

## DESIGNER'S HEALTH AND SAFETY RISK ASSESSMENT

**Project:** TFL Social Distancing Measures

**Location:** CS7 Balham High Road, between Tooting Bec Rd and Balham Station Rd

No.	HAZARD	CONSEQUENCE OF HAZARD (RISK)	Risk Owner	Next Formal Risk Review	MITIGATION MEASURES
<b>General</b>					
1	No on site surveys have been undertaken by the AECOM design team due to CV19 restrictions and the time allowed to undertake Detailed Design. Detailed design package is based on preliminary designs received from TFL Ref: CSDCS7-RSM-FEA-ZZ-DR-TE-02-0006 to 0008 including topographical survey.	When the Contractor attends site to begin construction the existing on street situation may not represent the design drawings. This may lead to incorrect setting out or extended time on site to rectify the issue. AECOM have not been on site to check accuracy of Topographical survey information as several surveys show conflicting information	TFL	Post scheme evaluation and onwards monitoring	AECOM only able to verify information presented in topographical survey by using google maps. Contractor to undertake site walk through at beginning of shift and highlight any issues. AECOM to liaise with TFL Designer if the design concept requires any alteration AECOM Design Lead on hand to discuss if required.
2	<del>AECOM understands that no official Stage 1 or Stage 2 Road Safety Audits have been undertaken by TFL as part of the design process.</del>	<del>The detail design layout may be unsafe as the usual Safety Audit process has not been followed.</del>	TFL	Post scheme evaluation and onwards monitoring	The scheme has already passed through an Internal TFL Design Approval stage prior to issue to AECOM. The detailed design package will be reviewed by the TFL road safety team prior to issue For Construction. <b>A Stage 2 Road Safety Audit has now taken place prior to construction.</b> A Stage 3 Road Safety Audit should be undertaken ASAP on completion of the build works and identified issues rectified immediately
<b>Highway and Geometry</b>					
3	AECOM have been utilising Google Streetview to assess the existing on site highway infrastructure due to CV19 restrictions and the time allowed to undertake Detailed Design	In normal circumstances, AECOM would undertake an in-depth site visit to ensure the proposed layout is compliant to standards and constructible. By not undertaking a site visit there is a high risk of existing infrastructure which requires remedial work being missed.	TFL	Post scheme evaluation and onwards monitoring	A Stage 3 Road Safety Audit and TFL Designer Inspection should be undertaken ASAP on completion of the build works and any identified issues rectified immediately.
4	Traffic Signal junctions with new banned movements. Traffic Signal contractor unable to fix the Regulatory box signs before scheme completion.	Drivers becoming confused due to lack of signage and attempt the banned movement, resulting in vehicle to vehicle collision	TFL	Post scheme evaluation and onwards monitoring	Installation of additional regulatory signs on the approach to the junction(s) which will be attached to existing lighting columns
5	Water filled barriers on top of utility covers	Utility companies having restricted access to their plant	TFL	Post scheme evaluation and onwards monitoring	The water filled barriers are incredibly manoeuvrable and can be adjusted on site to grant access to their plant chamber. Utility company must also review how they intend to work on their plant whilst providing safe working space to the adjacent cycleway.
6	Traffic cylinders along the corridor blocking existing third party entrances, bus stops and pedestrian crossing points	A struck bollard could protrude at a dangerous angle towards the cycleway / carriageway if it is damaged by turning vehicles, or completely sheared off at its fixing point causing a trip hazard. Pedestrians walking into upright bollards as they cross the road causing injury.	TFL	Post scheme evaluation and onwards monitoring	AECOM to review the positioning of bollards and adjust the positioning to suit.
7	Badly parked vehicles in the floating parking area could have doors opening into the cycleway.	Cyclists being struck by vehicle door, or swerving and striking the highway kerb resulting in injury.	TFL	Post scheme evaluation and onwards monitoring	Parking bays have been designed as 2.4m wide, with the floating island width set as 1.0m which should be adequate to protect cyclists from door swipes. The cycleway has been reduced to 1.5m which will naturally slow the speed of approaching cyclists
8	Internally illuminated bollards on several traffic islands that are due to be removed	Risk of injury due to contact with live electrical equipment	Contractor	Post scheme evaluation and onwards monitoring	Operatives undertaking construction to use correct methods of 'proving dead' and be appropriately trained/registered highway electricians within HERS, so that they understand nature of mixed cables and potential risks.
9	Termination of proposed protected cycleway for, side roads, signal junctions, bus stops, entrances, parking areas etc. Left turning vehicles not noticing cyclists in their rear view / side mirror due to the drivers blind spot	Cyclists being struck by vehicle, or swerving and striking the highway kerb resulting in serious injury	TFL	Post scheme evaluation and onwards monitoring	This is not a new risk as vehicles and cyclists share the carriageway at various locations. TFL to monitor these areas post scheme completion and implement additional measures where necessary
<b>On Going Maintenance</b>					
10	Cycle ramps for the floating bus stop island restricting the long fall drainage channel	Without adequate drainage, ponding will occur at the base of the ramp	TFL	Post scheme evaluation and onwards monitoring	Install a 50m dia pipe in the channel line to allow the free flow of surface water. This will require periodical jet washing to clear any blockages.
11	Existing permanent road markings become visible due to temporary coverings wearing off	Drivers becoming confused due to conflicting markings, resulting in vehicle to vehicle collision	TFL / CONWAY	Post scheme evaluation and onwards monitoring	Site to be reviewed on ongoing basis. Conway to provide ongoing TTM management. Asset Management Team will also review the on site conditions through the day and report any defects. Conway to undertake remarking as required.
<b>Public Utilities</b>					
12	No utility surveys have been undertaken as part of the detailed design process.	Contacting operatives at risk from striking buried services without knowing what is below ground level	CONWAY	Post scheme evaluation and onwards monitoring	Conway to undertake stats searches and produce stats packs prior to any excavation. This may delay some permanent items from being installed. To enable the scheme to progress, road signs will be housed on A frames as a temporary measure until the permanent sign post has been installed