

3.4.2 LCB2



Left to Right:
LCB2 canopy entrance
LCB2 Canopy
LCB2 Canopy
Existing overhead pipes



3.4.3 109 (NORTH) STRUCTURE



Left to Right:
 Accessible entrance to existing 109 (North) Structure
 North elevation-West edge of where 109 link is proposed
 Loading bays to existing 109 (North) Structure
 Space loss and internal drainage routing where 2 structures meet





Left to Right:
 Junction at existing 109 (North) Structure loading bay door jamb
 Internal guarding
 HGV loading yard outside existing 109 (North) Structure
 Loading bay vehicle doors and protective barriers

3.5 DRAINAGE AND FLOODING RISK

Table 1 below provides a summary of the Flood Risk and Drainage / SuDS Strategy for the scheme.

ITEM	BRIEF DESCRIPTION
Fluvial Flooding	The site is in Flood Zone 1 (Low Risk) on the Environment Agency Maps.
Overland Flow	The site slopes from the South to the North, with the surface water runoff intercepted by the existing drainage infrastructure within the existing hardstanding areas. A review of the Environment Agency Surface Water Flood Risk maps indicates that the proposed site ranges from high to low risk of surface water flooding. These low-lying pockets will be removed as part of the development design intent and in turn reduce the risk of surface water flooding.
Groundwater Flooding	At the time of writing this report a Site Investigation report was not available. The site does not lie within an EA Groundwater Source Protection Zone as currently published on the DEFRA Magic Map web-based service. The development site is located in an area at medium risk of flooding from emergence of groundwater (between 25% and 50%). The proposals for the site do not include any basement or underground structures that would be susceptible to the risk of groundwater flooding. The risk of flooding from Groundwater is considered to be low
Artificial Drainage	There are no canals or reservoirs in close proximity to the site. United Utilities Water sewer records have been reviewed and no public sewers are in the vicinity of the site. The nearby infrastructure discharge into private surface water drains. The PFRA and SFRA mapping shows that there are no incidents of sewer flooding on record within the site and the surrounding industrial park. In addition, online searches did not uncover any additional historic sewer flooding events close to the site. Therefore, it is considered that the site is at low risk of flooding from a sewer. The risk of flooding form sewers is considered to be low
Infrastructure Failure	There are no structural, hydraulic or geotechnical infrastructure within the site boundary.
Flood Risk Assessment	An assessment of flood risk has been undertaken at the site. Based on the assessment of sources above, the site is considered to be at low risk of flooding from all sources.
Nearest Adopted Sewers	There are no surface water public sewers currently near the site. Located at or near to the proposed development there are several private surface water drains. The existing site currently discharges into a series of private SW drainage channels located within the site. It is important to that all existing drainage infrastructure located within the vicinity of the site is private and no public sewers are in close proximity to the site.
Maintenance Responsibility	Management Company / Site owner

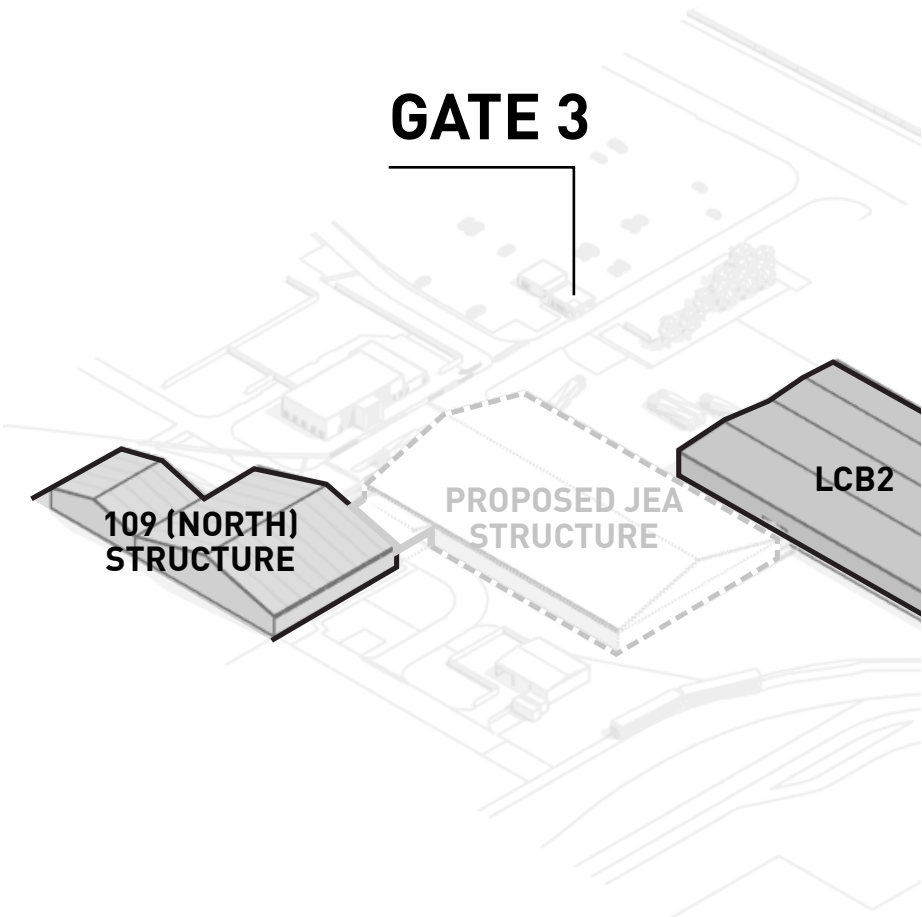


Figure 1-9. Proposed Site Plan

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DESIGN PROPOSAL

4. DESIGN PROPOSALS



4.1 SCHEME OVERVIEW

The proposal combines two separate program requirements. Firstly, the JEA Structure forms the main space and is to be used for storage of bodysides for 3 new models.

Secondly, the LCB2 link proposal to connect the LCB2 building and 109 (North) Structure with a covered route for forklifts.

4.2 LAYOUT

The layout has been dictated by the overall routes along and adjacent to the site to allow for minimal disruption. The key factors of this design include:

4.2.1 FORKLIFT TRAFFIC

Internally, the width of the link has been based on the various tracking exercises of both forklift models used on the Halewood site, alongside the existing design exercises undertaken as part of the previous LCB2 link canopy proposal. The tracking ensures two-way traffic of forklifts are not compromised. At entry/exit points, dual sets of vehicle doors have been provided to allow for two-way traffic which will require automatic opening linked to beacons/traffic lights to provide safe movement through the links. The height of the JEA-LCB2 Link has been dictated by the roller shutter doors with forklift access.

4.2.2 HGV ROUTE

For JEA-109 Structure, a higher canopy has been included for HGV's to pass through. The sizing of the overhang has been dictated by the calculations for driving rain undertaking in the previous LCB2 Link Canopy design. This design allows for weather protection from driving rain into the main forklift route, without compromising the access for HGVs.

4.2.3 LOADING BAYS

The 2 No. loading bays to the North elevation of the LCB2 link are sized based on the maximum constraints of the Structure manufacturer. Their location within the façade has been dictated by the constraints of exiting supports to the overhead pipes and an existing floodlight within the LCB2 yard. Additionally, JLR will look to adjust the structural supports to the overhead pipes that currently sit below the pipes. This is to allow sufficient clear height for trailers entering the loading bays.

4.2.4 WEATHER PROTECTION

The majority of the building is of a weather tight construction with the only exception being the link canopy between 109 and JEA. In this area, the overhang of the canopy is designed to limit the impact of driving rain, however it will be impossible to prevent water being tracked through by HGV traffic. To combat this, the link will be on a speed hump with drainage gullies to move water away from the area. Additionally, the raised hump will have a gradual slope to avoid build on the surface where forklifts will travel.

4.3 PROPOSED ELEVATIONS

