

Richmond Park, Crossings and Traffic Management

Stage 3 Road Safety Audit Response Report

On behalf of The Royal Parks

Project Ref: 332210520 | Rev: - | Date: 26th June 2023



Document Control Sheet

Project Name:	Richmond Park, Crossings and Traffic management
Project Ref:	332210520
Report Title:	Stage 3 Road Safety Audit Response Report DRAFT
Doc Ref:	RSA3 Des Res 01
Date:	26th June 2023

	Name	Position	Signature	Date	
Prepared by:	REDACTED	Principal Engineer •		- 26th June 2023	
Reviewed by:	REDACTED	Director		28th June 2023	
Approved by:	REDACTED	Director		28th June 2023	
For and on behalf of Stantec UK Limited					

Revision	Date	Description	Prepared	Reviewed	Approved
01	28/06/23	Initial design team response 'Draft' issue to TRP for their input	REDAC	FED	-
02	02/08/23	Overseeing Organisation Response and Agreed Actions added	REDAC ⁻	ΓED	

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.



Contents

1	Introduction	1
2	Stage 3 Road Safety Audit Decision Log	4
3	Design Team and The Royal Parks (Client / Overseeing Organisation) Statements 1	0

Appendices

Appendix A Site Reference Plan



J this page is intentionally blank



1 Introduction

1.1 This Road Safety Audit (RSA) Response Report provides the Design Team and Overseeing Organisation response to the Stage 3 RSA Report produced by TMS Consultancy Road Safety Audit Team for the proposed Crossings and Traffic Management in Richmond Park. (TMS reference no. 17835; Date: 14th June 2023)

The constructed works are as follows:

Crossings:

Proposed Pedestrian Crossings on existing Parks roads with associated signage and road markings. Plus, road marking and signage enhancements to existing crossings. To provide enhanced interactions between all traffic and vulnerable road users and cycle traffic calming.

Traffic Management:

Proposed Gateway Features to introduce vehicle restrictions and cycle traffic calming with associated signage and road markings.

1.2 In addition to the items raised by the Road Safety Audit Team, (recorded in the RSA3 Response Log Table in Section 2), The Royal Parks have requested that The Design Team (Stantec) also record some additional information / observations provided by Richmond Park Stakeholder / User Groups in this report. These are not items raised by the Road Safety Audit Team and as such are outside of the formal process defined by the DMRB Standard – 'GG119 – Road Safety Audit'. These additional items can be found in the second table in Section 2

1.3

In 2020 TRP published their Movement Strategy as a framework to help shape and inform the policies and decisions taken with regard to how park visitors can access, experience and move within the parks. The strategy sought to define the vision for Richmond Park, Bushy Park, St. James's Park, Hyde Park and Greenwich Park. The Movement Principles in the Movement Strategy document set out TRP's Vision, as follows:

- We will protect and conserve our parks' special qualities
- Our parks are places that people visit for relaxation and recreation
- We will encourage the use of more sustainable ways to access and travel through our parks
- Our park roads are not intended to be primarily commuter through-routes for motor vehicles
- We will achieve more by delivering key projects through collaboration and partnership
- We will make evidence-based decisions
- We will be proactive in our approach to future transport challenges and opportunity.
- 1.4 In August 2020, TRP launched a series of traffic-related trials across the five London parks to reduce the impact of cut-through traffic, improve the park visitor experience and open new spaces for park visitors to enjoy. Each of the parks has a unique set of trials, some are new and others seek to extend current access restrictions by vehicles. The trials were due to be in place for 18 mths, however due to Covid and with agreement of the surrounding boroughs and TFL, the trials remain in place. In summary the vehicle traffic restrictions in Richmond Park are summarised below and shown in the plan.





Trials across all five Royal Parks commenced in 2020 with subsequent further trials and study reports in 4 of the Parks in 2022. However, in terms of Richmond Park, the design and review process was already advanced, therefore the trial schemes for Richmond Park already had a package of mitigation measures seeking to improve movement through the park for pedestrians, manage speeds of cyclists and seek to promote behavioural change where users interact.

The previous temporary traffic management gateway schemes that support the trial in Richmond Park is now replaced with a permanent scheme of gateways and uncontrolled crossings and other elements of permanent Traffic Management which is more appropriate to the unique conservation environment of the park. Following design approval, the schemes were installed by a contractor under the supervision of The Royal Parks.

The objective is to provide more focussed locations/opportunities for pedestrians and cyclists to cross the roads and to enhance cycle and vehicle user awareness of proposed and existing crossing locations and to formalise the trialled temporary traffic management restrictions with permanent (but demountable in the carriageway) timber features and signage to restrict and calm vehicle and cycle traffic flows, as necessary.

Both the Traffic Management Schemes and the Crossing Schemes, were constructed between January and May 2023 under the supervision of The Royal Parks.

1.5 The Combined Stage 1 & 2 RSA was undertaken by TMS Consultancy. The RSA was completed in September 2022 and issued to Stantec UK Ltd by REDACTED (TMS). A site visit was undertaken by the RSA Team on 27th September 2022. An RSA Response Report was compiled in collaboration between Stantec and The Royal Parks and subsequently issued for consideration by the Audit Team at Stage 3 RSA.

An RSA Response Report was compiled in collaboration between Stantec and The Royal Parks and subsequently issued for consideration by the Audit Team at Stage 3 RSA.

1.6 The Stage 3 RSA was undertaken by TMS Consultancy. The RSA was completed in June 2023 and issued to Stantec UK Ltd by REDACTED (TMS). A site visit was undertaken by the RSA Team on 13th and 14th June 2023.

This RSA Response Report was compiled in collaboration between Stantec and The Royal Parks and includes reference to all the road safety problems and recommendations identified



by the RSA Team, as well as the response from the Design Organisation, the Overseeing Organisation and the Agreed Actions.

1.7 **Key Personnel** – RSA3 Site Visit Attendees highlighted yellow.

Overseeing Organisation

Park Manager – REDACTED (The Royal Parks) Head of Health and Safety – REDACTED(The Royal Parks)

Outer Parks Sergeant – REDACTED (Metropolitan Police)

Road Safety Audit Team

Road Safety Audit Team Leader – REDACTED (TMS Consultancy – Principal Engineer) Road Safety Audit Team Member – REDACTED (TMS Consultancy – Principal Engineer)

Design Organisation

Design Project Director – REDACTED (Stantec – Director) Design Team Leader – REDACTED (Stantec – Principal Engineer)

1.8 Problems identified in this report are indicated by location and are shown on the site reference plans in Appendix A.



2 Stage 3 Road Safety Audit Decision Log

Consideration of the road safety problems raised from the Stage 3 RSA prepared by TMS Consultancy, dated June 14th 2023 (TMS reference no: 17835). The numbering follows the Stage 3 RSA Report.



RSA problem number	RSA problem	RSA recommendation	Design Organisation response	Overseeing Organisation response	Agreed RSA action
2.1 Problem	Location – Sawyers Hill - Roehampton Gate (drawing 006) and Richmond Gate (drawing 003) Summary: Head on collisions with cyclists (weekend only) At the weekend, these gates are closed to the general public, for motorised vehicles, aside from authorised users and members of the ballet school located within the park. The current set up, is that the gates for the opposing traffic flow remains open, where authorised users must pass through the 'no entry' (wrong side) to travel along Sawyers Hill. This is to avoid users having to manually open the gates on the nearside where there could be the risk of them being struck by the many cyclists who pass through these sections. However, with the current set up, the audit team felt that there could still be the risk of head on collisions with opposing cyclists as vehicles pass through the 'no entry' side of the gate. Furthermore, the temporary yellow signs in place during the weekend site visit were not very conspicuous and could be potential strike hazards. (Also located at Richmond Gate)	Additional permanent sign information for authorised users (ballet school attendees) and cyclists should be displayed at the gates, so they are made aware of the current set up and that there could be opposing users as they pass through the gate.	The Royal Parks preferred weekend closure operation is for those motorists with access to the Ballet School etc to pass through the open exit gate on the opposite side of the carriageway when entering sawyers Hill from the north at Roehampton Gate and from the south at Richmond Gate. This operational principle underwent a long- term test when the schemes were trialled, with the same access restrictions, in the form of Temporary traffic management style barriers and signage, and resulted in no reported incidents / interactions raising concern. The Royal Parks prefer this to the alternative of requiring members of the public to stop/open gate/drive-thru/close gate due to the risks associated with operating the gate itself and the potential proximity to cyclists while opening / closing the gate. The Design Team are advised that the number of vehicles accessing Sawyers Hill will be very low and will consist of The Police, The Royal Parks Staff and members of the public (with access), who have all been advised of the need to take appropriate care when entering on the wrong side of the carriageway. However, we acknowledge The Audit Team's two elements of concern in this Problem and agree that permanent signage should be installed to warn northbound cyclists of the potential for motorists to be in the carriageway ahead and for southbound motorists to be warned of cyclists in the carriageway ahead. The potential to combine this signage and signage recommended in 2.2 will be reviewed and detailed subject to a site visit. The Design Team also recommend that this operation is reviewed closely and that The Royal Parks regularly ensure that all users allowed to access in this way are made aware of the need to consider opposing cyclists and take appropriate care when manoeuvring through the gate. Utilising hazard warning lights would also be appropriate.	Would like to see a design for permanent signs which we can flip down at weekends and then close up at weekdays. TRP feel that this is the safer approach due to the number of cyclists making it hazardous to them and the authorised drivers if stopping and getting out of your car to open and close the gates.	There is no TSRGD compliant Regulatory or Warning sign that directly fits this scenario, but a bespoke non-standard sign based around combining the 'SLOW' warning sign and a text plate saying 'Oncoming vehicles through gate ahead', placed on both sides of the gate, could be appropriate. Provide as flip signs (closed during the week) and open revealing signs at the weekends when Sawyer's Hill is closed to general motor vehicle traffic. Sign operation to be managed via TRP by authorised/trained persons.



RSA problem number	RSA problem	RSA recommendation	Design Organisation response	Overseeing Organisation response	Agreed RSA action
2.2 ProblemSecond stateSecond stateFaded lining at Robin Hood Gate roundabout	Location – Roundabouts at Roehampton Gate, Richmond Gate, Robin Hood Gate and Kingston Gate (drawings 003, 006, 008, 002) Summary: Overshoot collisions at roundabouts It was noted that at each of these roundabouts the advance roundabout signing was located very close to the circulatory and was partly obscured by the gate features (see photo in Problem 2.1). At the Robin Hood Gate roundabout, the give way road markings were also faded. Approaching users, especially cyclists might not be aware of the roundabouts ahead and might fail to slow down and give way to traffic on the circulatory, increasing the risk of collisions.	The roundabout ahead signs should be further inset into the approach arms, ensuring they are not obscured by the gate features.	The Design Team acknowledge that visibility to the roundabout warning signs are partially obstructed to approaching road users. The Design Team suggests an initial mitigation measure could be to use post extensions in their existing positions to increase the height of the sign face to improve visibility to the signs. However, we propose that a more detailed review on site would be required to determine if relocation of these signs is required and if so, to determine the most appropriate location and mounting height in each case. This would prevent inadvertently impacting other elements of the recently installed scheme or existing street furniture etc. The potential to combine this signage and signage recommended in 2.1 and 2.6 will be reviewed and detailed subject to a site visit. This existing condition of the road markings is separate to the recently installed scheme The Design Team do not manage TRPs highway maintenance/intervention but will bring this to their attention by issue of this report.	TRP would welcome a further assessment on both the size and positioning of the signs to ensure their visibility giving warning of the road hazard ahead. Road markings has been acknowledged and arrangements made for over marking.	Assess existing roundabout signage and adjust size, height and position as necessary to improve visibility, in conjunction with agreed action to Problem 2.6. Design subject to site visit observations.
<image/>	Location – Sawyers Hill roundabout with Sheen Gate (drawing 004) Summary: Strike hazard At the southern arm of this roundabout there is a double-sided keep left bollard with 'authorised vehicles only' on the reverse which is leaning over and is located in a solid concrete block. This could present a strike hazard to all road users, especially for cyclists when in dusk conditions where visibility is lower.	The sign and concrete block should be relocated out of the carriageway.	This existing element of street furniture predates the recently installed scheme and is not fundamental to it. The Design Team acknowledge the potential risk identified by the Audit Team and will liaise with TRP to understand how long this sign has been insitu and if there is a history of collisions associated with it. That said, the 'Keep Left' sign is not required and the 'Restricted Access' sign(s) to TSRGD Diag. 619 could be installed on the adjacent verge negating the need for a sign in the carriageway. Sign Diag. 619 The roundabout markings are currently bold and there is a roundabout symbol sign in the verge, which describe the presence of the roundabout to all users.	TRP acknowledge the sign is not best positioned for the reasons highlighted. The keep left arrow is not required but a sign to reinforce the message only authorised vehicles is still required. TRP have arranged for the current sign to go.	Sign to be removed by TRP. TRP to determine if additional 'Restricted Access' signs are required in adjacent verge to enhance existing signage.



RSA problem number	RSA problem	RSA recommendation	Design Organisation response	Overseeing Organisation response	Agreed RSA action
2.4 Problem	Location – Queens Road approach to Richmond Gate Summary: Skidding and loss of control collisions for two wheeled vehicles. On this approach there were two sets of service inspection covers which appeared to be worn and polished located in the primary riding position for cyclists and other two wheeled vehicles. These could have poor surface friction levels especially in wet and icy conditions, increasing the risk of skidding and loss of control collisions.	The worn covers should be replaced with high friction covers.	This existing element of street furniture predates the recently installed scheme and The Design Team do not manage TRPs highway maintenance/intervention but will bring this to their attention by issue of this report. However, the Design Team acknowledge the potential risk identified by the Audit Team, especially when considered in the context of disproportionately high volumes of 'sporting' cyclists travelling at relatively high speeds. The skid resistance of these covers should be assessed and replaced with high friction versions, if found to be deficient.	TRP have requested for these to be changed via our term facilities contractor. Ownership and responsibility to be determined. Added to our Road and Footpath Tracker to review progress.	TRP to investigate ownership and responsibility for these covers and request their replacement.
	Location – Broomfield Hill heading south to car park. Summary: Skidding and loss of control collisions for two wheeled vehicles. On this fast downhill section, where cyclist speeds were high, there were some highway defects, including some raised patch work and potholes. These could destabilise cyclists and two wheeled vehicles, increasing the risk of loss of control and the rider being ejected from their bike and sustaining injury.	The highway defects should be repaired ensuring a smooth flush carriageway surface.	This existing road condition is separate to the recently installed scheme The Design Team do not manage TRPs highway maintenance/intervention but will bring this to their attention by issue of this report. However, the Design Team acknowledge the potential risk identified by the Audit Team, especially when considered in the context of disproportionately high volumes of 'sporting' cyclists travelling at relatively high speeds. The road condition should be inspected and repaired as necessary.	TRP have requested for these to be actioned via our term facilities contractor. Added to our Road and Footpath Tracker to review progress.	TRP to action suitable repairs via maintenance contractors.
	Location – Broomfield Hill heading north to Robin Hood Gate roundabout (Drawing 008) Summary: Speed related collisions at gate and roundabout At this steep downhill section of the route, cyclists were observed travelling at high speed through the gate and into the roundabout. This could increase the risk of speed related collisions with the wooden gate feature and other users in the circulatory.	Additional signing and 'Slow' road markings should be installed to encourage lower speeds at this location.	It is unclear from the Audit Teams photo to determine if the proposed 10mph roundels have been installed. If installed as per the design and in combination with the other visual cues such as the existing roundabout signage and recently installed gateway feature/signage, The Design Team believe these to be sufficient to impart the message to slow down and give way ahead. That said, additional 'SLOW' road markings west of the first bauxite banding feature would further enhance this message. However, we propose that a more detailed review on site would be required to determine if additional signage is required and if so, to determine the most appropriate location and mounting height in each case. This would prevent inadvertently impacting other elements of the recently installed scheme or existing street furniture etc. The potential to combine additional signage and potential signage recommended in 2.2 will be reviewed and detailed subject to a site visit.	Speed of cyclists is a concern in approaching this roundabout, pedestrian crossing and equestrian crossing. Therefore, a site of multiple hazards. Would like to see further signage and road markings considered for this section to help slow the speed further. Also, to consider a different road surface to help with breaking.	Provide additional signage and road markings to enhance existing warning to slow for gate and roundabout ahead, in conjunction with Agreed Action to Problem 2.1. Design subject to site visit observations.



RSA problem number	RSA problem	RSA recommendation	Design Organisation response	Overseeing Organisation response	Agreed RSA action
2.7 Problem	Location – General: throughout park Summary: Injury hazards for errant cyclists Throughout the site small wooden stakes inserted into the verge are being used as parking deterrents on both sides of the carriageway. These could be hazardous in the case of errant cyclists who fall off their bicycle and into the grass verge area. If they fall onto these potentially sharp objects, they could sustain severe injuries.	The wooden stake features should be reviewed and replaced with alternative features such as passively safe products, especially at locations where cyclists' speeds are likely to be higher.	This existing element of street furniture predates the recently installed scheme and is not fundamental to it. The Design Team do not manage TRPs highway maintenance/intervention but will bring this to their attention by issue of this report. However, the Design Team acknowledge the potential risk identified by the Audit Team, especially when considered in the context of disproportionately high volumes of 'sporting' cyclists travelling at relatively high speeds. The Design Team believe these posts have been installed to deter verge side parking which we understand has historically both directly and indirectly increased the risk of highway maintenance and highway safety issues.	Current Risk Assessment acknowledges these as a hazard on hill sections and as such these have been removed. TRP further acknowledge this recommendation to take this further and are looking at a plan to remove more of these bollards where risk of illegal parking is low (Sawyers Hill as its closed to motor vehicles at weekends) Then look at alternative landscaping i.e. mounding, ditches/swales as a future replacement for the bollards and ensuring we protect the verges from illegal parking.	Please refer to Overseeing Organisations Response.
2.8 Problem	Location – General: throughout park Summary: Collisions with pedestrians crossing It was noted that some of the newly installed pedestrian crossing warning signs were starting to become obscured by tree branches and vegetation. Road users might not view these signs and be aware of the crossing points, increasing the risk of collisions with pedestrians crossing.	It should be ensured that all traffic signs are clearly visible around the park where trees and vegetation should be trimmed back where required.	 The Design Team do not manage TRPs highway maintenance/intervention but will bring this to their attention by issue of this report. However, we agree that trees and vegetation should be regularly monitored and trimmed as necessary to maintain clear visibility to all signage. The Design Team recommend a site visit is required to determine if any signs would benefit from relocation to reduce potential for obstruction. 	Acknowledged and visibility of road signs will be part of the future monthly roads and path inspections.	Please refer to Overseeing Organisations Response.
2.9 Observation	Location – Priority give way narrowing (drawing 021) The priority narrowing at the bridge was reviewed and no safety issues were found. Although there has been a suggestion from the police to reverse the priority and change the signing around. It was decided that there was no net gain from carrying this out; where the current cycle flows, which were predominately anticlockwise around the park, gain from having priority in this direction.	N/A	The Design Team appreciate the Audit Teams considerations and comments for this part of the scheme and acknowledge that this item is raised as an 'Observation' rather than a 'Problem' by the Road Safety Audit Team. We understand that this location will be monitored via CCTV for a period to further observe and quantify the perceived risks raised by road users.	This recent change has been a concern mainly by cyclists. Could consideration be given to provide Give Way countdown signage to help with warning. Concern around road user non- compliance of road signage/markings, so keen to have some CCTV monitoring to review this in more detail.	TRP have commissioned Stantec to organise CCTV monitoring for this and several other locations within the recently installed scheme. This is scheduled for early August 2023. Following a review of the CCTV footage and discussions with TRP, it will be determined if there is any requirement for adjustments or enhancements to the scheme.

In addition to the RSA3 Response Log Table above, The Royal Parks have requested that The Design Team (Stantec) also record some additional information / observations provided by Richmond Park Stakeholder / User Groups in this report. These are not items raised by the Road Safety Audit Team and as such are outside of the formal process defined by the DMRB Standard – 'GG119 – Road Safety Audit'.

Stantec

Additional Safety Perception / Feedback No.	Location	Description	Overseeing Organisation Response	Design Organisation Response	Action / Potential Action
001	General location throughout scheme	Open letter from Richmond Park Cyclists relating to concern around some of the road changes made and feedback from some of their members	TRP request the Design Team to document in this report.	The Design Team are not party to the full details within the Open Letter, but TRP have mentioned cyclist concerns on the approach to the gate at Robin Hood Gate Roundabout, the Priority give way narrowing at Beverley Brook Bridge, 10mph speed restriction on downhill sections of shared surface and the opposing vehicles through gates at Richmond Gate and Roehampton Gate on Sawyer's Hill. The Design Team are working with TRP where these are directly related to Problems raised by the RSA3 Audit Team.	TRP have commissioned Stantec to organise CCTV monitoring for several locations within the recently installed scheme. This is scheduled for early August 2023. Following a review of the CCTV footage and discussions with TRP, it will be determined if there is any requirement for adjustments or enhancements to the scheme.
002	Holly Lodge Access Road junction with Sawyer's Hill	Concern has been raised by the Equine community who use the stables at Holly Lodge. They are concerned that crossing with horses is becoming more difficult due to the speed of cyclist descending on the hill.	Please could further consideration be given to this stretch of road highlighting to cyclist to slow due to possible hazards ahead.	This location/hazard is outside the original scope of the scheme. Stantec can support TRP in investigating the concerns and make potential recommendations for enhancements, if necessary. These may include enhanced warning signs and road markings and high friction surfacing and / or relocation.	TRP to appoint consultants to assess road user behaviour at the Holly Lodge access junction with Sawyers Hill and, if necessary, make recommendations for proposals to assist crossing for equestrians at this location.
003	Queen's Road	TRP mentioned concerns, from their own observations, in relation to cycle to pedestrian interactions on the new crossings installed on Queen's Road outside Pembroke Lodge Car Park.	TRP have requested CCTV cameras to monitor user behaviour at these crossings.	The Design Team are working with TRP regarding this request and as such CCTV is being organised to monitor road user interactions with each other and the installed scheme to assist assessment of the concerns raised.	TRP have commissioned Stantec to organise CCTV monitoring for several locations within the recently installed scheme. This is scheduled for early August 2023. Following a review of the CCTV footage and discussions with TRP, it will be determined if there is any requirement for adjustments or enhancements to the scheme.



Design Team and The Royal Parks (Client / 3 **Overseeing Organisation) Statements**

4.1 This RSA Response Report has been prepared to address the issues raised in the Stage 3 RSA. For issues where the RSA Team's recommendations are not proposed to be fully implemented substantiating reasons have been provided.

Design Organisation Statement On behalf of the Design Organisation, I certify that:-

1) The actions identified in response to the RSA problems in this RSA have been discussed and agreed with the Overseeing Organisation.

Name

Name	-	REDACTED
Signed	-	
Position	-	Principal Engineer
Organisation	-	Stantec UK Ltd
Date	-	02 nd August 2023

Overseeing Organisation Statement

On behalf of the Overseeing Organisation, I certify that:-

1) The actions identified in response to the RSA problems in this RSA have been discussed and agreed with the Design Organisation; and

REDACTED

2) The agreed actions will be progressed.

-

Signed Position **Richmond Park Manager** --The Royal Parks Organisation

03rd August 2023 Date



Appendix A



Appendix A

Site Reference Plan

