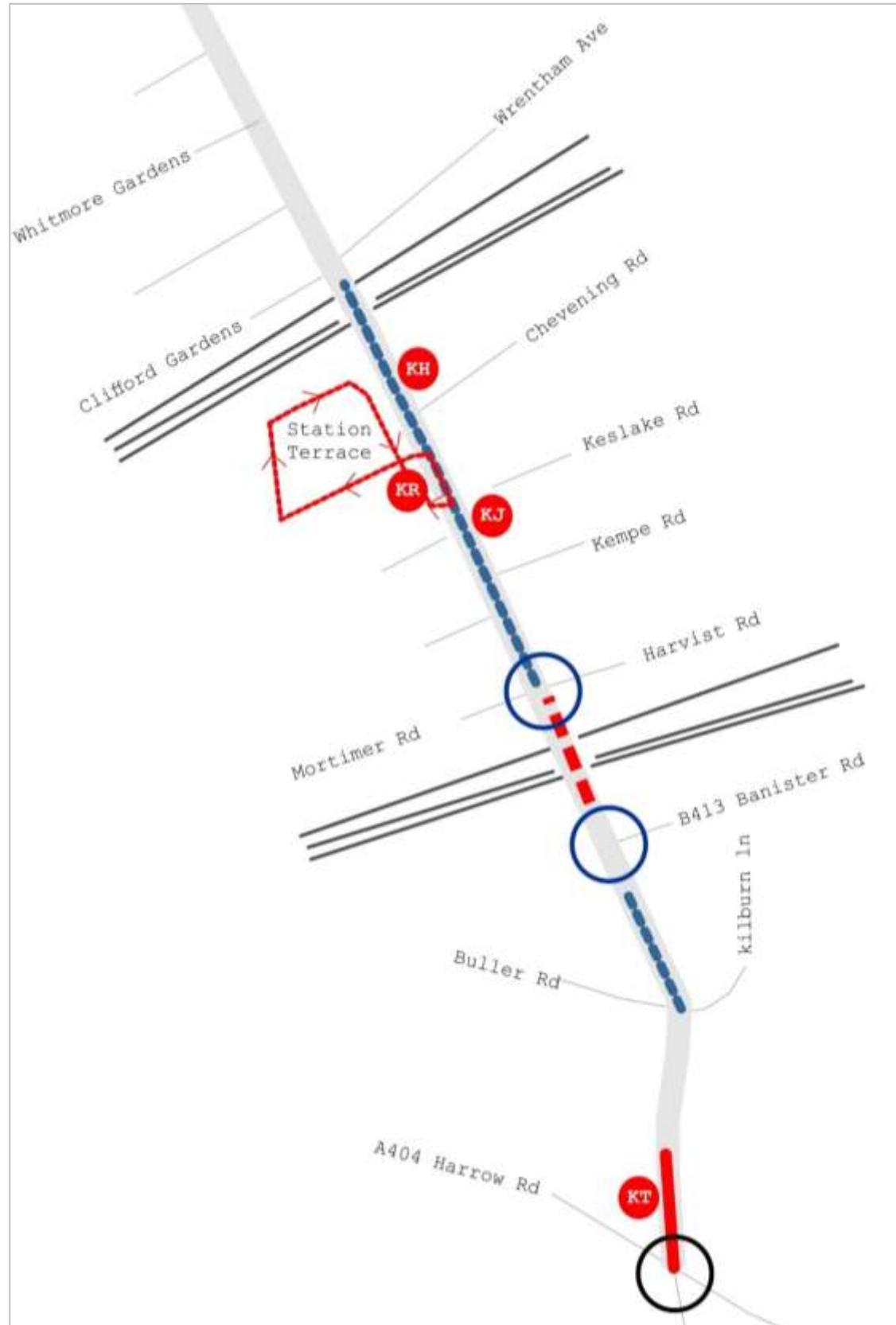
- Review the number of bus services and anecdotal evidence captured by local residents of empty buses on the corridor to help improve bus reliability.

BUS STOPS

- Review bus stop locations to better improve accessibility, patronage and bus reliability, pedestrian and cyclist environment, the need for businesses to (un)load and the public realm (*medium term*)
- Introduce real time information at important bus stops and fully accessible kerbs (*medium term*).



Corridor-Wide Overall Bus Scheme Recommendations



Buses, Parking and Loading (medium term)

- It is recommended that parking and loading restrictions are reviewed and where possible amended to restrict parking and loading activity outside of peak journey times (no parking or loading between 7am – 10am and 4pm – 7pm) to improve bus reliability / traffic flow. Better enforcement of existing and future parking / loading bays is required.

Bus Stop Locations (medium to longer term)

- It is recommended in the medium term that where possible, bus stops are rationalised or relocated, notably bus stops KH and KJ are within 100m of each other and impact on pedestrians, congestion and business operation
- It is recommended that in the longer term bus stop KR is relocated from Station Terrace to the main Chamberlayne Road corridor to improve bus stop reliability and enable more space for pedestrians, cyclists and businesses to be provided
- Introduce real time information at bus stops near station.

Carriageway Improvements (medium to longer term)

- In the medium term, remove pinch-points including on the railway bridge (near Harvist Road) and at junctions to improve bus turning movements and reliability
- In the medium term, amend the carriageway, to remove the stepped kerb and improve bus stop accessibility at bus stop KT (Harrow Road junction)
- In longer term, consider mini-roundabouts at key junctions, notably Harvist Road and Banister Road junctions. A (mini) roundabout would be subject to road safety modelling and pedestrian / cyclist impact assessment. In the short term it is recommended that SCOOT is introduced at this junction, as well as the Harvist Road junction to improve traffic flow.

KEY	
	Improve bus stop accessibility
	Remove stepped kerb and improve carriageway
	Address pinch-point on railway bridge to improve road safety
	Address bus reliability and impact of buses on Station Terrace and surrounding streets
	Address impact of parking and loading on bus movement during peak journey times
	Optimise and realign junction to improve bus reliability, movement and road safety
	Consider mini roundabout subject to modelling and pedestrian / cyclist impact assessment

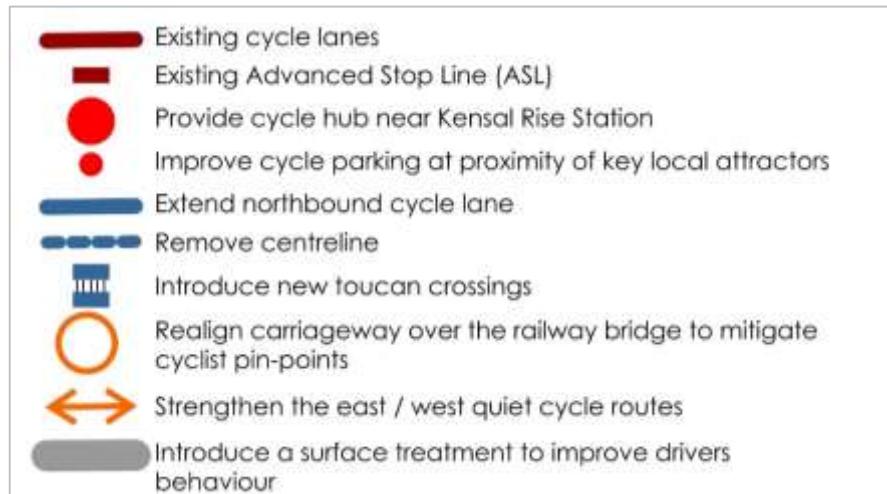
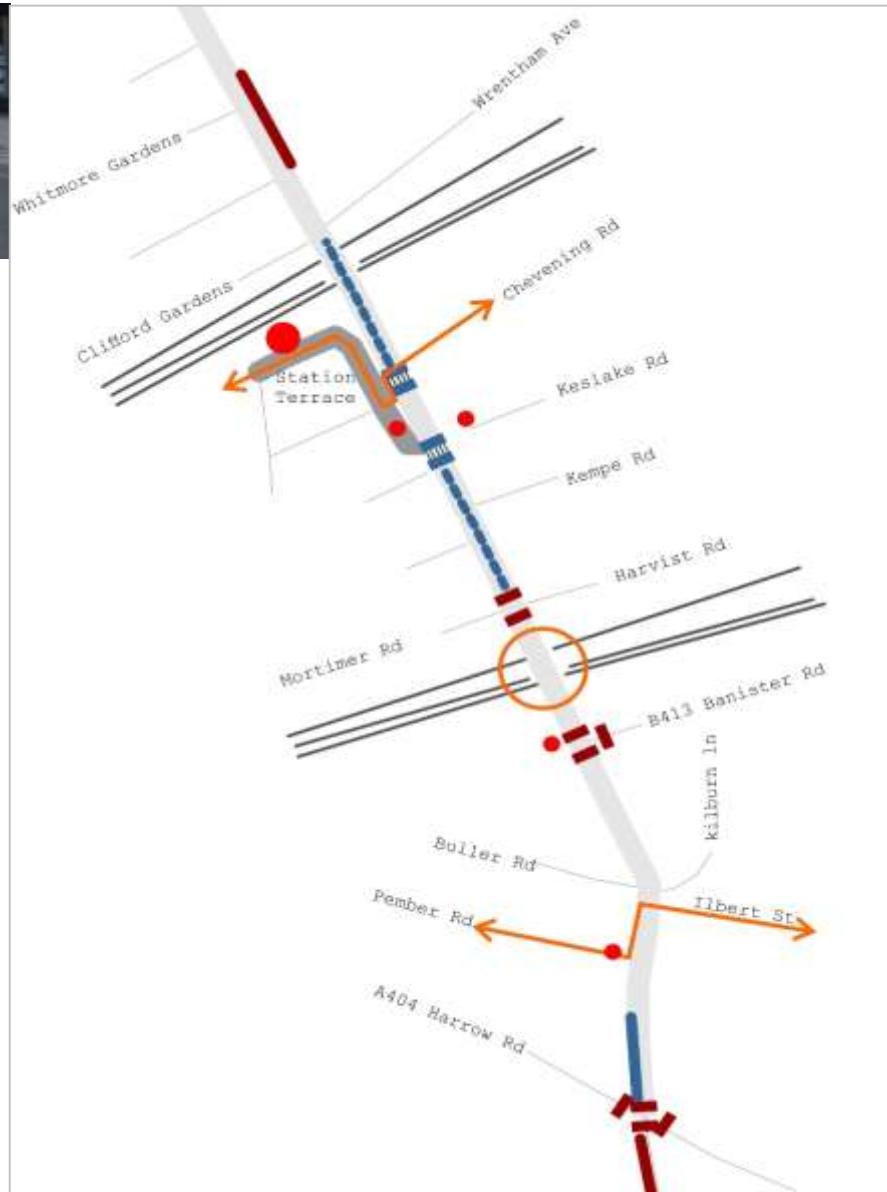
Corridor-Wide Overall Cycling Scheme Recommendations



Opportunities to materially improve conditions for cyclists must be actively considered.

Based on existing good practice, notably TfL cycling design standards, when considering cycling the following principles are recommended:

- Address cyclist hotspots and pinch-points to improve road safety
- Avoid over-complication and use of many different materials
- Carefully consider conditions for disabled and visually impaired pedestrians and design accordingly
- Also consider other users who may be affected by the introduction of cycling infrastructure such as those needing waiting and loading facilities, bus operators etc.



Cycling, Parking and Loading (medium term)

- Review parking and loading restrictions and where possible amend to restrict parking and loading activity outside of peak journey times (7am – 10am and 4pm – 7pm) to improve cyclist movement, reducing pinch-points and improving road safety on the corridor.

Carriageway Pinch-Points (short to longer term)

- Remove existing cycle lane facilities on Station Terrace as they are both confusing and (from observation) infrequently used by cyclists (short term)
- Address carriageway pinch-points, notably on the railway bridge and at junctions to improve cyclist road safety (medium term (3-5 years))
- Consider the removal of the carriageway centre line where there is insufficient width to accommodate cycling infrastructure, notably on Chamberlayne Road near Station Terrace (longer term)

Cycle Routes (medium term)

- Extend the northbound cycle lane on the exit from the Harrow Road junction to provide greater safety for cyclists
- Strengthen alternative routes for cyclists to avoid the busy Chamberlayne / Kilburn Lane corridor and access key services, stations and facilities.

Cycle Parking (short / medium term)

- Replace existing cycle parking with TfL recommended cycle stands ensuring parking is located to provide for local needs whilst not compromising business operation, pedestrian access and the public realm
- Where possible introduce secure and sheltered cycle parking near Kensal Rise Station on Station Terrace.

Corridor-Wide Overall Pedestrian Scheme Recommendations

De-cluttering (short term measure)

- o It is recommend that the entire corridor should be de-cluttered, removing unnecessary street furniture and consolidating street signage

Pedestrian countdown (short term) and road junction improvements (longer term measure)

- o Introduce pedestrian crossing countdown at signalised junctions and crossings
- o Ensure the Harrow Road junction is fit for purpose, introducing a pedestrian stage to improve road safety and accessibility, particularly for vulnerable users.

Raised junction (medium term measures)

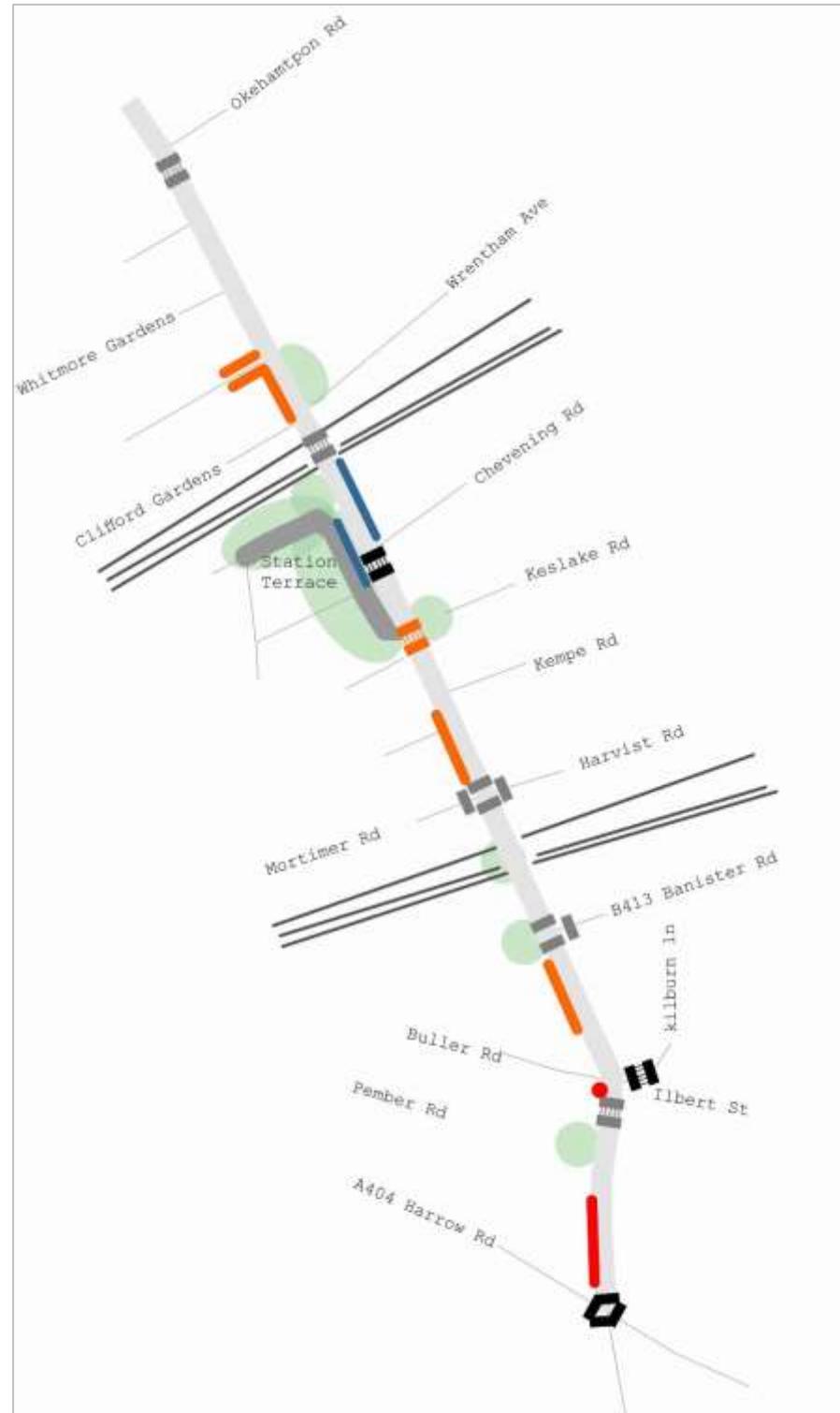
- o Provide a raised table on Station Terrace junction with Chamberlayne Road to improve pedestrian links especially at proximity of local attractors
- o Enhancing the sense of arrival at Kensal Rise station by building-out the footways, improving lighting and seating.

Widen footway (longer term measure)

- o Consider widening the footway between Chevening Road and Wrentham Avenue and on the eastern side of Station Terrace to accommodate wheelchair users, buggy and passengers waiting for buses

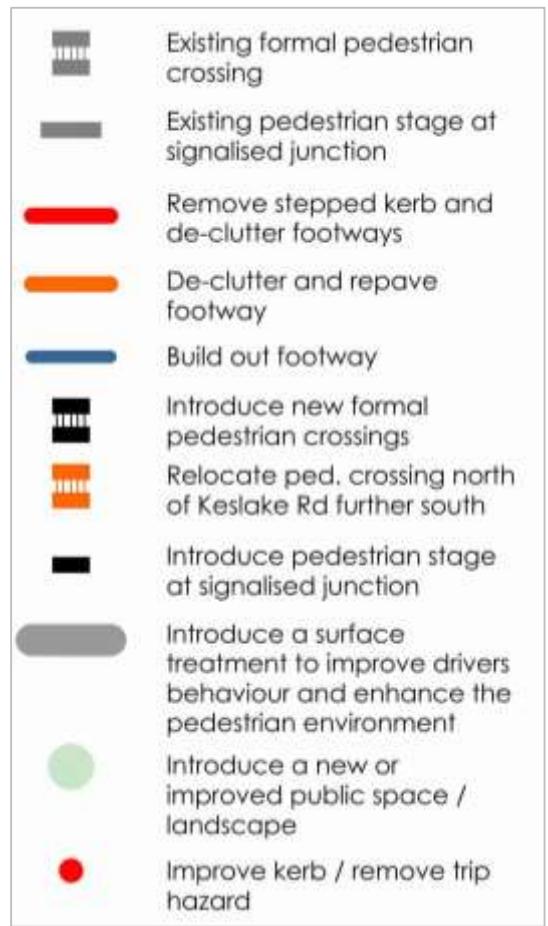
Pedestrian crossings (longer term measure)

- o Introduce two new signalised crossings on Chamberlayne Road in proximity of Station Terrace to provide greater connectivity and accessibility to key services including the station, bus stops and shops.



Indicative Timescales to Implement

- Short Term: 1-2 years
- Medium Term: 2-3 years
- Longer Term: 3-5 years+



Corridor-Wide Public Realm Recommendations

The plan opposite sets out the overall public realm recommendations for the corridor. In line with Brent Council's Placemaking Guide the following approach is undertaken :

- o Coherent and consistent materials are introduced throughout the corridor, including private forecourts
- o Introduce soft landscaping, notably street trees in suitable locations
- o Street furniture (bollards, bins, seating etc.) is kept to a minimum and is of a consistent type / style
- o Where possible licencing agreements are put in place with local businesses, to ensure that private forecourts are properly maintained, refuse is managed and clutter ('A' boards, shop produce etc.) are kept to a minimum.
- o It is recommended that businesses are encouraged to improve shop fronts and where possible, restore facades more in-keeping with the architecture and local heritage
- o Materials, street furniture and soft landscaping should be low maintenance.



Introduce low maintenance road closures which are free from clutter and design out crime (Example: Kilburn, Brent Council's Placemaking Guide)



Indicative Timescales to Implement

Short Term: 1-2 years
 Medium Term: 2-3 years
 Longer Term: 3-5 years+

- Better integrate Kensal Rise station through public realm improvements and wayfinding
- Upgrade road closures. Introduce interesting green spaces which have a positive impact on the wider area
- De-clutter unnecessary street furniture and introduce consistent, easy to maintain footway materials and street furniture throughout Kensal Rise high street area
- Create special, integrated and flexible space to support local businesses, integrate the station and create a sense of community
- Improve shop fronts and private forecourts
- Improve railway bridge facades. Possible opportunity for public art
- Introduce street trees where possible

7. Station Terrace (Zone 4) Options

Station Terrace (Zone 4) Options



This Section

In this section short, medium and long term schemes are set out and appraised to improve the Station Terrace area.

Concept layouts are shown to indicate the level of change that is feasible. The medium and longer term layouts build upon those short-term changes to try and avoid abortive implementation works.

The short, medium and longer term schemes rely on changes to the existing bus stops, routes and operation. These changes are further explained and appraised opposite and over page.

Short Term – Changes to Bus Route 302 Circulation

To address the bus route 302 double circulation within Station Terrace it is recommended that a new bus stop for 302 services is provided on Station Terrace.

In the short term it is recommended that the existing bus stop KR is realigned to improve bus stop accessibility and the pedestrian waiting area.

Medium Term – Bus Route 302 Terminates Elsewhere

Building on those measures introduced in the short term, it is recommended that, where possible, bus route 302 terminates elsewhere on the network. Bus route 302 could potentially terminate at Ladbrooke Grove Sainsbury's, as well as other possible alternatives that would require further review and discussion with London Buses. This would enable the bus stop and bus stand for the 302 to be removed on Station Terrace and greater improvements to the pedestrian environment to be introduced including wider footway and street trees.

Longer term – Bus Stop KR moved to Chamberlayne Road. Bus Services 28 and 452 Terminate Elsewhere

To better integrate Kensal Rise station, shops and provision of extended public space for pedestrians and cyclists on Station Terrace, it is recommended that bus stop KR is relocated to Chamberlayne Road, where bus accessibility and reliability is likely to improve and bus routes 28, 452 terminate elsewhere on the network. This would be subject to further review and examination including discussions with London Buses.

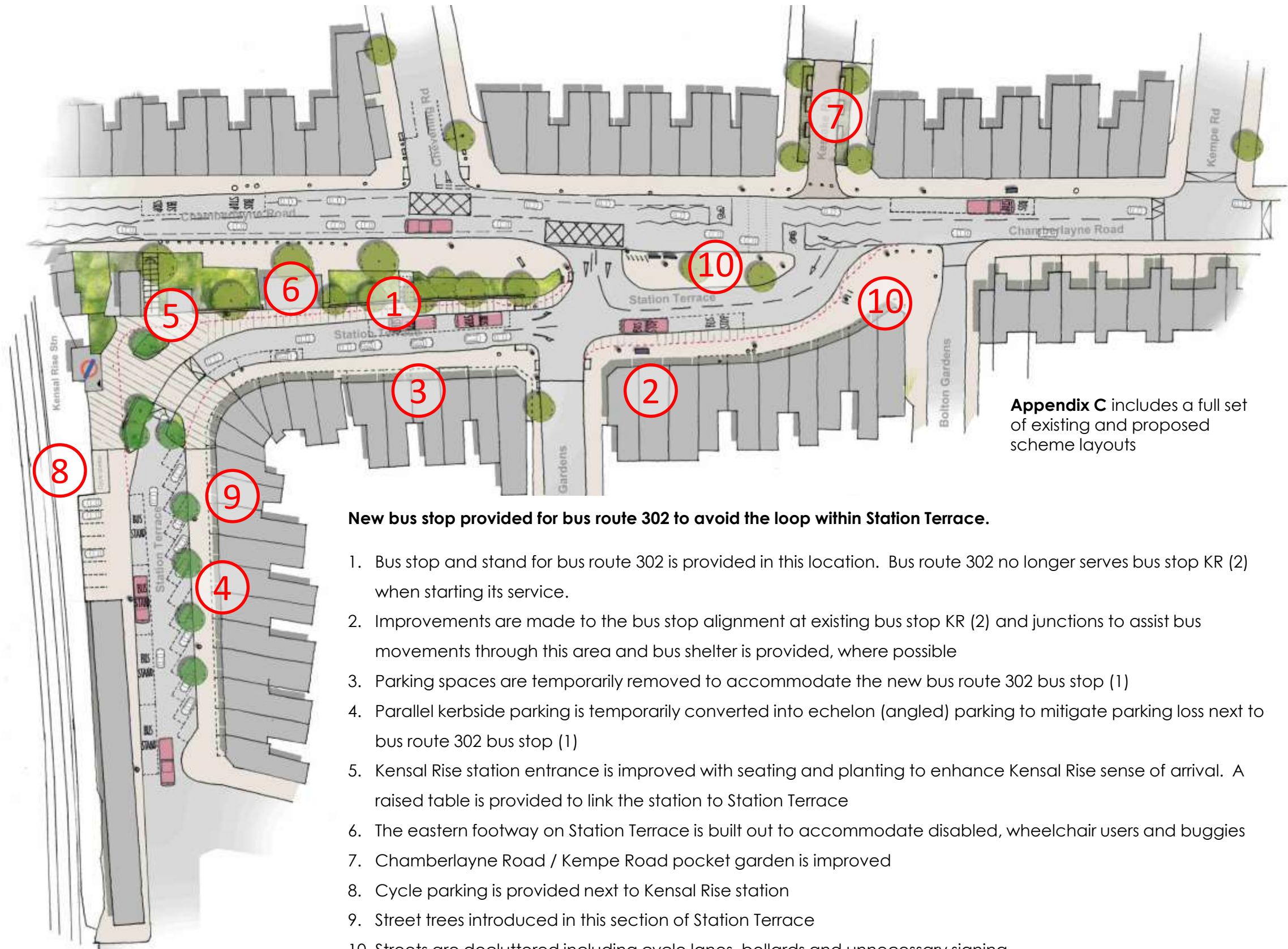
At the time of writing, Transport for London was undertaking a review of bus route 452, and potentially re-routing this service. The coverage of the 452 service also appears to have been revised.

Station Terrace (Zone 4) – The Existing Situation



Appendix C includes a full set of existing and proposed scheme layouts

Station Terrace (Zone 4) – Short Term Indicative Scheme Layout



Appendix C includes a full set of existing and proposed scheme layouts

New bus stop provided for bus route 302 to avoid the loop within Station Terrace.

1. Bus stop and stand for bus route 302 is provided in this location. Bus route 302 no longer serves bus stop KR (2) when starting its service.
2. Improvements are made to the bus stop alignment at existing bus stop KR (2) and junctions to assist bus movements through this area and bus shelter is provided, where possible
3. Parking spaces are temporarily removed to accommodate the new bus route 302 bus stop (1)
4. Parallel kerbside parking is temporarily converted into echelon (angled) parking to mitigate parking loss next to bus route 302 bus stop (1)
5. Kensal Rise station entrance is improved with seating and planting to enhance Kensal Rise sense of arrival. A raised table is provided to link the station to Station Terrace
6. The eastern footway on Station Terrace is built out to accommodate disabled, wheelchair users and buggies
7. Chamberlayne Road / Kempe Road pocket garden is improved
8. Cycle parking is provided next to Kensal Rise station
9. Street trees introduced in this section of Station Terrace
10. Streets are decluttered including cycle lanes, bollards and unnecessary signing.

Station Terrace (Zone 4) – Short Term Scheme – Bus Assumptions

As demonstrated diagrammatically opposite, in the short term, it is recommended that bus route 302 no longer undertakes the figure of eight manoeuvre to access Station Terrace.

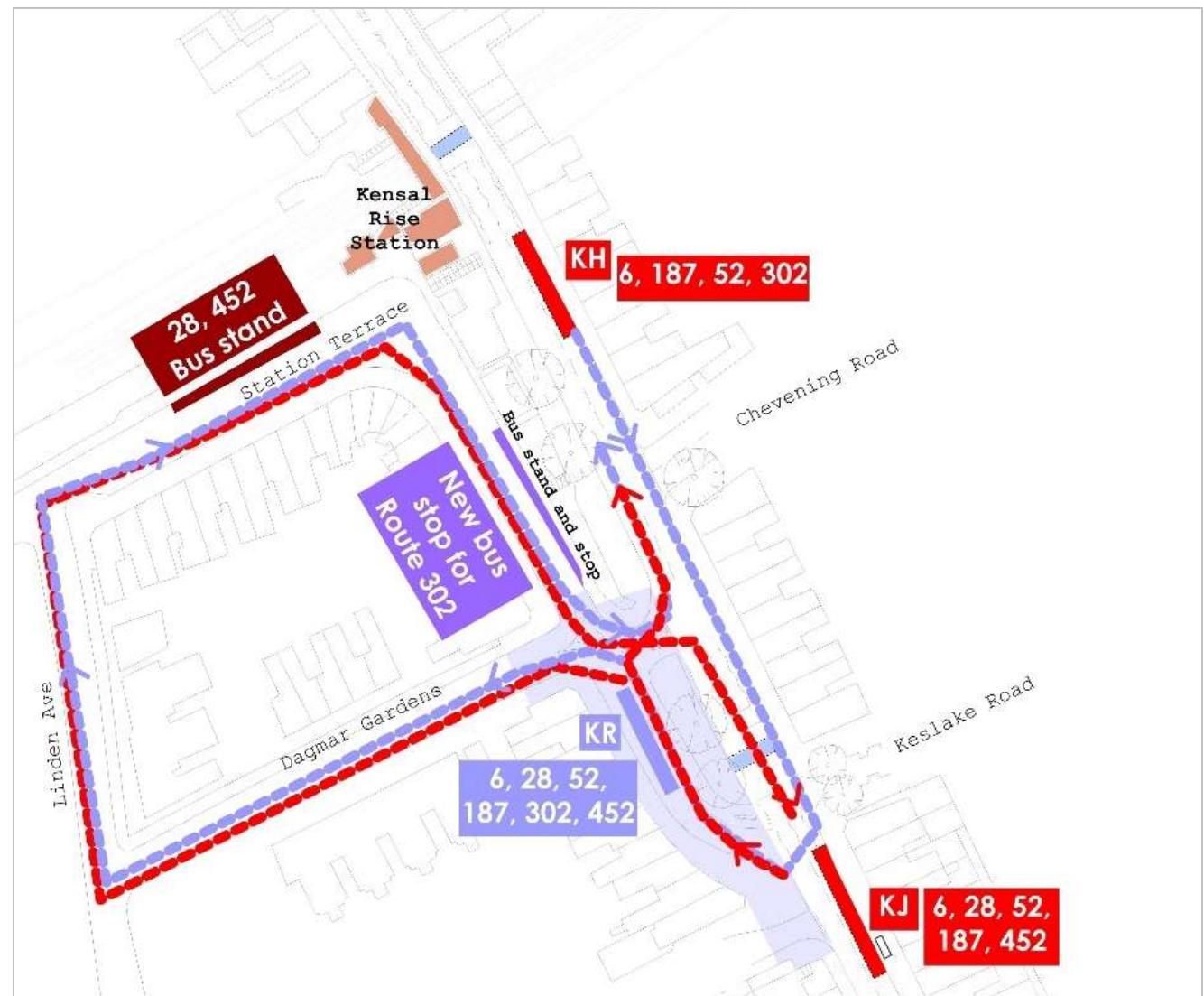
A new bus stop / stand is created for bus route 302 on Station Terrace. Improvements made to Bus Stop KR to improve bus stop accessibility.

Pros

- This scheme starts to address bus reliability through the re-routing of the 302 and creation of a new bus stop for the 302 and improve bus stop accessibility.
- This option would help to alleviate traffic congestion during the peak periods and the impact of buses on business operation and pedestrian environment
- The scheme improves station access from Station Terrace.

Cons

- As part of this option, there is limited ability to improve the public realm (station entrance only) and to help local businesses to operate (parking / loading / outdoor seating etc.) due to the space required for buses and the availability of funding
- This scheme is relatively achievable in the short term at low cost but doesn't resolve the impact of standing / turning buses within Station Terrace.



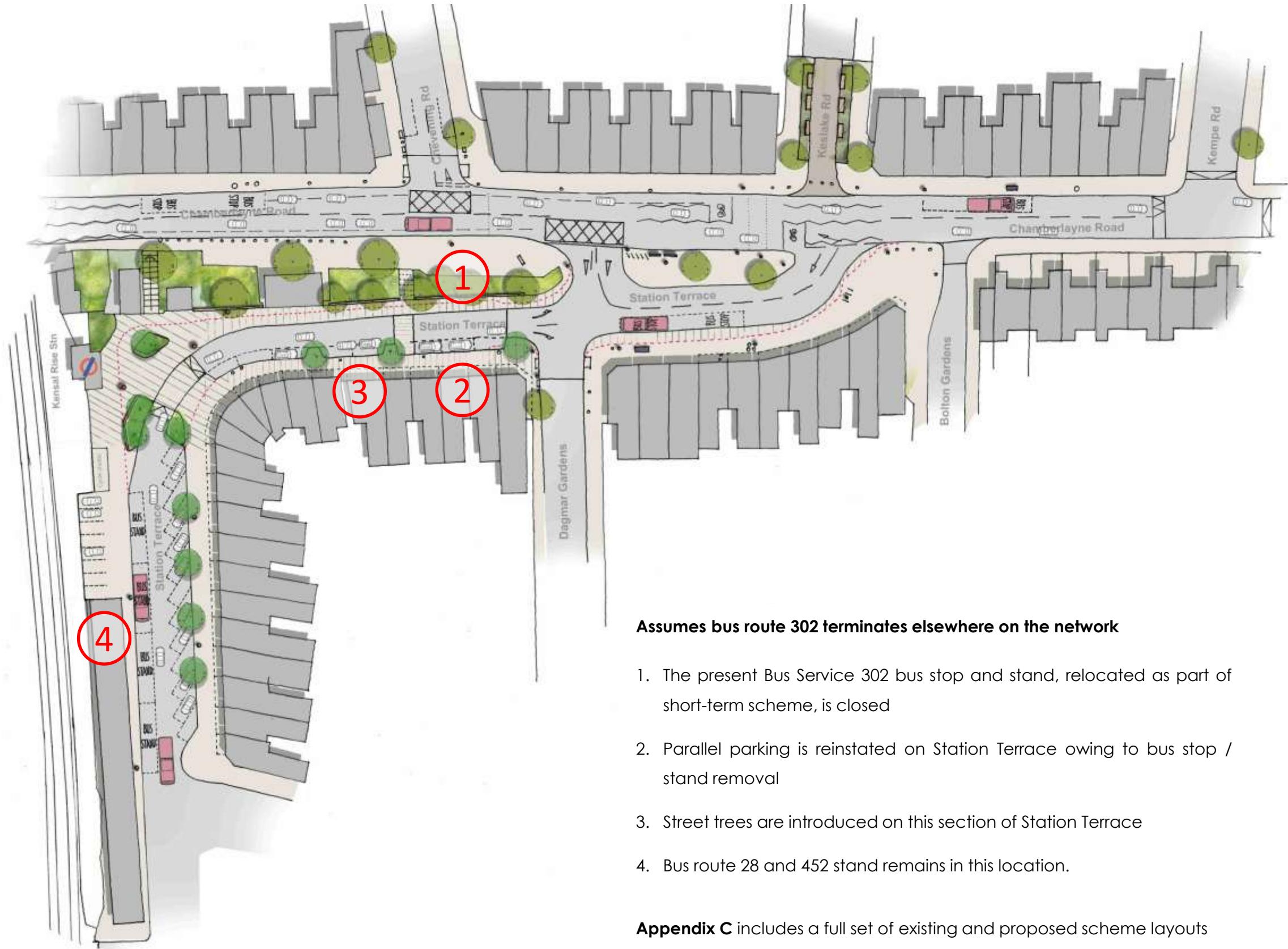
Existing

- Bus stop
- Bus stand
- Pedestrian crossing
- - - Existing bus circulation

Proposed

- New bus stop 302
- - - New bus route 302 circulation
- Bus stop KR alignment and junction improvements. 302 no longer starts its service here

Station Terrace (Zone 4) Medium Term Indicative Scheme Layout



Assumes bus route 302 terminates elsewhere on the network

1. The present Bus Service 302 bus stop and stand, relocated as part of short-term scheme, is closed
2. Parallel parking is reinstated on Station Terrace owing to bus stop / stand removal
3. Street trees are introduced on this section of Station Terrace
4. Bus route 28 and 452 stand remains in this location.

Appendix C includes a full set of existing and proposed scheme layouts

Station Terrace (Zone 4) – Medium Term Scheme – Bus Assumptions

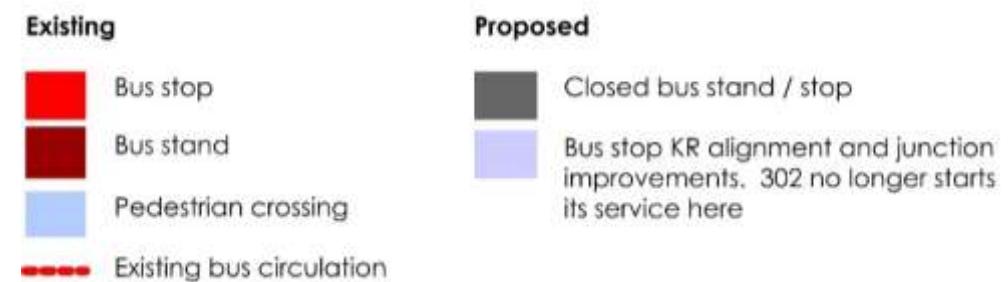
As shown diagrammatically opposite, to achieve the medium term scheme, bus route 302 would be required to terminate elsewhere. The 302 bus stop and bus stand can then be removed on Station Terrace to make way for more footway space and greater public realm improvements within Station Terrace.

Pros

- o 28 and 452 continues to terminate and stand within Station Terrace, but removal of bus route 302 helps to address the impact of buses on the local (residential) streets
- o By reinstating the parallel parking spaces, planting and trees can now be delivered on Station Terrace to enhance the local area.

Cons

- o This option requires bus route 302 to terminate elsewhere on the network. This would require further review by London Buses and TfL, and possibly the need for a business case, which will take time and funding to enable this change.



Station Terrace (Zone 4) Longer Term Indicative Scheme Layout



Assumes bus stop KR is moved to Chamberlayne Road bus routes 28, 302 and 452 terminates elsewhere on the network

1. The northbound bus stop KR is relocated from Station Terrace to the carriageway on Chamberlayne Road opposite. Station Terrace is closed and flexible space provided. Restricted waiting and loading is permitted on this section
2. The existing signalised pedestrian crossing is relocated north of Bolton Gardens
3. A new signalised pedestrian crossing is provided south of Chevening Road to satisfy pedestrian desire line
4. Bus stands for services 28, 302 and 452 are closed. These services terminate elsewhere on the network
5. Significant public realm improvements are introduced for the extent of Station Terrace to tie in Kensal Rise station and shops and provide flexible space for pedestrians and businesses to operate. Waiting and loading is restricted within this area
6. Bus stop KJ is relocated slightly further towards Kempe Road to make way for the new signalised pedestrian crossing. Bus route 6, 187 and 52 no longer serve bus stop KJ due to 100m proximity to KH to help smooth traffic and improve bus stop reliability
7. Bus routes 28 and 452 don't serve bus stop KH
8. Eastern footway of Chamberlayne Road is widened and three new shared loading / parking bays are provided
9. Centre lines are removed to improve cycling safety
10. Cycle parking provided at station (loss of station parking).

Appendix C includes a full set of existing and proposed scheme layouts

Station Terrace (Zone 4) – Longer Term Scheme – Bus Assumptions

As part of a potential longer term scheme, as shown diagrammatically opposite, bus stop KR would be relocated to Chamberlayne Road and where possible, bus routes 28 and 452 are terminated elsewhere on the network. This would be subject to a comprehensive review and discussions with London Buses and Transport for London.

Pros

- This scheme enables greater integration of Kensal Rise station with the wider area, creating a much more pedestrian and cyclist friendly environment for commuters, visitors, residents and businesses
- Relocation of the bus stop KR is likely to improve bus stop accessibility and reliability considerably as a dedicated fully accessible bus stop facility could be provided on Chamberlayne Road. Buses would no longer have to enter and leave the Station Terrace service road area, which currently causes delay to buses during busy times
- The removal of the bus stands in station terrace will enable much wider footways to be introduced, street trees, parking including potentially taxis
- This scheme would benefit local businesses and residents substantially, with more space becoming available for public space, shop forecourts and events, notably on the section of Station Terrace opposite Chamberlayne Road (where Tesco Express is currently situated).

Cons

- This option requires strategic changes to bus operation. This would require detailed consideration by London Buses and Transport for London, and is likely to be time consuming due to the need to renegotiate contracts and undertake business cases.



8. Zone 4 Station Terrace Area (Long Term) Visualisations

Longer Term - Chamberlayne Road Visualisation



- o The section of Station Terrace next to Chamberlayne Road is closed. Bus Stop KR is relocated to Chamberlayne Road and a high quality fully accessible bus stop waiting area is provided
- o Seating and planting is introduced on Station Terrace
- o Access for deliveries on Station Terrace is maintained but restricted to certain times to mitigate conflicts with other users
- o Additional pedestrian crossing provided on Chamberlayne Road.



Longer Term – Kensal Rise Station Visualisation



- o Greater space is provided for pedestrians (wider footways), cycling, businesses and station users. Trees are introduced throughout. Secure and sheltered cycle parking is provided close to the station entrance



Longer Term – Station Terrace Visualisation

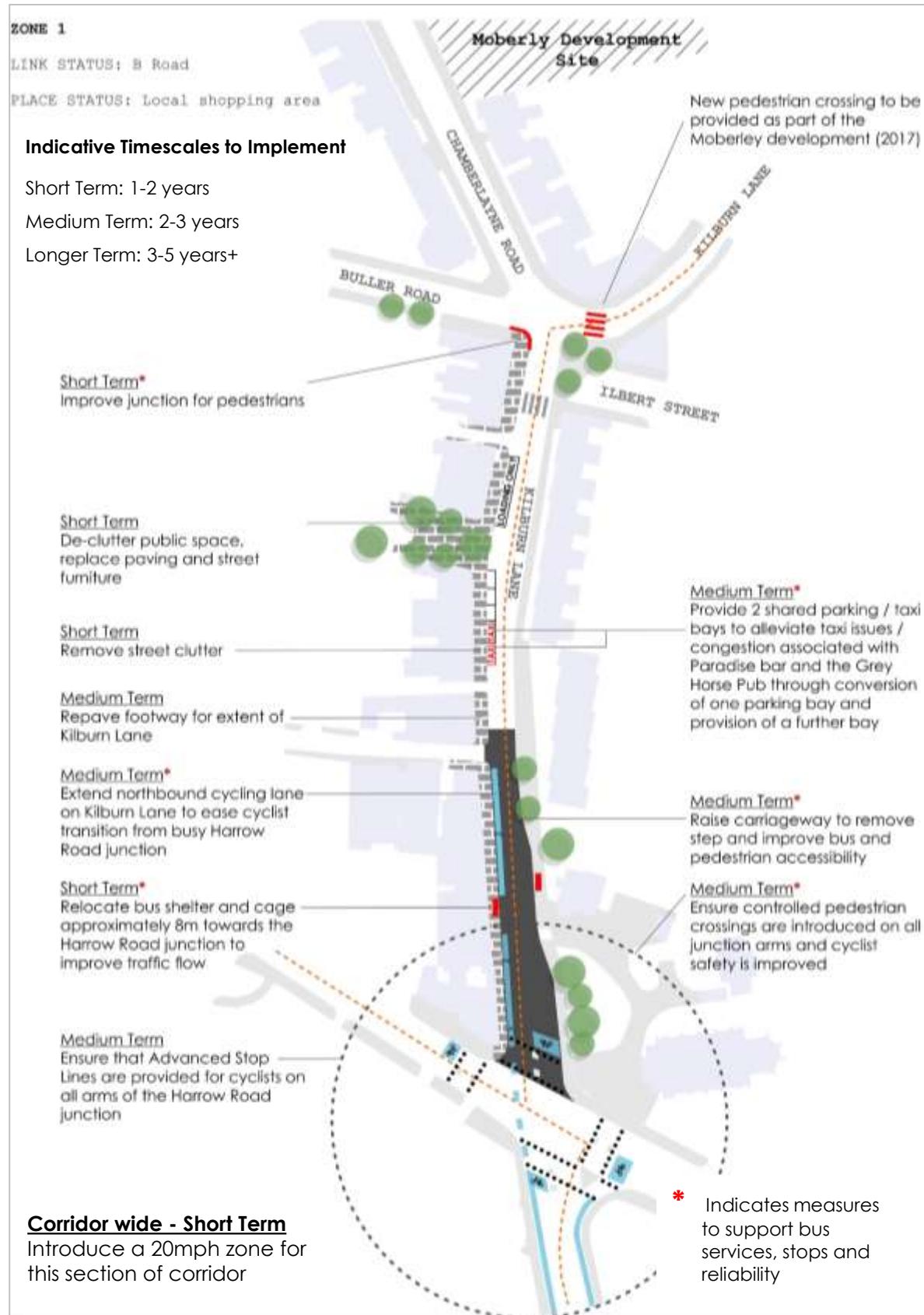


- Greater space is provided for pedestrians through wider footways and relocation of parking
- Street trees and planting are introduced to provide a more pleasant, less vehicle dominated space.



9. Corridor-Wide Options (by zones)

Zone 1 Identified Options

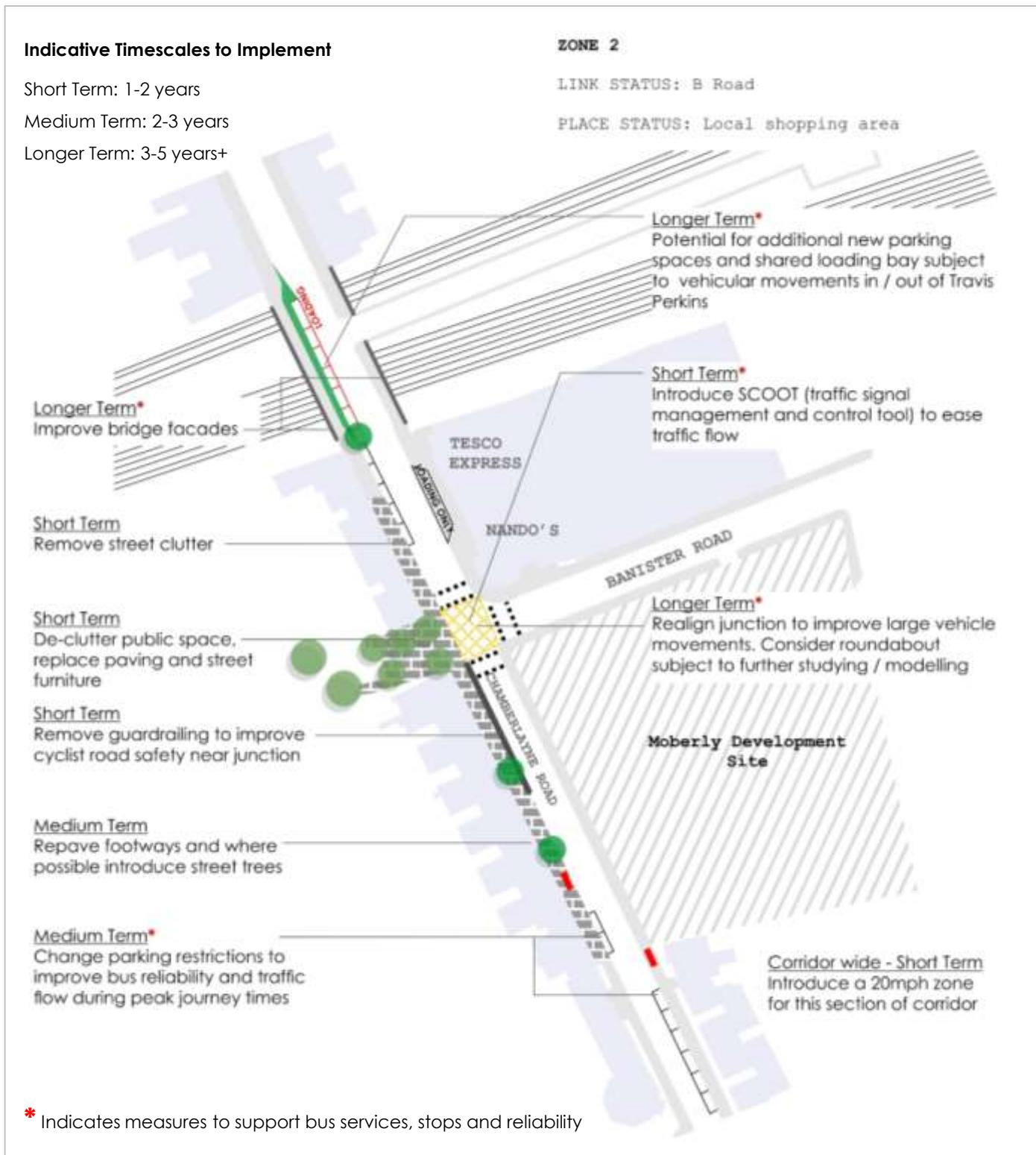


Before: Elizabeth Street, Mayfair (BDP / Urban Flow)



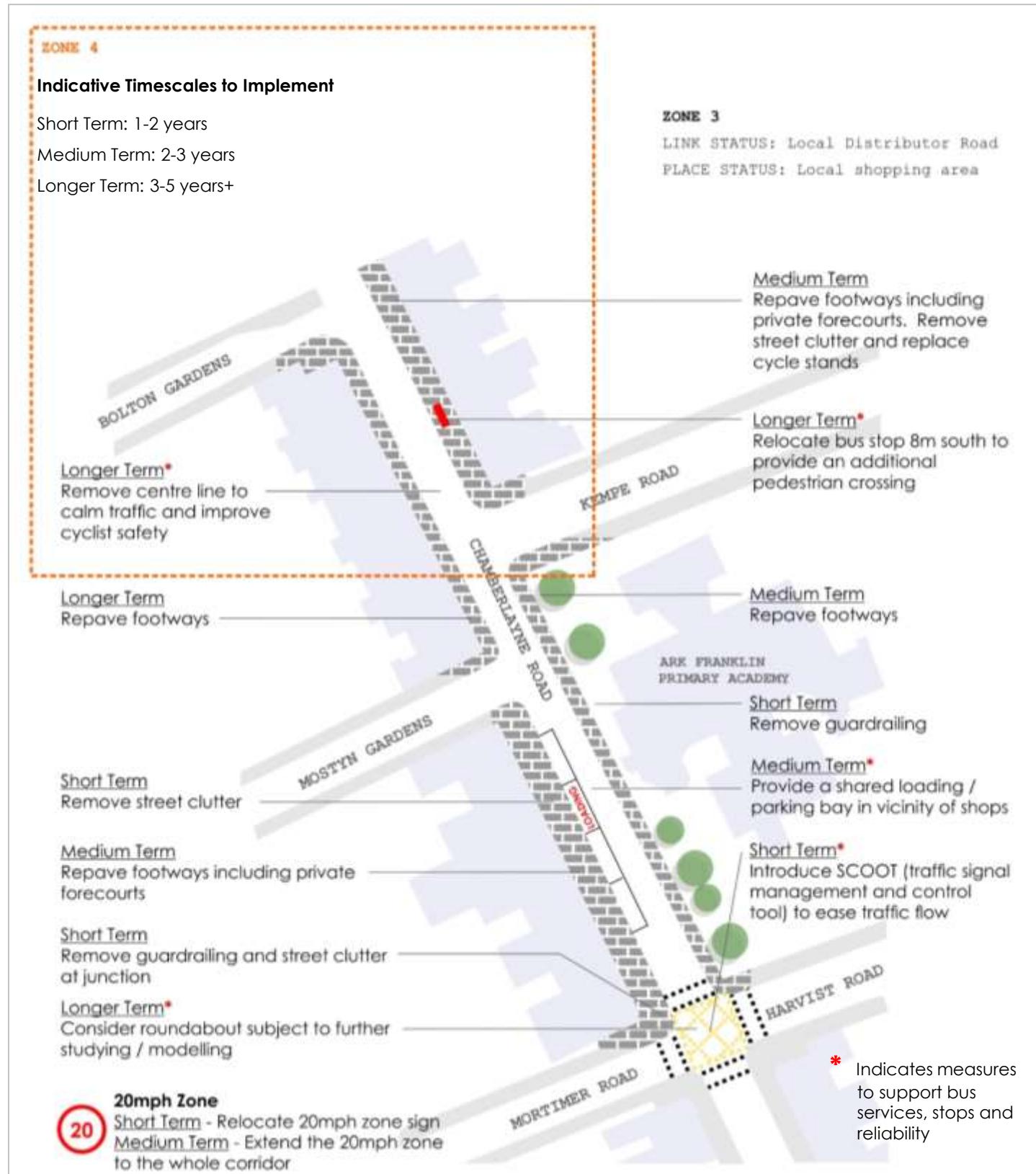
After: Elizabeth Street, Mayfair (BDP / Urban Flow)

Zone 2 Identified Options



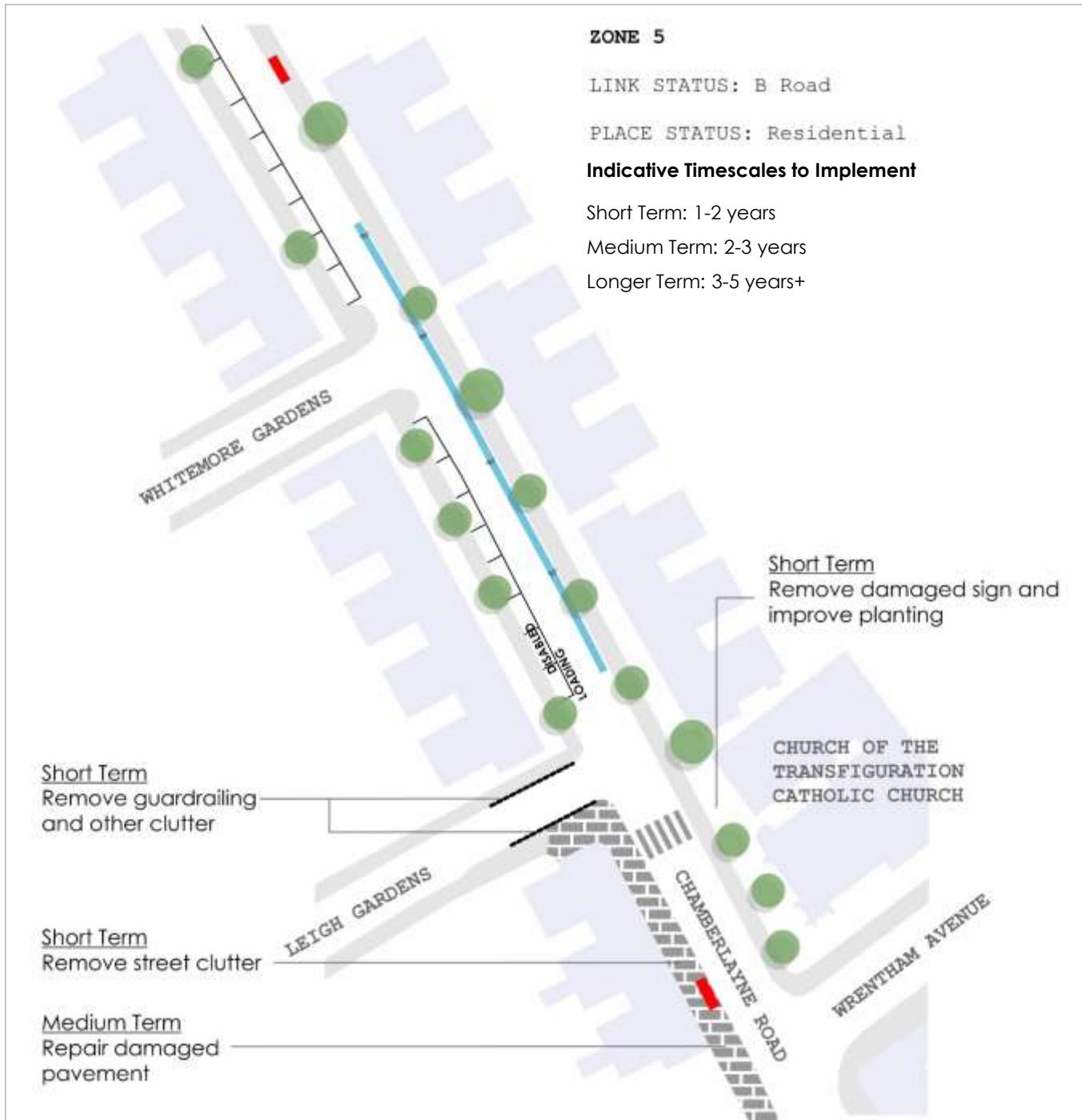
Various example of bridge art

Zone 3 Identified Options



Example of street clutter removal and improvements to private forecourts on a busy road (BDP Mayfair Public Realm Scheme)

Zone 5 Identified Options



Sustainable / low maintenance planting

10. Precedents

Precedents – A Flexible Street Environment



Flexible streets that enable pedestrians businesses to operate, deliveries and vehicles to access with ease



Rationalised parking, loading and traffic management regime to ease movement and assist the local businesses



BEFORE



AFTER

Centre lines removed - TfL Streetscape Guidance to improve cyclist road safety where there is insufficient space for infrastructure



Simple, durable materials that provide value for money and easy to maintain

Precedents – A welcoming sustainable transport environment



Legible, fully accessible station environment that encourages walking and cycling



Legible London Signing



Sheltered Cycle Parking



Fully accessible well laid out bus stops



Sense of arrival and interchange

Precedents – A greener and more pleasant environment



Introduce single stem trees to allow clear views for turning vehicles. Use a simple, low maintenance and strong planting palette to create all year-round interest, such as grasses, perennials and shrubs



Introduce multi-stem trees near the entrance to the station. These could be lit-up to provide an attractive arrival space after dark. Low maintenance should be a key design consideration.

11. Indicative Costs and Next Steps

Delivering Value for Money – Indicative Costings

The scheme(s) is intended to make a substantial and meaningful difference to the local area and help stimulate change, sustainable movement and a sense of local place. However, there is a need to ensure the degree of change provides value for money in helping the Council to seek and secure the necessary funding in an uncertain economic climate. Sustainability and lifetime costs are also a key factor to ensure the scheme continues to create impact without significant maintenance costs attached.

Station Terrace (Zone 4)

Short / Medium Term Scheme Indicative Costs

It is recommended a sum of between **£500,000 and £650,000** is assigned to implement a scheme within the Station Terrace area. This figure is likely to increase if a staged approach (short then medium term scheme) is pursued, particularly the more time that lapses between schemes.

Station Terrace (Zone 4)

Longer Term Scheme Indicative Costs

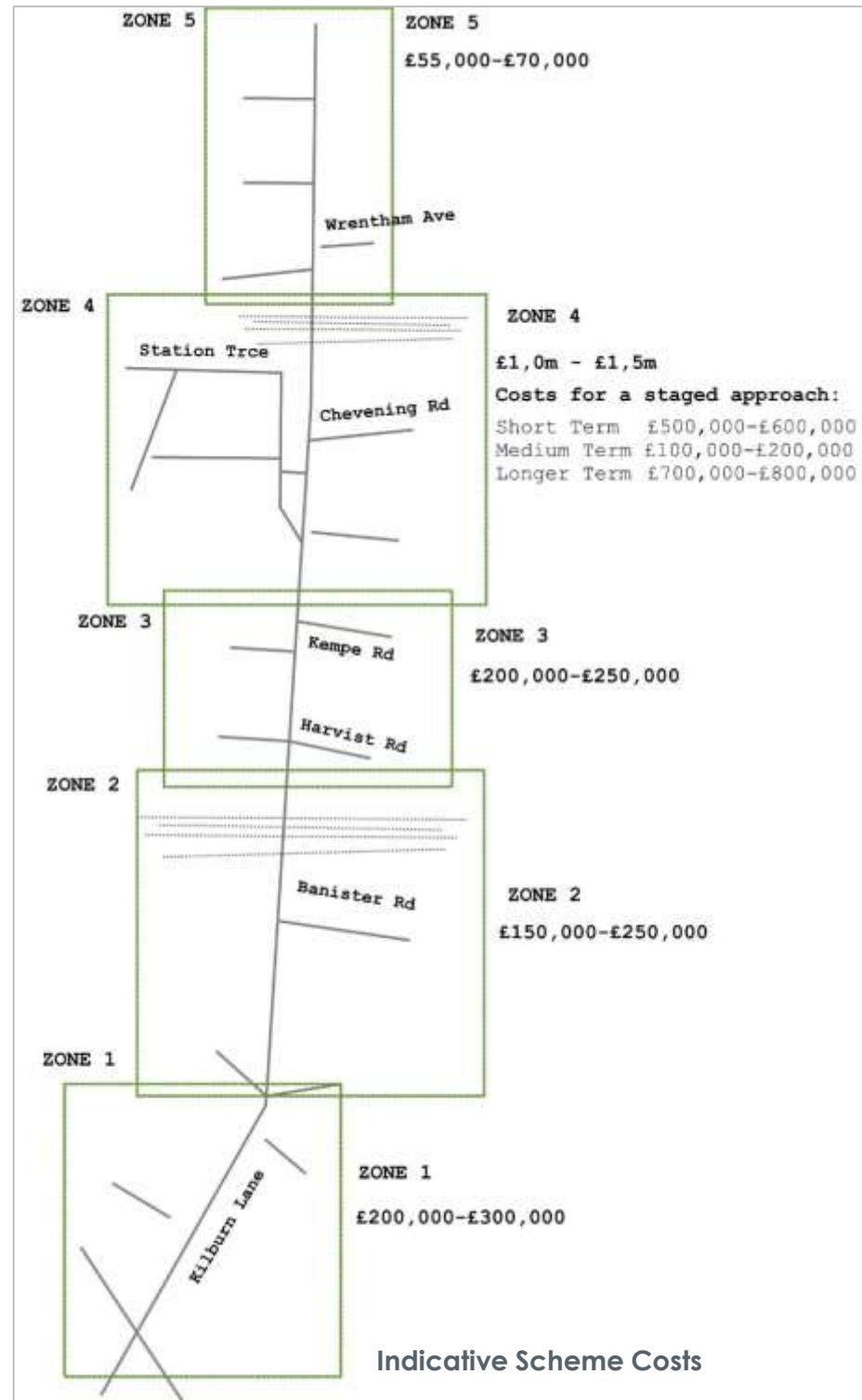
It is a recommended between **£1m and £1.5m** is budgeted to implement the longer term scheme.

If a staged approach is undertaken to achieve the longer term scheme then this figure is likely to increase and result in further disruption to the local community. This figure is likely to be in the order of £1.5m.

However, if the longer term scheme could be implemented in a single stage, an indicative budget of approximately £1m is suggested.

The Wider Corridor (Zones 1, 2, 3 and 5)

An indicative budget of between **£650,000 and £850,000** is to appropriate for the identified measures and recommendations (excluding significant changes to junctions / modelling) along the corridor. Costs will be significantly reduced (approximately £650,000) if implemented in a single stage.



Cost Assumptions

The indicative budget ranges include design fees, consultation, surveys, preliminary investigations of 15%, and a 20% contingency.

These costs are based on implementing standard paving with a low to medium cost range (£250 to £350 per sqm.). This cost range may be higher or lower depending on choice of materials, lighting, utility diversions / protection, and specifications etc. These costs would be reviewed in greater detailed as part of scheme development to ensure value for money.

In all instances, traffic modelling is excluded, however it is not envisaged that modelling would be required to implement a scheme in Station Terrace. Modelling would be required if the Harvist Road and Banister Road undergo significant changes i.e. a roundabout is investigated as an option.

The costs exclude any measures modelled or implemented at the Harrow Road junction as well as any required bus-related work / business cases for the corridor.

It is recommended that a cost consultant / Brent Council's Highway team review the costs and prepare an outline cost schedule prior to applying for funding.

Next Steps

The report outlines the first stage in the process of design development, technical analysis, surveys, consultation and funding identification before the scheme can be implemented.

Short-Term Steps

In the short term, there are a number of key tasks that will need to be undertaken by the Council and key stakeholders to progress this project further, these include:

- o Discussing the issues and emerging concepts with Transport for London, London Buses and other key technical stakeholders
- o Identify funding streams - at the time of writing Transport for London was undertaking a spending review and with a new Mayor in place there was uncertainty regarding future funding for transport schemes.

Medium / Longer Term Steps

Only when the above tasks have been undertaken, and it is clear that there is sufficient funding available to develop the project and implement a scheme, will the Council pursue further work. If successful, the following key tasks will then need to be undertaken:

1. Determine what schemes and recommendations to take forward to further design phase.
2. Surveys (statutory undertakers surveys, land registry, traffic surveys, parking surveys, road safety audits)
3. Design development (preparation of feasibility plans and strategies including materials, planting, lighting, de-cluttering)
4. Technical and local community engagement and consultation
5. Approvals and sign-offs (TfL, London Buses, Brent Council, other stakeholders etc.)
6. Detailed designs and sign-offs
7. Implementation, including all production drawings, schedules and specifications of materials.

The Role of the Community

The local community played an important role in this project. Building on this, it is recommended that a community group is set up to champion the local area.

The group should aim to bring together local residents, businesses, local schools, faith groups and other key stakeholders to actively promote the corridor. This group could then obtain funding to help in the maintenance of the corridor, for example planting, waste management and shop front improvements as well as street events.

A positive, active and engaged local community group who champion the proposed scheme, will significantly benefit it's development, potential access to funding and overcome technical challenges, that the Council cannot solve with out significant support from the local community.





urban
flow
movement people places

DECK
SOCIAL
BDP.

 **Brent**