



SITE: Summer Lane, Pagham, Bognor Regis

DEVELOPER: Drew Smith

REPORT: Local Road Assessment
Road 2

REPORT DATE: 18th September 2019

REPORT REF: LD/DSM/E4761/17495

Section 1 – Introduction

- 1.1 This report has been produced to identify and reduce the number and severity of injuries in the event that an errant vehicles leaves the road and encounters a hazardous feature.
- 1.2 The report is produced in accordance with the guidance of Design manual for Roads and Bridges (DMRB) TD19 and the Department for Transport Design and Maintenance Guidance for Local Authority Roads Provision of Road Restraints Systems on Local Authority Road dated October 2011.

Section 2 – Method

- 2.1 The subject of the report is a proposed road within a future residential development comprising of 90 units. The road being assessed, Road 2 is to be used as access to the western part of the development and will serve at most, 24 Plots.
- 2.2 Accident data is not available.
- 2.3 The method of risk assessment chosen in this instance is risk scoring.

Section 3 – Risk Scoring Method

- 3.1 Hazard Category - An errant vehicle may leave the proposed road (Road 2) and encounter the proposed swale which is adjacent to the carriageway offset at a minimum distance of 2.1m. The swale can be encountered from Ch.170m to the end of the carriageway with a maximum depth 2.7m lower than the road level and with a maximum side slope of 1:3. At the top of the bank, the swale covers a total area of 3472m² with a maximum depth of 1.8m (maximum designed water level of 1.35m) and maximum side slope of 1:3. A vehicle may also leave proposed road (Road 2) and encounter the proposed attenuation basin which is adjacent to the carriageway offset at a minimum distance of 4.35m. The basin can be encountered from Ch.225m to Ch.313m with a maximum depth 2.8m lower than the road level and with a maximum side slope of 1:3. At the top of the bank, the basin covers a total area of 730m² with a maximum depth of 2.0m (maximum designed water level of 5.1m) and maximum side slope of 1:3.
- 3.2 Location Factor – Proposed residential road with a design speed of 20mph.
- 3.3 Layout Factor – 14.3mR curve from ch 170.00 to Ch.175.373m
Straight alignment from Ch.175.373m to Ch.211.324m.
10.3mR curve from Ch.308.088 to Ch.322.720m
Straight alignment from Ch. Ch.322.720 to Ch.337.775m.
26.4mR from Ch.337.775m to Ch.350.096
Straight alignment from Ch.350.096 to Ch.354.138
2.0mR from Ch.354.138 to Ch.354.668
Straight alignment from Ch.354.668 to Ch.356.243
2.0mR from Ch. 356.243 to Ch.356.759
Straight alignment from Ch.356.759 to Ch.363.555
24.9mR curve from Ch.363.555 to Ch.369.918
14.3mR curve from Ch.369.918m to Ch.111.106m
Straight alignment from Ch.356.759 to Ch.390.060 which is beyond the hazardous feature. Alignment of the road then terminates at Ch.419.079.
- Single Lane approaching T-Junction.
- 3.5 Collision Factor – 2 No. Hazard has been identified as a Swale and Attenuation Basin KSA for all roads
(Submerged) = 33.3%
- 3.6 Consequential Factor – In the event an errant vehicle left the carriageway and encounters a hazard off the carriageway this is unlikely to increase the risk of a secondary accident.

In the event an errant vehicle left the carriageway and encounters a hazard it is unlikely that any damage to the hazard would have any impact network availability.

In the event an errant vehicle left the carriageway and encounters a hazard, it is unlikely to require repair costs.

Section 4 – Risk Score Ranking

Factor	Priority Rank	Risk Factor Score
Location	0 – All Other Roads	0
Layout	0 – Straight alignment and/or complies with TD9	0
	1 – Straight Road, Approach to a junction	1
Collision	1 – Series of hazards less than 50m apart	0
	2 – Highest KSI 33.3% > 30%	4
Consequential	0 – Secondary event likely	0
	0 – No impact on network availability	0
	0 – No significant cost implications	0
Total Priority Score		5

Section 5 – Risk Reduction

- 5.1 Low Priority Site – Level of risk is regarded as generally acceptable. Further assessment to be undertaken as part of the Stage 3 Road Safety Audit.

Signed



Dated

18.09.2019

Leon Darrell –

Principal Engineer
Rogers Cory Partnership