

SQA-8569 - Scheme Impact Report (SIR)

Kings Road - Beaufort Street - Fulham Road - Beaufort
Street Additional pedestrian facilities

June 2020



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Purpose

The Scheme Impact Report (SIR) is to be used to identify the impact of implementing a scheme on the network. This allows either the Promoter or Sponsor to provide all of the required information to the Network Impact Specialist Team (NIST) to make an informed decision on the project as part of the TMAN process.

The Scheme Impact Report (SIR) will be initiated and submitted by the scheme Sponsor / Promoter. Engineering Service Signals will complete the Signals Design Technical Assurance section. The SIR is then handed to Network Performance Delivery to inform on the integrity of the modelling and network impact. Once complete, the SIR is handed back to the sponsor/client who will then submit the scheme to NIST for approval.

A SIR must be completed for all schemes planned for implementation on the Transport for London Road Network (TLRN), Strategic Road Network (SRN) and on borough roads if bus operation is also impacted.

Scheme types:

- Significant changes to large sections of the network
- Major schemes including an aggregation of schemes in an area
- Large schemes
- Small to medium schemes - localised impacts
- Low impact schemes

All of these scheme types require a SIR to assess the impact on the network.

Reference documents

Document Number	Document Title
SQA-0448	Signal Design Review Sheet
SQA-0064	Design Standards for Signal Schemes in London
SQA-0184	Model Audit Process (MAP) Overview

Document Control for Scheme Submission

Version	Date	Prepared by	Reviewed by	Approved by
1	12/06/2019	██████		



Scheme Overview

Executive Summary

Royal Borough of Kensington & Chelsea are proposing to improve walking at the location of Kings Road - Beaufort Street with the introduction of additional pedestrian facilities in line with Healthy Street and vision zero. The proposal is to incorporate new pedestrian crossing facilities on north and south side of Beaufort Street.

Walking Additional pedestrian facilities are being proposed on the north and south of Beaufort Street.		Positive
Cycling ASL are being updated to be in line with the latest standards		Positive
Bus Network Journey times are expected to remain broadly similar to existing.		Positive & Negative
Freight & Servicing Traffic on Kings Road eastbound will be prohibited from turning left		Positive & Negative
General Traffic Traffic on Kings Road eastbound will be prohibited from turning left		Positive & Negative
Taxis Traffic on Kings Road eastbound will be prohibited from turning left		Positive & Negative

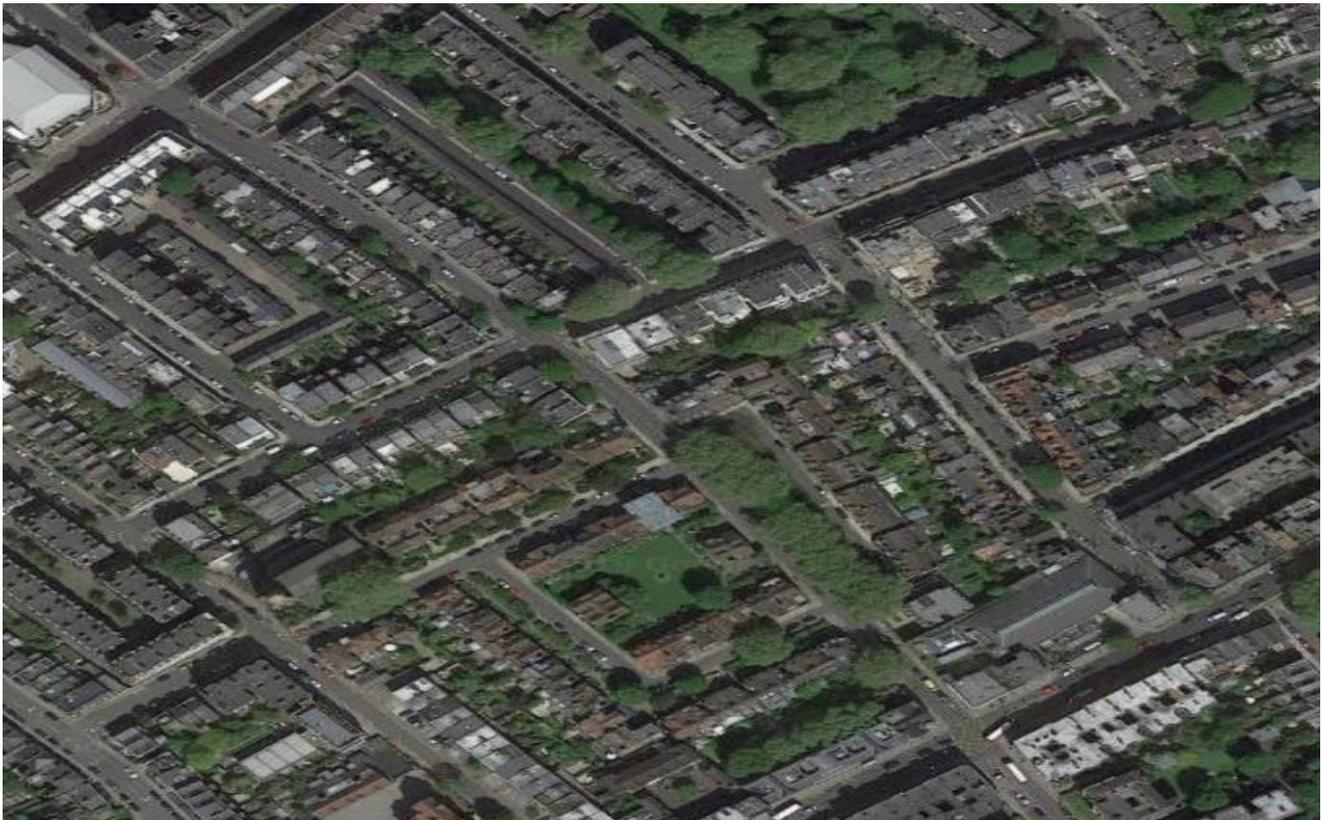
RSPG

RSPG Version	Changes	Date
I		



Scheme Summary

Name:	Kings Road - Beaufort Street - Fulham Road - Beaufort Street Additional pedestrian facilities		
Type of scheme:	Large Scheme		
Main borough:	Kensington & Chelsea	Road Network:	SRN
Location & scope of works:	Kings Road - Beaufort Street & Fulham Road - Beaufort Street - Additional pedestrian facilities to be added at both junctions		



Scheme objective (from Scheme Brief form):	These two junctions are on popular shopping streets, the Kings Road junction currently provides signal controlled pedestrian crossing facility on one arm (King's Road- eastern). The proposal suggests the addition of the following: 1- a signalised crossing facility on the northern arm; 2- a banned left turn from King's Road into Beaufort Street to facilitate the pedestrian facility in (1); 3- provide a signalised staggered pedestrian crossing on the southern arm (Beaufort Street) with appropriate stop lines; 4- adjust all ASLs to correct depth. The Fulham Road - Beaufort Street Junction currently has no pedestrian facilities and the proposed is to install crossing points over each approach as an all red period. Were also adjusting all ASLs to correct depth
Scheme justification & benefits (from Scheme Brief form):	Improving the environment and safety for pedestrian is a key outcome for Royal Borough of Kensington & Chelsea and aligns with TfL Healthy Streets and Vision Zero. It will encourage walking and cycling while mitigating where possible the impact on Bus journey times. There is a constant demand from residents to improve pedestrian facilities at this location.
Changes to scheme brief	





Engineering Services: Safety checks

Designs approved in principle:	Yes
Both designs have passed Stage 2 Signal Safety Check. Approved drawings are PRO/12/000018/08 and PRO/12/00048/07. No issues were identified with the proposals.	

Safety review (including safety timings:	Yes
Buildability Review:	Yes
Maintainability Review:	Yes

Comments or additional supplementary information:
Duct surveys required at both sites to determine existing condition of ducts/pits and what new ducting/pits will be needed. TO required for the banning of the left turn from King's Road into Beaufort Street N/B.

<p><i>Signal Design Technical Assurance of design drawings listed in Appendix.</i></p> <p><i>This Assurance constitutes "Approval in Principle". Full Engineering Services Technical Approval of the Signals Design will be given in detailed design.</i></p> <p><i>Changes to layout or facilities following public consultation or in detailed design may affect the timings, buildability, maintainability and safety assessment of the design(s).</i></p> <p><i>Prohibited movements require Traffic Management Orders prior to implementation.</i></p>



Model Integrity

Modelling in line with MAP standards:

LMAP	N/A	TMAP	N/A	VMAP	Yes	AMAP	N/A
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Date of traffic flow data:

25-Apr-17

Traffic peak times modelled:

AM peak	Off peak	PM peak	Weekend
0800-0900		1715-1815	

Strategic modelling undertaken:

ONE	No	Other	N/A	<i>If "Yes", please specify here</i>
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Scenarios modelled:

Base	Yes	Future Base	No	Do Something	Yes
Other	<i>Please specify here</i>				

Feasibility modelling undertaken in Linsig:

<i>If "Yes", please specify here</i>

Model Library Links:

Modelling vs. Reality (MvR)

How will the scheme be assessed for modelling vs. reality?

Degree of saturation	N	Journey times (general traffic)	N
Queue lengths	N	Journey times (buses)	Yes
Traffic counts	N		

Has base modelling vs. reality data been collected, or is data available?

<i>If "Yes", please specify here</i>

Estimated dates for:

Base modelling vs. reality assessment		Post-implementation MvR assessment	
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Key modelling assumptions/exceptions



Strategic Modelling

Has Strategic Modelling been undertaken for this scheme?	No
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Network Impact Assessment:

Walking



Positive

The scheme provides additional pedestrian facilities without increasing pedestrian waiting times at the junction of Kings Road and Beaufort Street, providing signals across three out of the four arms of the junction. There is a slight change to the cycle time at Fulham Road / Beaufort Street, although during the implementation of the scheme, the network manager will try and keep the cycle time the same as the neighbouring junctions if possible, increasing the cycle time only if there is a significant delay to buses.

Region/Area	Cycle Time (s)					
	AM Peak		Off-peak		PM Peak	
	Base	DS	Base	DS	Base	DS
Kings Road / Beaufort Street	88	88			88	88
Fulham Road / Beaufort Street	88	96			88	96

Average pedestrian maximum wait times and journey times

AM Peak		Average ped max wait times (s)		
Location		Base Model	Do Something	Difference

Average pedestrian maximum wait times and journey times

PM Peak		Average ped max wait times (s)		
Location		Base Model	Do Something	Difference



Network Impact Assessment:

Cycling



Positive

This is not specifically a cycling scheme, however, the design does include Advanced Stop Lines which provide space for cycles to wait ahead of general traffic.





Please note: the modelling results are taken from the joint VISSIM model which assessed the impact of the pedestrian improvements at Fulham Road/Beaufort Street and the pedestrian improvements at Kings Road/Beaufort Street. Routes have been extracted pertinent to the Kings Road/Beaufort Street junction.

Overall, the impact of the changes at the junction of Kings Road and Beaufort Street do not result in major changes to bus routes, with minor increases in journey times for some bus routes, and minor decreases for other bus routes.

AM Peak

Route description	Direction	Frequency (bus/hr)	JT Time Bands (mins)		
			Base Model	Do Something	Difference
Route 11	East	6	5-10 mins	5-10 mins	0-30 secs
Route 11	West	6	3-5 mins	3-5 mins	0-30 secs
Route 14	East	8	5-10 mins	5-10 mins	0-30 secs
Route 14	West	8	3-5 mins	3-5 mins	0-30 secs
Route 19	South	8	0-1 mins	0-1 mins	-(0-30) secs
Route 19	North	8	2-3 mins	2-3 mins	-(0-30) secs
Route 22	East	8	5-10 mins	5-10 mins	0-30 secs
Route 22	West	8	3-5 mins	3-5 mins	0-30 secs
Route 49	North	8	2-3 mins	2-3 mins	-(0-30) secs
Route 49	South	8	0-1 mins	0-1 mins	-(0-30) secs
Route 211	East	5	5-10 mins	5-10 mins	0-30 secs
Route 211	West	5	3-5 mins	3-5 mins	0-30 secs
Route 319	North	6	2-3 mins	2-3 mins	0-30 secs
Route 319	South	6	0-1 mins	0-1 mins	0-30 secs
Route 328	South	6	3-5 mins	3-5 mins	0-30 secs
Route 328	North	6	5-10 mins	5-10 mins	0-30 secs
Route 345	North	7	3-5 mins	3-5 mins	0-30 secs
Route 345	South	7	2-3 mins	2-3 mins	-(0-30) secs
Route 414	East	8	5-10 mins	5-10 mins	0-30 secs
Route 414	West	8	3-5 mins	3-5 mins	0-30 secs

PM Peak

Route description	Direction	Frequency (bus/hr)	JT Time Bands (mins)		
			Base Model	Do Something	Difference
Route 11	East	6	5-10 mins	5-10 mins	-(30-60) secs
Route 11	West	6	3-5 mins	3-5 mins	0-30 secs
Route 14	East	8	5-10 mins	5-10 mins	0-30 secs
Route 14	West	8	3-5 mins	3-5 mins	-(0-30) secs
Route 19	South	8	0-1 mins	0-1 mins	0-30 secs
Route 19	North	8	2-3 mins	2-3 mins	0-30 secs
Route 22	East	8	5-10 mins	5-10 mins	-(0-30) secs



Route 22	West	8	3-5 mins	3-5 mins	0-30 secs
Route 49	North	8	2-3 mins	2-3 mins	0-30 secs
Route 49	South	8	0-1 mins	0-1 mins	-(0-30) secs
Route 211	East	5	5-10 mins	5-10 mins	-(0-30) secs
Route 211	West	5	3-5 mins	5-10 mins	0-30 secs
Route 319	North	6	2-3 mins	2-3 mins	0-30 secs
Route 319	South	6	0-1 mins	0-1 mins	0-30 secs
Route 328	South	6	3-5 mins	3-5 mins	-(0-30) secs
Route 328	North	6	5-10 mins	5-10 mins	-(1-2) mins
Route 345	North	7	3-5 mins	3-5 mins	30-60 secs
Route 345	South	7	3-5 mins	3-5 mins	0-30 secs
Route 414	East	8	5-10 mins	5-10 mins	0-30 secs
Route 414	West	8	3-5 mins	3-5 mins	0-30 secs



Network Impact Assessment:

Freight & Servicing



Positive &
Negative

There is no significant impact of general traffic journey times so therefore the impact of Freight and Servicing is fairly neutral.



General Traffic



Positive & Negative

Overall, general traffic journey times are comparable to existing journey times, with some journey times expected to be slightly lower than existing journeys.

AM Peak

Route description	Direction	JT Time Bands (mins)		
		Base Model	Do Something	Difference
West Cross Route SB		5-10 mins	5-10 mins	0-30 secs
West Cross Route NB		5-10 mins	5-10 mins	0-30 secs

PM Peak

Route description	Direction	JT Time Bands (mins)		
		Base Model	Do Something	Difference
West Cross Route SB		5-10 mins	5-10 mins	-(1-2) mins
West Cross Route NB		5-10 mins	5-10 mins	-(30-60) secs



Network Impact Assessment:

Taxis



Positive &
Negative

There is no significant impact of general traffic journey times so therefore the impact on Taxis is fairly neutral.



Final Summary

					
Walking	Cycling	Bus Network	Freight/Service	General Traffic	Taxis
Positive	Positive	Positive & Negative	Positive & Negative	Positive & Negative	Positive & Negative

Healthy Streets Criteria

Have Healthy Streets Criteria objectives been met?

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Additional Information

List of additional documents (to be included with SIR submission or links provided):

Document title	Date last updated
Name	

File Information:

File created by (oneLondon user name):	trans
Date/time Excel copy was created:	06/12/2019 08:44
Date/time PDF copy was created:	10/03/2018 10:26

Additional comments:

This document was created using SIR Files Generator v1.5



Contact Details

Scheme Sponsor		Date Signed
Sponsor (Client):	Ian Davies (Royal Borough of Kensington & Chelsea)	
Promoter (Design Consultant):	Carlos da Rocha	

Engineering Services (ES)		Date Signed
ES Traffic Control Engineer:	James Beloni	24/09/2019
ES Principal Traffic Control Engineer:		

Network Performance - Delivery (NPD)		Date Signed
NPD Network Manager:	Adam Greenland	
NPD Area Performance Manager:	Andrew Rogers	

Network Impact Specialist Team (NIST)		Date Signed
Network Impact Assessment Engineer:		
Network Impact Assessment Manager:		

ODE		Date Signed
Outcomes Design Engineer:		

Modelling		Date Signed
Modelling Resource:		

