

ITB16357 Land South of A259, Angmering

Site Access Junction on A259 / Littlehampton Road, Angmering

Preliminary Design Check General;

1. All proposals based on topographical survey data prepared 2016 supplemented by 2016 Ordnance Survey data
2. Principal Documents referenced in this Design: DMRB CD123;109 & 127; Departures from Standards Procedures for Local Highway Authorities Oct 2011 (UK Roads Liaison Group)

Preliminary Design Check – A259 Littlehampton Road / Site Access Priority Junction Left-in / Left-out (Drawing No ITB16357-GA-003 Rev E)

Outline of proposed scheme: A priority junction left-in / left out is proposed off the A259 Littlehampton Road in Angmering to provide access and egress to residential development of approximately 76 dwellings. New junction to be lit to Local Highway Authority standards as part of detailed design process. Non-motorised user (NMU) provision to be provided by means of 3.0m shared use footway / cycleway with central island restricting the right turn manoeuvre from the access. This is to tie into the existing cycle path that runs along the site frontage, to be widened as part of the development proposals, with provision of dropped kerb crossing of existing Public Right of Way to the north.

Existing Conditions: The A259 Littlehampton Road is a dual carriageway located to the north of the site routing east through Hangleton before merging with the A2032 Littlehampton Road at the Swallows Return Pub. The westbound carriageway measures approximately 7.3m in width with the eastbound carriageway measuring approximately 6.6m. The dual carriageway is subject to a 50mph speed limit.

Junction: Northern Access (Left-in Left-out)	Proposed	Comment	Action
Geometric Design Parameter			
Carriageway Width Site access	5.0m	Where a physical traffic island is provided on a minor road, the width of the minor road exit lane adjacent to the island at its furthest point from the major road shall be 5.0m for SLD and dual carriageway junctions. Provision compliant with CD 123 para 5.9	
Carriageway Width A259	7.0m	Departure from CD127 – width of 3.5m, see DFS Application for further information.	

Corner Radii	Access - 18m Egress - 12m	Provision compliant with para 5.6.1 of CD123 for rural junctions	
Traffic Islands	Central Island	Physical traffic island provided on minor arm to prohibit right turn or deter such movements. Provision compliant with CD123 para 5.14	
Deceleration length / Direct taper	80m deceleration length 15m direct taper	80m deceleration length and 15m direct taper compliant with CD123 table 5.22	
Spacing of Junctions	120m	The proposed site access is 120m from the existing roundabout to the west. This is compliant with table 2.25 in CD123 showing that for 50mph design speed on a dual carriageway a spacing / stagger or 75m is acceptable.	
Horizontal Alignment	The proposed priority junction is sited on a straight section on the A259 with a gradient of 2%	In accordance with paragraph 2.1.2 CD123	
Vertical Alignment	Gradient on approach to site access and then on to existing roundabout is 2%	In accordance with table 5.1 in CD109 3.6 of where the preferred maximum is 4%	
Visibility			
Minor Arm	4.5m x 160m to the west	Visibility in accordance with the guidance set out in CD123 para 3.8 3) 4.5m set back for all other priority junctions. 160m shown in relation to the 50mph speed limit as set out in CD109 to the right enable vehicles emerging from the site access to see oncoming traffic on the A259 in sufficient time to permit them to make their manoeuvres safely. Unobstructed visibility is achievable from a 4.5m set back distance, which represents a reasonable maximum distance between the	

		front of a vehicle and the driver's eye without the vehicle protruding into the carriageway.	
Major arm	≥160m stopping sight distance	Drivers approaching the junction along the A259 approaches are able to see major road traffic turning left into the minor road from a distance corresponding to required Stopping Sight Distance (SSD) for the prevailing vehicle speeds in accordance with the visibility guidance provided in CD109, as well as allowing drivers to be aware of traffic entering from the minor road in time for them to be able to slow down and stop safely if necessary.	
Non-Motorised User Provision			
Pedestrian/Cycling Facilities	Dropped kerbs and tactile paving will be provided on the proposed site access central island to enable pedestrians travelling on the A259 to cross the minor arm safely.	Existing cycle/footway to be widened to 3.0m along east-west site frontage adjacent to A259.	
General Layout Design Parameter			
Swept Paths and general vehicle movements		Proposals designed to allow for the appropriate design vehicle, i.e. a large refuse vehicle.	
Hard strips	Removal of 1m hard strips over a distance of 150m.	Departure from CD127 – see DFS Application for further information.	
Bus Stop Location	Existing bus stop located on approach to junction to be removed as per WSCC request.	Bus stop on approach to junction results in partial obstruction of visibility splay, contrary to CD123.	

APPENDIX A Site Access Arrangements Drawing

