



Hammersmith Lower Bus Station Risk Assessment Record

Location	Hammersmith Lower Bus Station	Date of Risk Assessment	1st September 2017
Reference	CHAL/0108	Assessed by	David Moore & Luis Cabana
LBSL Region	Central	Review Date	1st September 2018
Responsible Person	Ricky Pite	Local Authority	Hammersmith & Fulham
Residual Risk	Medium		

Summary Report

1 Location: Hammersmith Lower Bus Station is located on Hammersmith Broadway gyratory system at the Butterwick and is adjacent to the Broadway Shopping Centre and the upper level bus station. It forms part of a transport interchange with London Underground District, Piccadilly and Hammersmith and City services.

2 Layout/Operation: There are designated boarding and alighting points within the open plan bus station. The separate passenger islands are linked by a highly visible pedestrian crossing which meets pedestrian desire lines to and from the shopping centre and Hammersmith Road. Pedestrians / passengers are directed via the designated crossing point from each of the islands.

A pedestrian crossing area has been provided across the mouth of the north ramp defined by an anti skid surface and parallel lines. The crossing point is on public highway and signage is in place on the north ramp exit lane advising drivers of the pedestrian crossing ahead.

A rising barrier has significantly reduced the number of passengers entering/exiting the station via the entrance. The barrier is triggered by I-Bus with only the routes destined for the Lower Station causing the barrier to rise. As a back-up, loops have been cut into the roadway that detect vehicle movement and trigger the barrier to rise.

Buses circumnavigate the Broadway in a clockwise direction and enter the lower bus station direct from Hammersmith Broadway / Road via entrance to north ramp which leads to the upper station. The angle of approach for buses entering the lower bus station has been clearly defined with highlighted trieffe kerbs. There are clear directional road markings, entry and speed restriction signage.

Buses traverse through the bus station in one direction from north to south and exit at the southern end direct on to the Butterwick which operates one way from north to south. Directional and awareness signage is in place throughout the bus station. Vehicles exiting the upper bus station via the north ramp must stop and give way to buses crossing the upper level; exit lane to enter the lower level bus station.

On departure buses exit Hammersmith Lower Bus Station direct on to Butterwick which operates one way from north to south.

Operator	Routes	Buses per Hour
London United	33, 72, 283, 419	26.5
Metroline	209, 266	16.5
London General	485	2
Totals	7	45



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No	Hazards	Activity	Persons who could be harmed	Existing Controls	Risk Rating			Proposed Actions	Completion Date
					Severity	L/Hood	Rating		
1	Collision Bus v Bus Bus v 3rd Party Vehicle Bus v Infrastructure	Vehicle movement Access and egress to and from the bus station Use of stand areas	Staff Pedestrians Contractors Other vehicle users	<p>The lower bus station operates as a one way system with one entrance and one exit.</p> <p>Vehicles enter direct from Hammersmith Broadway / Road via entrance road to north ramp.</p> <p>Vehicles exit direct on to Butterwick which operates one way from north to south – ‘right turn only’ signage in place.</p> <p>Highlighted trieffe kerb build outs and islands installed at north ramp entrance and entrance of lower bus station to manage movement of vehicles entering the lower bus station.</p> <p>Vehicles exiting the north ramp must stop and give way to buses entering the new lower level bus station – ‘Stop’ signage and road markings in place.</p> <p>Road markings ‘Keep Clear’ on exit lane from upper bus station where it crosses entry lane to lower bus station to minimise congestion and potential vehicle conflict.</p> <p>Parking bays clearly defined for buses.</p> <p>Unauthorised vehicles are prohibited - signage posted advising of ‘no entry - except buses’ at entrance and exit.</p> <p>Scheduled checks carried out by LBSL staff daily/weekly/periodically.</p> <p>Suitable and sufficient lighting provided for bus station.</p> <p>Posts and barriers installed where necessary on passenger islands and perimeter pavement.</p> <p>A clearly marked speed limit is in force (10mph).</p> <p>Identified defects reported / recorded on Smartworker and progress monitored until closed.</p> <p>Documented speed monitoring carried out.</p> <p>The bus station is regularly cleaned throughout the day and spillage clean up procedures are in place.</p> <p>All Bus drivers trained to PCV standards.</p> <p>All authorised vehicles/ buses have audible reversing signals.</p>	2	2	4	Road resurfacing needed at the entrance to the station junction with the north ramp in Upper station. Road markings needs upgrading and needs to be clearer No entry sign is not clear.	



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2	Collision Bus v Pedestrian 3rd Party Vehicle v Pedestrian	Vehicle movement Access and egress to and from the bus station Use of stand area Boarding and alighting buses	Staff Other authorised vehicle users Pedestrians Contractors	<p>All passengers board or alight to at designated passenger areas.</p> <p>Designated waiting areas for passenger on each island.</p> <p>Passengers have designated access route between shopping area / upper bus station and lower bus station.</p> <p>Prominent pedestrian crossing across the bus station between the shopping centre entrance and all pedestrian islands.</p> <p>Designated walkways provided for staff and contractors between off side stand areas and pedestrian areas.</p> <p>Roadway complies with LBSL skid and slip resistance requirements.</p> <p>Rising barrier installed at station entrance to attempt to stop pedestrians entering through this busy intersection.</p> <p>Suitable and sufficient lighting provided for bus station.</p> <p>A clearly marked speed limit is in force (10mph).</p> <p>Signage in place on each island advising passengers and pedestrians not to cross the roadway.</p> <p>Signage in place at north ramp advising pedestrians that there is no access for them to the bus station.</p> <p>Designated pedestrian crossing with central reservation installed on highway across entrance and exit to and from north ramp.</p> <p>'Look Left / Look Right' road markings provided on kerb sides of crossing accordingly.</p> <p>The bus station is regularly cleaned throughout the day and spillage clean up procedures are in place.</p> <p>Scheduled checks carried out by LBSL staff daily/weekly/periodically.</p> <p>High visibility clothing worn by staff and contractors whilst on the bus station.</p>	2	2	4	<p>Extra signage " No access to pedestrians" by the entrance to the bus station as there is only 1. There should be one on each side of the entrance.</p>	



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3	Slips, Trips, Falls On same or different levels	Moving around pavement and road areas Accessing staff facilities Accessing LBSL stores Working at Height	Staff Pedestrians Passengers Contractors	Scheduled checks carried out by LBSL staff 30min/weekly/periodically. Identified defects reported / recorded on Smartworker and progress monitored until closed. Dedicated alighting / pick up points for passengers The bus station is regularly cleaned throughout the day and spillage clean up procedures are in place. Suitable and sufficient lighting provided for bus station. Salt and grit applied during times of adverse weather by Bus Operations staff. Ability to isolate defective floor surfaces with cones/barriers/barrier tape. Slip resistant uniform shoes provided for LBSL staff. Buses maintained to required standard as to reduce spillages. High level work carried out by competent contractors.	2	2	4		
4	Fumes/ noise	Statutory Nuisance Use & / or storage of hazardous substances	Staff Pedestrians Passengers Contractors	Unauthorised vehicles are prohibited - signage in place. Only competent contractors are chosen to work on site. Notices in place advising drivers to switch off engines. Requirement enforced by LBSL staff. Scheduled checks carried out by LBSL staff daily/weekly/periodically. Bus Operators staff supervise bus movements on site daily. Vehicles are maintained to a required standard and to meet emission standards. Cleaning materials kept in secure location when not in use. Cleaning contractor COSHH documentation available.	1	2	2		



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No	Hazards	Activity	Persons who could be harmed	Existing Controls	Risk Rating			Proposed Actions	Completion Date
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5	Assault / Robbery	Anti-Social Behaviour Lone working	Staff Contractors Passengers Pedestrians	<p>LBSL staff is trained in conflict management training.</p> <p>Buses are fitted with CCTV which is recorded 24/7 and can be downloaded as required.</p> <p>Bus station is covered by digital CCTV and can be viewed in Bus Station Controllers office. Images are recorded 24 hours.</p> <p>Buses are equipped with driver activated assault alarms.</p> <p>Suitable and sufficient lighting provided for bus station.</p> <p>Emergency services can be summoned quickly via CentreComm using on bus radio.</p> <p>Personal assault alarms provided to LBSL staff.</p> <p>Airwave radios and mobile phones issued to LBSL staff.</p> <p>All bus routes are cashless.</p> <p>Public address system broadcasts pre recorded safety and security messages.</p>	2	2	4		
6	Electricity	Unauthorised access to electrical supply(s) Damaged bus station Damaged lamp columns	Staff Contractors Pedestrians	<p>Electrical mains are in a secure location accessed by authorised persons only.</p> <p>Electric mains circuits and LBSL lamp columns protected by fuses / RCB's.</p> <p>Only authorised persons permitted to carry out work on power supply.</p> <p>Emergency contact details available for LBSL owned equipment regarding repairs.</p> <p>Portable appliances subject to regular PAT testing.</p> <p>Identified defects reported / recorded on Smartworker and progress monitored until closed.</p> <p>Scheduled checks carried out by LBSL staff daily/weekly/periodically.</p> <p>LBSL staff have access to barriers, barrier tape and / or cones to isolate damaged infrastructure.</p>	3	1	3		



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7	Fire Explosion Arson Vehicle Fire	Terrorist / malicious activity Use of ignition sources Use of combustible	Staff Contractors Pedestrians Passengers	<p>Identified defects reported / recorded on Smartworker and progress monitored until closed.</p> <p>Fire detection located in LBSL accommodation block.</p> <p>Fire extinguishers available on buses and in bus station.</p> <p>LBSL vehicles and buses maintained to a required standard and monitored by LBSL.</p> <p>Emergency plans in place to deal with emergency detailing assembly points/alarms/detections and reviewed annually.</p> <p>Visitors and contractors advised of site rules and emergency procedures.</p> <p>Emergency services can be summoned quickly via CentreComm, mobile phone or on-bus radio.</p> <p>Bus station is covered by digital CCTV and can be viewed in Bus Station Controllers office. Images are recorded 24 hours.</p> <p>Buses are fitted with CCTV which is recorded 24/7 and can be downloaded as required.</p> <p>Scheduled checks carried out by LBSL staff daily/weekly/periodically.</p> <p>The bus station is regularly cleaned throughout the day and spillage clean up procedures are in place.</p> <p>Hazardous substances kept to a minimum and stored in secured roller cabinet.</p> <p>Portable appliances subject to regular PAT testing.</p> <p>Cleaning contractor COSHH documentation available.</p> <p>Only competent contractors chosen to work on site.</p> <p>Bus station fire risk assessment last conducted in August 2015. Risk assessment located in Bus Station Controllers office.</p>	4	1	4		

This risk assessment should be reviewed whenever a material change occurs at the bus stand or following a serious incident to ensure controls are still relevant. Otherwise it should be reviewed as indicated at the top of this document.