

## MID SUSSEX DISTRICT PLAN – SAFETY STUDY



# MID SUSSEX DISTRICT PLAN

## SAFETY STUDY

### IDENTIFICATION TABLE

<b>Client/Project owner</b>	Mid Sussex District Council
<b>Project</b>	Mid Sussex District Plan
<b>Study</b>	Safety Study
<b>Type of document</b>	Report
<b>Date</b>	30/09/2024
<b>Reference number</b>	GB01T24C55/RPT/01
<b>Number of pages</b>	84

### APPROVAL

<b>Version</b>	<b>Name</b>		<b>Position</b>	<b>Date</b>	<b>Modifications</b>
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## 1. INTRODUCTION

- 1.1.1 SYSTRA have been commissioned by Mid-Sussex District Council (MSDC) to develop the transport evidence base to support the development of the Mid Sussex District Plan. This report details the outcomes of the Safety Study which has considered collision trends, clusters and causation factors across the district, to determine priority junctions and links to take forward to mitigation stage.
- 1.1.2 STATS-19 Data has been extracted for the period 2017-2023, which includes the collision records for the last full five year period plus an additional two years to account for 2020-2021 being impacted by COVID. This data has been mapped in GIS and all collisions are assigned to either a “node” - the junctions throughout the region, or “links” - stretches of highway between nodes to allow correlation with forecast flows from the Mid Sussex Strategic Highway Model (MSSHM). All of these have a 20 metre buffer surrounding them in order to fully capture all collisions which occur within their proximity, with a manual sense check applied for the 20 prioritised locations to ensure collisions are assigned to the correct junction or highway link.
- 1.1.3 A junction/link “scoring” methodology to allow for filtering of the top priority locations has been developed by SYSTRA and agreed with MSDC. This has involved consideration of frequency of collisions in addition to the traffic flow uplift between the 2040 Reference Case (includes committed development and infrastructure up to 2039) and the 6m2 District Plan scenario (includes committed development/infrastructure as well as District Plan growth and associated mode shift assumptions up to 2039). This isolates traffic growth associated with the District Plan development to assess locations whereby there is an increase in traffic associated with growth which could worsen any existing safety issues. Analysis was undertaken at the district level, assessing each junction and link to create an accident prevalence rate for all locations having at least one recorded accident. For those locations where only a single accident was recorded, the increase in traffic growth had to be greater than a 30% increase in either peak to warrant consideration to be taken forward to a priority assessment. Additionally, where the increase in traffic flow growth was only 1%, five accidents had to be recorded to warrant consideration to be taken forward for a priority assessment. Following this prioritisation exercise; the 20 highest ranked junctions and links have been analysed and the assessment details covered within this Report.
- 1.1.4 For those junctions ranked below 20 generally the level of traffic flow increase was typically below 5% (or had low absolute flow value change) or the number of accidents was three or below where the percentage of traffic flow increase was above 5%. It was therefore considered that the prioritisation exercise following the wider analysis at district level targeted those locations whereby the District Plan growth was forecast to have the largest impact on safety.
- 1.1.5 Further details on the model scenarios and inclusions can be found in the Scenario 6 Modelling Report which forms part of the transport evidence base.

## 2. JUNCTION/LINK ASSESSMENT

### 2.1 Introduction

2.1.1 The following section describes the assessments for the junctions and links which have been identified through the priority sifting process. As described in Chapter 1, the collision ranking system was informed by the combined number of collisions within the years 2017-2023 in combination with the uplift in traffic associated with the District Plan delivery, which has led to a priority list of 20 junctions/links which were taken forward for further investigation.

2.1.2 The 20 junctions and links resulting from the sift are:

- Borde Hill Lane / Balcombe Road / Hanlye Lane (junction);
- Cuckfield Road / Gatehouse Lane / Bishopstone Lane (junction);
- A23 NB Between B2115 and B2110 (link);
- A23 / A272 Southbound Off-Slip (junction);
- A2300 / Bishopstone Lane (junction);
- A23 / A281 Eastbound On-Slip (junction);
- A23 NB to A264 Off-Slip (link);
- A281 / B2117 / Shaves Wood Lane (junction);
- A2220 / Old Hollow (junction);
- A23 / A273, Pyecombe (junction);
- Sydney Road / Perrymount Road / Market Place / Mill Green Road Roundabout (junction);
- B2110 / B2028 Turners Hill (junction);
- A272 / B2036 Ansty Mini-Roundabout (junction);
- Sussex Road / Franklynn Road / South Road / Hazelgrove Road / Caxton Way Roundabout (junction);
- B2036 London Road / Victoria Way (junction);
- London Road / Henfield Road (junction);
- B2112 / Lodge Lane (junction);
- B2116 / Twineham Lane (junction);
- Gander Hill / Portsmouth Lane / Summerhill Lane (junction);
- A23 from A23 / B2210 NB On-Slip to A23 (link).

2.1.3 The following sections assess the series of junctions and links, with surrounding future year conditions, and discuss the potential mitigations to be implemented to improve the wider safety surrounding the Mid-Sussex Region highway network.

### 2.2 Borde Hill Lane/Balcombe Road/Hanlye Lane

2.2.1 The Borde Hill Lane/Balcombe Road/Hanlye Lane junction is a three-arm unsignalized roundabout located to the north of Haywards Heath. All three arms are comprised of two entry lanes to the junction, with a wide unmarked roundabout circulatory. The existing layout of the junction is indicated in **Figure 1** below.



Figure 1. Borde Hill Lane/Balcombe Road/Hanlye Lane



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

- 2.2.2 Through SYSTRA’s ranking system surrounding the collisions and traffic flow uplift this is considered to be the junction of highest priority to investigate the collision causation factors and existing layout considerations further. Such can be seen through the nine collisions taking place within the study years, including three of a serious severity and six of slight. Furthermore, between the Reference Case and SC6M2 scenarios, an uplift in vehicle flow of 12% (+281 vehicles) is seen in the AM peak and 9% (+196 vehicles) in the PM peak.
- 2.2.3 It is noted that the junction has undergone a recent physical upgrade to the junction, changing from the existing unsignalized T-junction to the current layout of an unsignalized roundabout with works completed in September 2020. Construction works for the upgrade were noted to occur between June and September 2020.
- 2.2.4 The junction is located southeast of the Borde Hill site within the emerging District Plan, which seeks to provide 60 dwellings.

**Collision Analysis**

- 2.2.5 The causation of the collisions which occurred prior to June 2020 (before any construction works for the upgrade scheme occurred) is indicated in **Table 1** below. **Table 2** indicates the collisions occurring at the junction after the junction was upgraded to a roundabout.

**Table 1. Borde Hill Lane/Balcombe Road/Hanlye Lane Collision Causation (Pre-June 2020 Construction/ Upgrade Scheme)**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 2 collides with Vehicle 1 after failing to see Veh 1.	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with Vehicle 2 whilst turning right	
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to give way	Careless/Reckless (Driver/Rider - Behaviour)
Serious	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 2 collides with Vehicle 1	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Motorbike collides with Car	Failed to look properly (Driver/Rider - Error)
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1	Poor turn or manoeuvre (Driver/Rider - Error)

**Table 2. Borde Hill Lane/Balcombe Road/Hanlye Lane Collision Causation (Post-September 2020 Roundabout Upgrade)**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	2	Wet/Damp	Daylight	Unknown	Vehicle 1 collides with Vehicle 2	
Slight	1	1	Wet/Damp	Daylight	Raining without high winds	Vehicle collides with lamppost upon exit of roundabout at speed	Careless/Reckless (Driver/Rider - Behaviour)

2.2.6 The location of the collisions are displayed in **Figure 2** below.

**Figure 2. Borde Hill Lane/Balcombe Road/Hanlye Lane Collision Locations**



2.2.7 As is evidenced above, it is clear that the majority of collisions occur on Borde Hill Lane to the north of the junction, and the causation of a majority of the collisions is associated with careless or reckless driver behaviour, including failures to look for other drivers. The frequency of accidents has reduced since the upgrade scheme was built out.

### Junction Layout/Conditions

2.2.8 The previous junction layout is indicated in **Figure 3** below. This previous layout is evident to have featured faded road markings, surface degradation, and a short entry lane into Hanlye Lane to the west for use if travelling northbound along Balcombe Road.

2.2.9 Upon closer analysis of the junction layout post-September 2020, it is apparent the arms have wide entries to the roundabout circulatory, and lighting is present around the junction. Whilst all three arms are comprised of two entry lanes, it is noted that along the Borde Hill Lane arm to the north, the lane markings for two lanes stretches approximately four metres in length from the Give Way line allowing for a single car flare. The view from the Balcombe Road arm is indicated in **Figure 4** below, and the lack of signage on the approach arm from Hanlye Lane is displayed in **Figure 5**.

**Figure 3. Borde Hill Lane/Balcombe Road/Hanlye Lane pre-September 2020 layout**



*Source: Image Capture April 2024 © 2024 Google*

**Figure 4. Borde Hill Lane/Balcombe Road/Hanlye Lane Post-September 2020 Junction Access (Northern Arm)**



*Source: © 2024 Google*

**Figure 5. Borde Hill Lane/Balcombe Road/Hanlye Lane Post-September 2020 Junction Access (Western Arm)**



Source: © 2024 Google

- 2.2.10 Whilst minor improvements could be made, such as the implementation of further warning signage on the approach to the roundabout, the junction layout meets design standards, and the road surfacing is of a smooth quality. The recorded incidents are primarily due to driver error and it is not evident that further physical changes to the junction layout would materially affect this. Additionally, seven of the nine collisions occurred prior to the mitigation being introduced in September 2020, and as such it is deemed that the upgrade to the roundabout layout including improvements to the road surfacing have enhanced the safety surrounding the junction.

### Future Mitigation

- 2.2.11 Due to the recent upgrade scheme to an unsignalized roundabout in 2020, and the limited physical improvements which are feasible being considered unlikely to have a significant effect upon the observed causes of collisions at the junction, this location has not been taken forward for future mitigation.

## 2.3 Cuckfield Road/Gatehouse Lane/Bishopstone Lane

- 2.3.1 Cuckfield Road/Gatehouse Lane/Bishopstone Lane is a four-arm unsignalized cross roads located to the west of Abbotsford. The junction is comprised of single-lane entries on each of the four arms, with several arms noted to have wide radii at the junction bell-mouth. The east to west/ west to east movement along Bishopstone Lane and Gatehouse Lane is free-flowing whereas the northern and southern arms of Cuckfield Road are required to give-way upon approach to the cross roads. The layout of the junction is indicated in **Figure 6** below.

**Figure 6. Cuckfield Road/Gatehouse Lane/Bishopstone Lane Existing Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

- 2.3.2 Based on SYSTRA’s ranking of the junctions and links, this junction is the 2<sup>nd</sup> highest rank for further investigation. This is the result of seven recorded collisions; four serious and three slight, occurring at the junction within the seven study years. Furthermore, an uplift in traffic flows between the Reference Case and SC6M2 scenarios of 50% (+493 vehicles) is seen in the AM peak, and 67% (+449 vehicles) is seen in the PM peak.
- 2.3.3 The junction lies immediately to the northwest of the Burgess Hill development site, an allocated site within the District Plan with a yield of 1400 dwellings.

**Collision Analysis**

- 2.3.4 The causation of collisions is displayed in **Table 3** below.

**Table 3. Cuckfield Road/Gatehouse Lane/Bishopstone Lane Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 1 collides with Cyclist	
Slight	3	2	Dry	Dark: no street lighting	Fine without high winds	Vehicle 1 collides with 2 Cyclists	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 fails to give way and collides with cyclist	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 fails to give way and collides with cyclist	Failed to look properly (Driver/Rider - Error)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 1 crosses Give Way line and collides with cyclist	
Serious	1	1	Wet/Damp	Daylight	Raining without high winds	Motorcyclist skidding	Deposit on road e.g. oil, mud, chippings (Road Environment Contrib)
Serious	1	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with pedestrian	Failed to look properly (Pedestrian)

2.3.5 The location of the collisions are indicated in **Figure 7** below.

**Figure 7. Cuckfield Road/Gatehouse Lane/Bishopstone Lane Collision Locations**



2.3.6 As evidenced above, all collisions from the 2017-2023 study years are noted to have occurred between the north and western arms of the junction. Through analysis of the specific collision data, three of the collisions are noted to be the result of vehicles travelling along Cuckfield Road failing to give way or see oncoming vehicles travelling east-west along Gatehouse Lane/Bishopstone Lane.

### Junction Layout and Conditions

2.3.7 The conditions surrounding the junction are indicated in **Figure 8** and **0** below.

**Figure 8. Cuckfield Road/Gatehouse Lane/Bishopstone Lane junction layout (View from Cuckfield Lane South approach arm)**



Source: Image Capture March 2024 © 2024 Google

**Figure 9. Cuckfield Road/Gatehouse Lane/Bishopstone Lane junction conditions (Bishopstone Lane East arm)**



Source: Image Capture March 2024 © 2024 Google

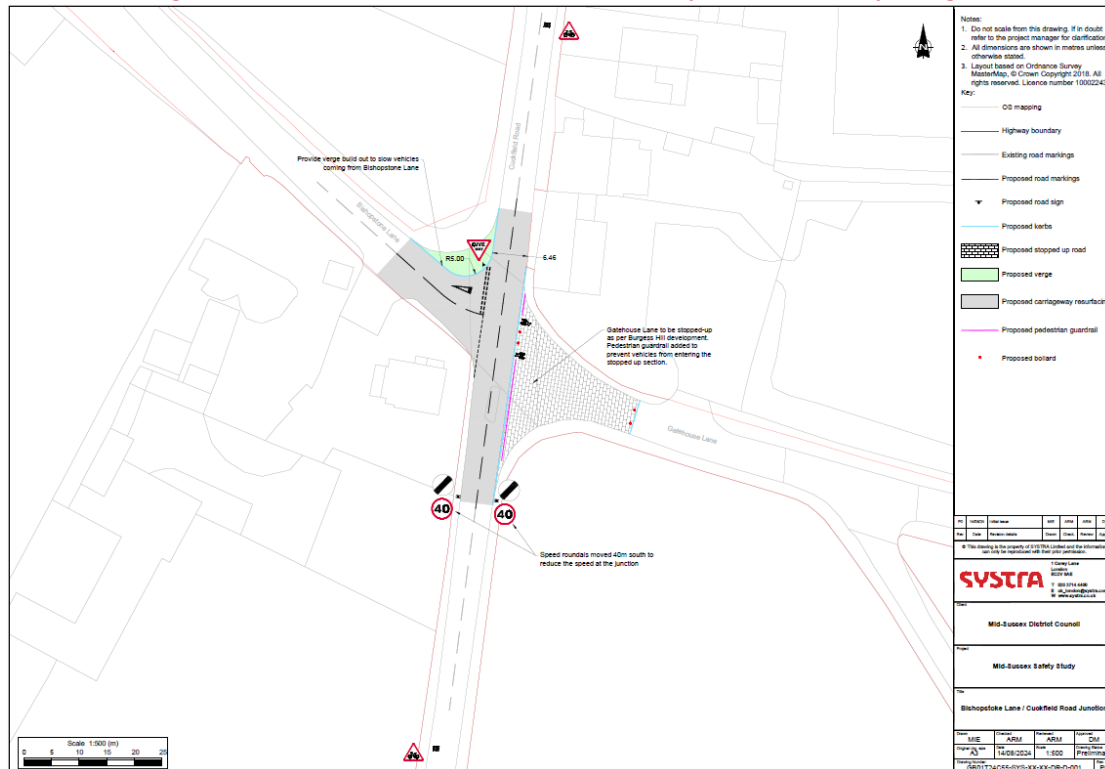
- 2.3.8 As is evident from the figures above the junction is subject to significant degradation, with the southern arm of Cuckfield Road specifically comprised of a narrow entrance to the junction, with faded road markings, and heavily-worn road surfacing.
- 2.3.9 Whilst it is apparent that the road surfacing along Gatehouse Lane and Bishopstone Lane is in better condition than along Cuckfield Lane North and South, visibility to the east and western arms from the north and south arms is limited, as displayed in **Figure 8** above.



## Future Mitigation

2.3.10 With the above information considered, it is determined that this junction should be taken forward for further mitigation. An concept design is shown in **Figure 10** below alongside the drawing in full scale at **Appendix A**. This junction design has built upon the proposals developed as part of the Burgess Hill development application and looked to further enhance the provision for cyclists and associated speed limited reductions.

**Figure 10. Cuckfield Road/Gatehouse Lane/Bishopstone Lane Concept Design**



2.3.11 The proposed design features include:

- **40 mph speed limit roundels have been moved 40 metres south of their existing location to include the entirety of the junction within the speed limit area.** It is intended with this mitigation that vehicle speeds entering the junction will be reduced, subsequently increasing the safety.
- **Advanced cycling warning signage is to be introduced for vehicles on the approach to the junction from both the north and south.** It is intended this is to increase awareness surrounding cyclist movement.
- **The priority movement has been altered from east-west as the main movement to north-south. Give way signage has also been implemented on the Bishopstone Lane/Cuckfield Road junction.** This is due to the direct routing to the A2300 Cuckfield Roundabout along Cuckfield Road to the north of the junction whereas Bishopstone Lane does not provide any through access and the east to west traffic flow is no longer the dominant traffic flow movement.
- **Gatehouse Lane has been stopped-up as shown in the adjacent Burgess Hill development. Pedestrian guardrails and bollards have been introduced on both**

**sides of the stopped-up section.** These measure have been introduced to improve safety for active travel users, whilst also preventing car usage through the arm.

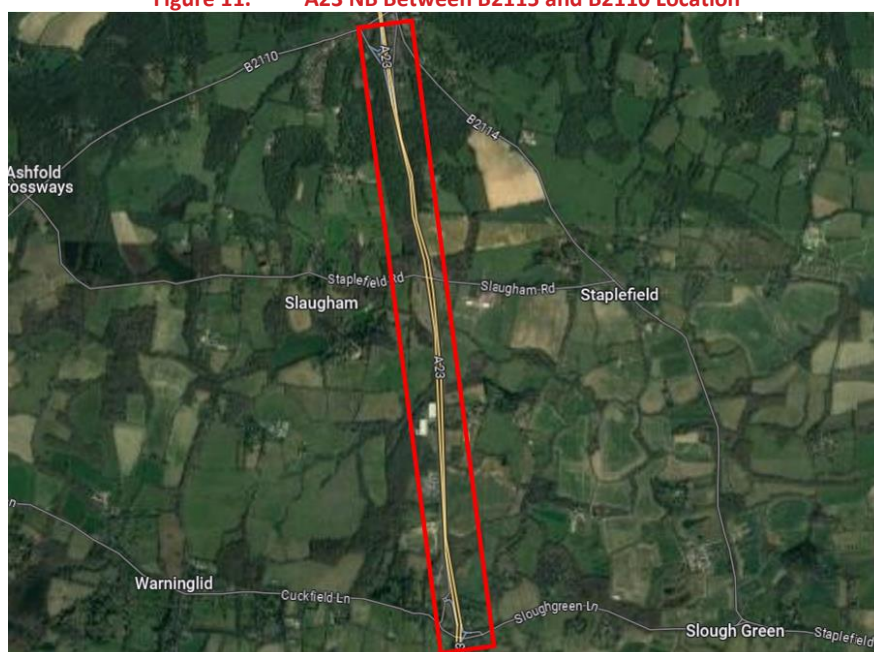
- **Bishopstone Lane and Cuckfield Road junction northwestern corner has been built-out to narrow the junction bell mouth.** This measure is to encourage vehicular slowdown when exiting Bishopstone Lane.

2.3.12 The estimated cost of this scheme is c.£265,000. Further detail on the costing is available within the MSDC Costing Report in **Appendix B**.

## 2.4 A23 NB Between B2115 and B2110

2.4.1 The A23 between B2115 and B2110 link is located to the northwest of the Mid-Sussex district. The link is approximately 2.9 km in length and stretches from the south of Handcross in the north to between Warninglid and Slough Green to the south. The location of the link is displayed in **Figure 11** below.

**Figure 11. A23 NB Between B2115 and B2110 Location**



Source: Imagery © 2024 Landsat / Capornicus, Maxar Technologies, Map Data © 2024

2.4.2 Based on SYSTRA’s ranking of the junctions and links, the link is the 3<sup>rd</sup> highest priority in requiring further investigation for mitigation within the Mid-Sussex district. This is the result of 26 recorded collisions; three serious and 23 slight, occurring along the link within the seven study years. Additionally, between the Reference Case and SC6M2 scenarios, a small proportionate uplift in traffic flow of 6% (+302 vehicles) is seen in the AM peak, and 4% (+137 vehicles) is seen in the PM peak. It is noted that the higher number of collisions is associated with the fact that this is based on a link selection rather than an individual junction and hence covers a broader area which would be expected to introduce higher volumes of collisions.

2.4.3 There are no District Plan site allocations within 2.5 kilometres of the link.

### Collision Analysis

2.4.4 Further detail of the collisions taken place along the link are presented in **Table 4** below.

**Table 4. A23 NB Between B2115 and B2110**

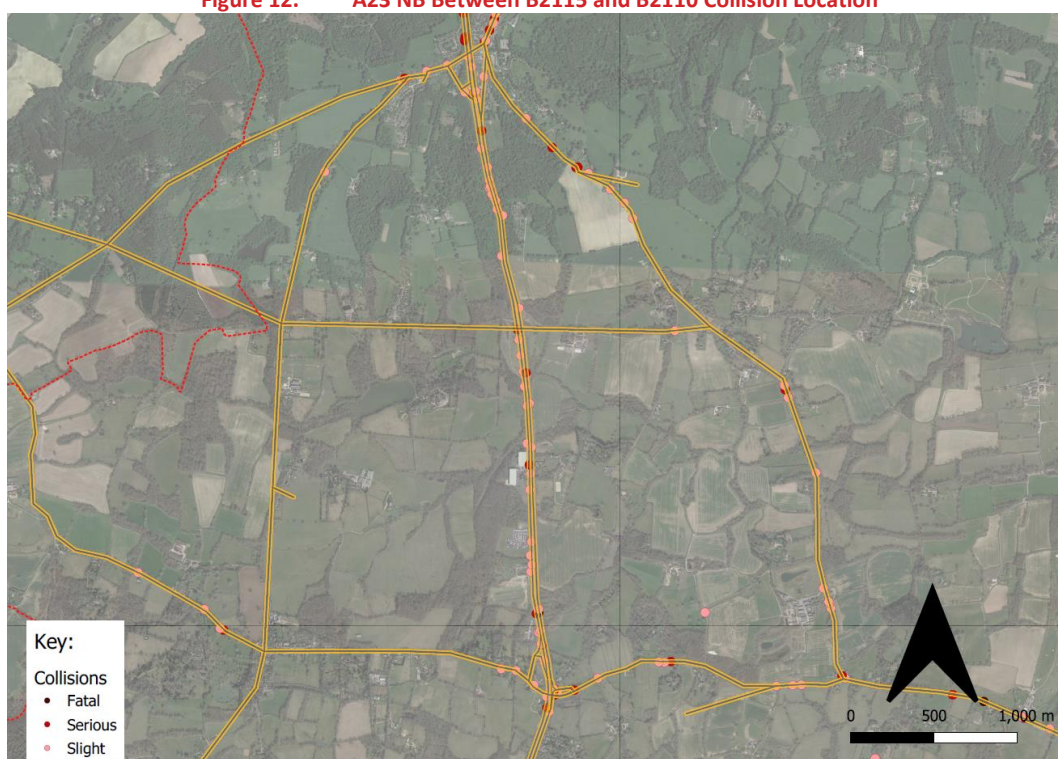
SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 loses control in heavy rain and collides with barrier	Sudden braking (Driver/Rider - Error)
Slight	3	2	Dry	Daylight	Fine without high winds	Vehicle 1 fails to see stationary Vehicle 2 (with blue lights flashing) and collides with it	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Dark: no street lighting	Raining without high winds	Vehicle 1 collides with Vehicle 2	Loss of control (Driver/Rider - Error)
Slight	1	1	Dry	Daylight	Fine without high winds	Vehicle 1 crashed through wooden gate	Impaired by alcohol (Driver/Rider - Impairment)
Slight	2	3	Dry	Daylight	Fine without high winds	Vehicle 1 collides with vehicle 2	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	3	3	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 2 swerved around Vehicle 1 and collides with Vehicle 3	Loss of control (Driver/Rider - Error)
Slight	1	4	Dry	Daylight	Fine without high winds	Vehicle tyre malfunction led to collision with barrier	Loss of control (Driver/Rider - Error)
Slight	3	6	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 rear shunt to Vehicle 3 due to slowing speeds and collides with Vehicle 2	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	3	5	Dry	Daylight	Fine without high winds	Vehicle 1 collides with barrier	Poor turn or manoeuvre (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 aquaplaned and collides with Vehicle 2	Loss of control (Driver/Rider - Error)
Slight	4	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 1 collides with Vehicles 2, 3, and 4	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Wet/Damp	Daylight	Raining without	Vehicle 1 collides with roadside barrier	Nervous/Uncertain (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
					high winds		
Serious	1	1	Wet/Damp	Daylight	Raining with high winds	Vehicle 1 collides with central reservation	Travelling too fast for conditions (Driver/Rider - Injudicious)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 in slow moving traffic	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Dark: no street lighting	Raining without high winds	Vehicle 1 collides with barrier	Illness or disability, mental or physical (Driver/Rider - Impairment)
Slight	1	3	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with barrier	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	2	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	1	1	Wet/Damp	Dark: no street lighting	Raining with high winds	Vehicle 1 collides with barrier	Travelling too fast for conditions (Driver/Rider - Injudicious)
Serious	10	4	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 slows for broken down vehicle, causing 9 vehicle collision	Following too close (Driver/Rider - Injudicious)
Slight	4	2	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 changing lane causes 4 vehicle collision	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	3	2	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with Vehicle 2, which subsequently collides with Vehicle 3	Slippery road due to weather (Road Environment Contrib)
Slight	1	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 aquaplaned and collides with central reservation	Travelling too fast for conditions (Driver/Rider - Injudicious)
Serious	3	2	Wet/Damp	Dark: street lights present but unlit	Raining without high winds	Vehicle 1 collides with Vehicle 2, which subsequently collides with Vehicle 3	Other (Special Codes)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	2	Wet/Damp	Dark: no street lighting	Raining without high winds	Vehicle 1 collides with Vehicle 2	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	3	3	Wet/Damp	Daylight	Fog or mist - if hazard	Vehicle 1 collided with Vehicle 2, which collided with barrier and Vehicle 3	Careless/Reckless (Driver/Rider - Behaviour)

2.4.5 The location of the collisions is indicated in **Figure 12** below.

**Figure 12. A23 NB Between B2115 and B2110 Collision Location**



2.4.6 As is evidenced above, the collisions occur relatively evenly throughout the length of the link, with a common theme across the collision data seen to be the result of vehicular slowdown and subsequent crashing into the rear of vehicles. Additional causation is seen as wet weather, with five collisions caused by loss of control due to surface water.

### Road Layout/Conditions

2.4.7 The road conditions of the A23 between the B2115 On-Slip and B2110 are indicated in **Figure 13** below.

**Figure 13. A23 NB Between B2115 and B2110 Link Conditions**



Source: Image Capture April 2024 © 2024 Google

- 2.4.8 As is evident from the image above (which is representative of the link as a whole), the link is noted to be of a smooth surface quality, with wide lanes and adequate lighting. With all aspects of the link considered, it is determined that much of the causation behind the link's inclusion within the collision ranking is due to its length, with the causation behind many of the collisions being due to bad weather conditions. We have additionally considered the drainage provision on this link, due to the number of incidents associated with wet weather; we have not identified any specific issues which we consider would be directly associated with the drainage conditions.

### Future Mitigation

- 2.4.9 Due to the adequate surfacing and width of the road layout, it is determined that the A23 NB Between B2115 and B2110 will not be taken forward for physical mitigation associated with the safety study. It is deemed that the number of collisions occurring along the link does not trigger a need for further mitigation relative to the length of the link as there are no obvious correlations of collision clusters to specific sites or collision types.

## 2.5 A23 / A272 Southbound Off-Slip

- 2.5.1 The A23/A272 Southbound Off-Slip is located to the south of Bolney and to the northwest of Burgess Hill. Within SYSTRA's collision analysis, the off-slip is determined by the initial node at the north of the off-slip, the north of the roundabout node between the off-slip/Bolney Road/Cowfold Road, and the link between.
- 2.5.2 The location of the off-slip is indicated in **Figure 14** below.

**Figure 14. A23/A272 SB Off-Slip Location**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.5.3 As part of SYSTRA’s collision analysis, the nodes/links are ranked 4<sup>th</sup> highest in terms of requiring further investigation for mitigation development. This is largely due to 12 recorded collisions within the seven-year study period; with three collisions being serious in severity, and nine slight. The traffic flow uplift between the Reference Case and SMC62 scenarios is 3% (+102 vehicles) in the AM peak and 5% (+247 vehicles) in the PM peak.

2.5.4 The proposed Bolney allocated development site within the District Plan lies approximately 800 metres to the west of the junction with a potential yield of 200 dwellings.

**Collision Analysis**

2.5.5 Further detail surrounding the causation of the collisions is noted in **Table 5** below.

**Table 5. A23/A272 SB Off-Slip Collision Detail**

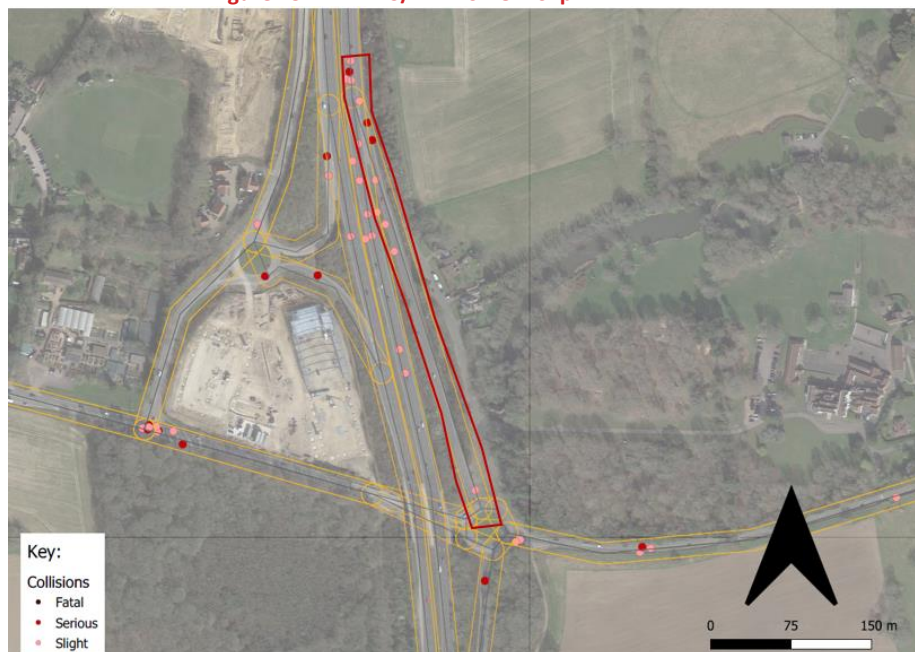
SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	2	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle collided with lamppost	Travelling too fast for conditions (Driver/Rider - Injudicious)
Slight	2	1	Wet/Damp	Daylight	Raining with high winds	Vehicle 1 collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Wet/Damp	Dark: street lights present but unlit	Raining without high winds	Vehicle 1 collided with lamppost	Poor turn or manoeuvre (Driver/Rider - Error)
Slight	2	3	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 travelling at excess speed collided with truck	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 lost control on standing water and collided with signpost	Travelling too fast for conditions (Driver/Rider - Injudicious)
Slight	3	2	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with Vehicles 2 and 3	Careless/Reckless (Driver/Rider - Behaviour)
Serious	1	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with grassy verge and barrier	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)
Slight	1	2	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 lost control and collides with signpost	Loss of control (Driver/Rider - Error)
Serious	1	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 failed to register slip road slow queue and collides with lamppost	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collided with roadworks	Loss of control (Driver/Rider - Error)
Serious	4	1	Wet/Damp	Dark: street lights present and lit	Raining with high winds	Vehicle 1 collides with stationary vehicle	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	2	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 collides with Vehicle 2	Travelling too fast for conditions (Driver/Rider - Injudicious)

2.5.6 The locations of the collisions is displayed in **Figure 15** below.



Figure 15. A23/A272 SB Off-Slip



2.5.7 As depicted above, seven of the twelve collisions are noted to occur within proximity of the point of diverge from the A23, with the remainder largely occurring at the northern end of the off-slip with one collision slight in severity occurring in close proximity to the roundabout at the southern end of the slip road.

2.5.8 Of the reported collisions, eleven occurred in dark and/or rainy conditions, whilst one occurred in damp daylight conditions. The majority of the collisions were caused by reckless driving, whilst two collisions were caused by drivers failing to notice stationary cars in front of them whilst accessing the off-slip.

**Road Layout/Conditions**

2.5.9 The figures below shown the road layout of the off-slip, with **Figure 16** showing the point of diverge from the A23, **Figure 17** showing the view down the off-slip and **Figure 18** displaying the approach to the roundabout at the southern end of the off-slip.

**Figure 16. A23/A272 SB Off-Slip Diverge**



Source: Image Capture April 2024 © 2024 Google

**Figure 17. A23/A272 Off-slip**



Source: Image Capture March 2024 © 2024 Google

**Figure 18. A23/A272 Off-Slip Southern Roundabout**



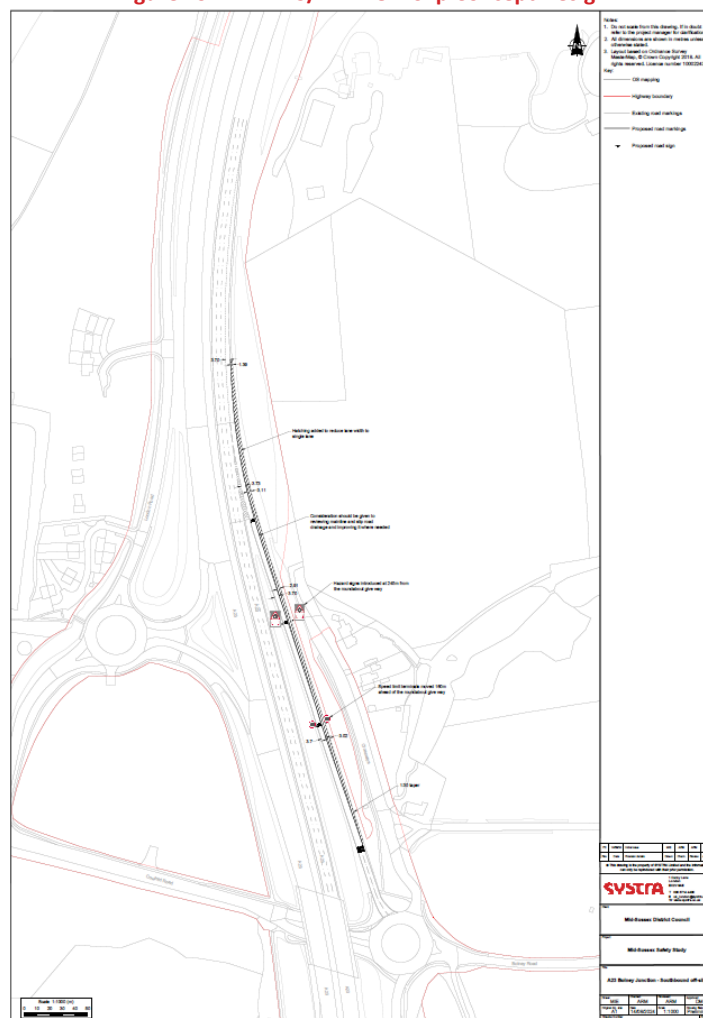
*Source: Image Capture April 2024 © 2024 Google*

- 2.5.10 Upon further inspection of the road layout of the off-slip, it is determined that the signage upon approach to the diverge is sufficient however the off-slip is very wide for a single lane at approximately 6.7m. As a single lane this width encourages higher speeds upon approach to the roundabout. The off-slip length and approach to the roundabout at this southern end has a speed limit of 50 mph, with no warning sign on the slip road alerting drivers to the presence of a roundabout at the end of the slip road.

### **Future Mitigation**

- 2.5.11 It is determined due to the high level of collisions surrounding the off-slip, that it should be taken forward for further mitigation development. **Figure 19** indicates SYSTRA's development option for the off-slip, with a full-scale drawing in **Appendix A**.

**Figure 19. A23/A272 Off-Slip Concept Design**



2.5.12 The proposed design features include:

- **The existing wide slip road (6.7m wide) is to be reduced to a single lane (3.7m wide), with continuous white line hatching (~3 m wide).** This is to prevent two vehicles exiting and travelling through the slip lane which could lead to collisions.
- **Advanced warning signs of the roundabout are to be introduced approximately 245 metres from the roundabout to raise awareness of the approaching roundabout.**
- **50 mph speed limit roundels are to be moved 160 metres from the roundabout give way.** This is to be in accordance with Design Manual for Roads and Bridges (DMRB) Stopping Sight Distance (SSD) for a 50mph road.
- **1:30 hatching taper is to be introduced.** This is to enable a two-lane approach closer to the roundabout.
- **“SLOW” marking is to be added throughout the slip road and destination markings introduced.** This is to delineate movements at the roundabout and avoid conflicts between vehicles.

2.5.13 The estimated cost of this scheme is c.£33,500. Further detail on the costing is available within the MSDC Costing Report in **Appendix B**.

2.6 A2300/Bishopstone Lane

2.6.1 The A2300/Bishopstone Lane is located to the west of Burgess Hill and the east of Hickstead. The location and layout of the junction is shown in **Figure 20** below.

Figure 20. A2300/Bishopstone Lane Junction Layout



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.6.2 Through SYSTRA’s collision ranking, the A2300/Bishopstone Lane is ranked as the 5<sup>th</sup> highest ranked junction for further investigation for future mitigation. Contributing factors to this include the six collisions occurring at the junction, comprised of two serious collisions and four slight.

Collision Analysis

2.6.3 The detail of the collisions surrounding the A2300/Bishopstone Lane junction is indicated in **Table 6** below.

Table 6. A2300/Bishopstone Lane Collision Detail

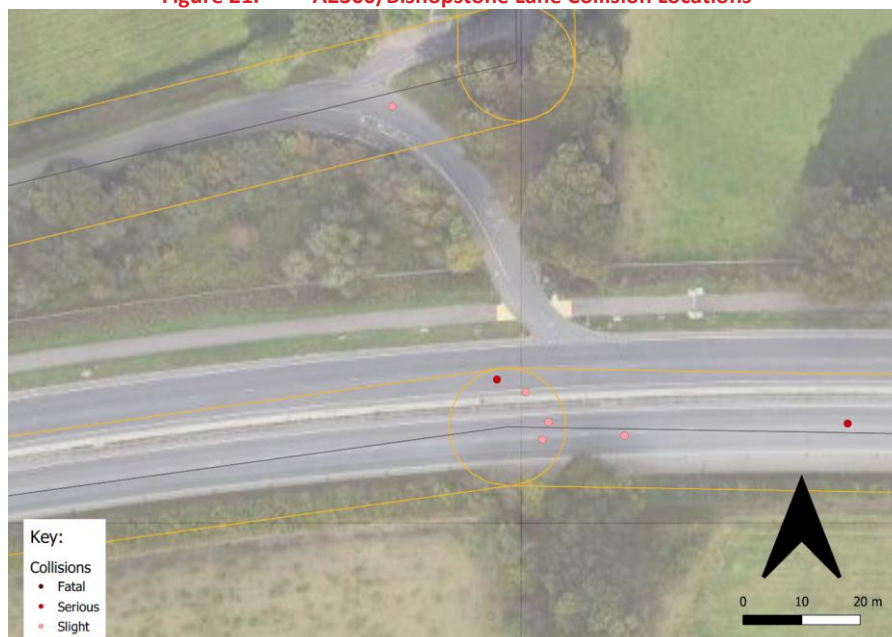
SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 failed to notice Vehicle 2 when turning and collided with it.	Failed to judge other person's path/speed (Driver/Rider - Error)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Daylight	Fine without high winds	Cyclist misjudged car's location when turning and the car collided with the cyclist	Careless/Reckless (Driver/Rider - Behaviour)
Slight	3	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 2 and 3 collide into the back of Vehicle 1 after suddenly stopping	Following too close (Driver/Rider - Injudicious)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 when turning	Careless/Reckless (Driver/Rider - Behaviour)
Slight	4	1	Dry	Daylight	Fine without high winds	Vehicle 1 failed to slow down and collided into Vehicles 2 and 3	Failed to look properly (Driver/Rider - Error)
Serious	2	4	Wet/Damp	Dark: no street lighting	Raining without high winds	Vehicle 1 misjudged Vehicle 2 stopping and collided into the back of it	Emergency vehicle on call (Special Codes)
Slight	1	1	Dry	Daylight	Fine without high winds	Vehicle 1 lost control and collided with tree	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)

2.6.4 It is noted that a majority of the collisions occurring at the junction are the result of the vehicles waiting on the A2300 waiting to turn into Bishopstone Lane. It is noted however that with these collisions occurred between 2017 and 2020, since when, a junction improvement scheme has been constructed resulting in vehicles being prohibited from entering Bishopstone Lane from A2300.

2.6.5 The location of the collisions is indicated in **Figure 21** below.

**Figure 21. A2300/Bishopstone Lane Collision Locations**



2.6.6 As is evident, five of the collisions (one serious, four slight) occurred at the junction itself, whereas one serious collision occurred to the east along the A2300, and one slight collision occurred to the north on Job’s Lane.

### Road Layout/Conditions

2.6.7 **Figure 22** and **Figure 23** below indicate the previous and existing layout of the junction.

**Figure 22. A2300/Bishopstone Lane Previous Junction Layout (pre-2020)**



Source: Image Capture April 2019 © 2024 Google

**Figure 23. A2300/Bishopstone Lane Existing Junction Layout (post-2020)**



Source: Image Capture March 2024 © 2024 Google

2.6.8 As is evident from the figures above, with the newly constructed junction layout, Bishopstone Lane is not accessible from the A2300, and therefore the risk from previous collisions is not considered to justify further mitigation assessment as the conflict points have been addressed by the constructed upgrade.

**Future Mitigation**

2.6.9 Further mitigation is not required due to the layout of the junction having been upgraded since 2020 since the time of collisions, with the layout now prohibiting vehicles from entering Bishopstone Lane from the A2300 reducing the existing conflict points.

**2.7 A23/A281 Eastbound On-Slip**

2.7.1 The A23/A281 Eastbound On-Slip is located to the northwest of Pyecombe, and to the southwest of Hassocks. The on-slip is comprised of one lane, merging with the two eastbound lanes on the A23. The layout of the junction is indicated in **Figure 24** below.



Figure 24. A23/A281 On-Slip Junction Layout



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.7.2 Within SYSTRA’s collision rating system, the junction ranks the 6<sup>th</sup> highest in priority for analysis for future mitigation. This is due to the five collisions recorded through the seven-year study period, two of serious severity and three of slight. Whilst an uplift of 8% in flow is apparent between the Reference Case and SC6M2 scenario (+285 vehicles) in the AM peak, there is seen to be a minimal increase in the PM peak of 0% (+16 vehicles).

**Collision Analysis**

2.7.3 Further detail surrounding the collisions is indicated in **Table 7** below.

Table 7. A23/A281 EB On-Slip Collision Detail

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	4	1	Dry	Daylight	Fine without high winds	4 vehicle collision caused by lane swerving	Failed to look properly (Driver/Rider - Error)
Slight	1	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collided with barrier	Poor turn or manoeuvre (Driver/Rider - Error)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with lorry	Dazzling sun (Driver/Rider - Vision Affected)
Slight	2	1	Wet/Damp	Dark: street lights	Fine without high winds	Vehicle 1 collides with Vehicle 2	Fatigue (Driver/Rider - Impairment)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
				present and lit			
Serious	1	1	Dry	Daylight	Fine without high winds	Vehicle exits carriageway and collides with lamppost	Illness or disability, mental or physical (Driver/Rider - Impairment)

2.7.4 The locations of the collisions are displayed in **Figure 25** below.

**Figure 25. A23/A281 Collision Mapping**



2.7.5 As indicated above, three of the collisions (one serious, two slight in severity) occurred in close proximity to the merge with the A281, whereas the other serious collision occurred on the spread out throughout the length of the merge.

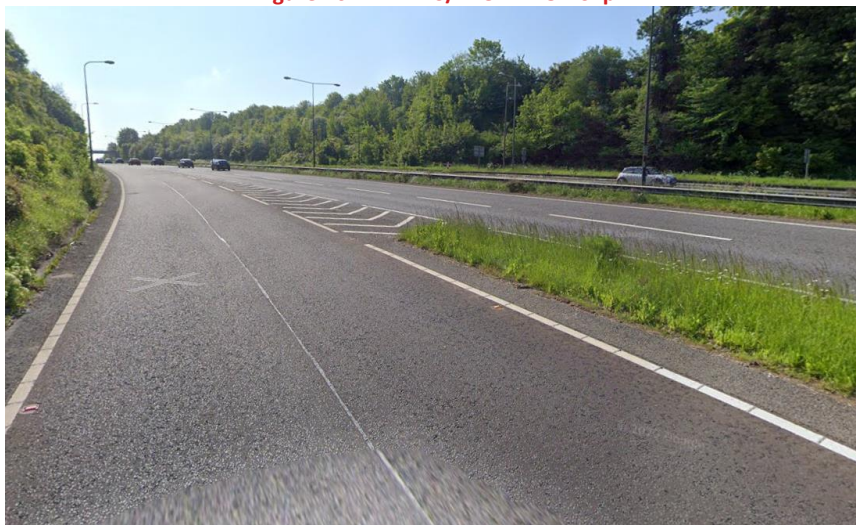
2.7.6 As evident from the table above, the two serious collisions were caused due to a medical condition, and a collision due to a vehicle braking suddenly. Other slight collisions are caused by factors such as driver loss of control, sunlight affecting vision, and driver fatigue.

2.7.7 Four of the five collisions are noted to have occurred during the day with dry conditions, whereas one is noted to have occurred in the damp at night, however it is noted that sufficient street lights are present.

**Road Layout/Conditions**

2.7.8 **Figure 26** below indicates the current layout of the road network at the merge with the A23.

**Figure 26. A23/A281 EB On-Slip**



*Source: Image Capture May 2023 © 2024 Google*

- 2.7.9 As is evident from the figure above and wider analysis of the merge, it is evident that the road layout is of a sufficient width at 5.8 metres at the beginning of the merge, with the length of the merge being approximately 230 metres.

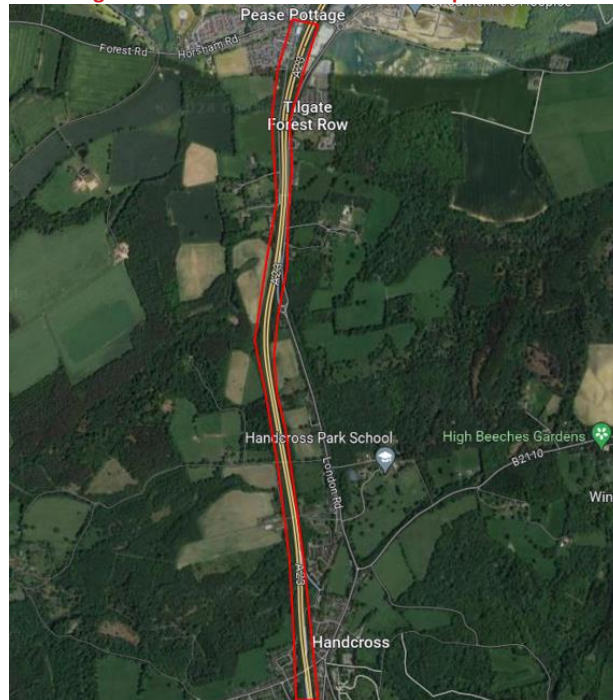
### **Future Mitigation**

- 2.7.10 Given the appropriate quality of the road network, and the associated collisions largely being the result of circumstances aside from road infrastructure or safety, it is determined that the A23/A281 should not be taken forward for further road safety mitigation.

## **2.8 A23 Handcross NB to A264 Off-Slip**

- 2.8.1 The A23 NB to A264 Off-Slip is located to the northwest of the study area, stretching between Handcross to the South and Pease Pottage at the northern end of the link.
- 2.8.2 The location of the link is indicated in **Figure 27** below.

**Figure 27. A23 NB to A264 Off-Slip Location**



Source: Imagery © 2024 Landsat / Capornicus, Maxar Technologies, Map Data © 2024

2.8.3 Through SYSTRA’s collision scoring, the link is ranked as the 7<sup>th</sup> highest priority for consideration of the requirement for mitigation. This is largely the result of nine collisions occurring along the link throughout the seven-year study period, all slight in severity. The vehicular uplift between the Reference Case and SC6M2 scenarios is noted to be 4% (+246 vehicles) in the AM peak and 3% (+113 vehicles) in the PM peak.

**Collision Detail**

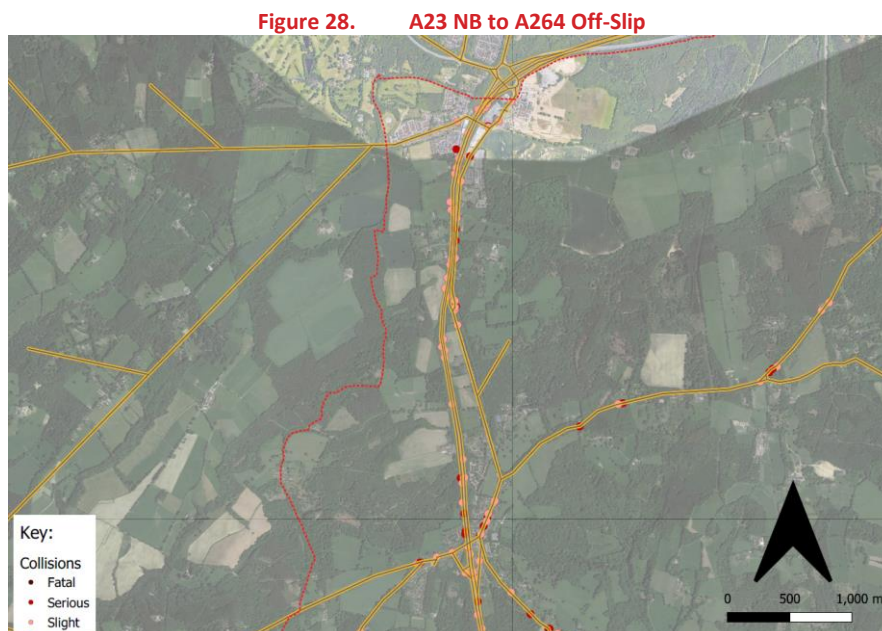
2.8.4 Further detail of the collisions along the link are indicated in **Table 8** below.

**Table 8. A23 NB to A264 Off-Slip Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	3	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 2 collides with Vehicle 3 after changing lanes	Emergency vehicle on call (Special Codes)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 hits pool of water and collides with Vehicle 2	Loss of control (Driver/Rider - Error)
Slight	1	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 loses control and skids.	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)
Slight	1	1	Wet/Damp	Daylight	Raining with high winds	Vehicle 1 collided with signpost	Loss of control (Driver/Rider - Error)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collided with Vehicle 2	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	1	1	Frost/Ice	Dark: street lights present and lit	Fine without high winds	Vehicle 1 loses control on ice and collides with central barrier	Slippery road due to weather (Road Environment Contrib)
Slight	2	1	Wet/Damp	Dark: street lights present but unlit	Other	Vehicle 1 collides with Vehicle 2 and Vehicle 2 collides with central reservation	Careless/Reckless (Driver/Rider - Behaviour)
Slight	3	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 aquaplaned and collides with Vehicle 2 and 3	Careless/Reckless (Driver/Rider - Behaviour)
Slight	3	2	Wet/Damp	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2 and 3	Failed to judge other person's path/speed (Driver/Rider - Error)

2.8.5 The location of the collisions along the link is indicated in **Figure 28** below.



2.8.6 As is evidenced above, four of the nine noted collisions are the result of drivers losing control of vehicles in wet or icy conditions. Collisions are noted to have occurred relatively evenly along the link.

2.8.7 The road quality is indicated in **Figure 29** below.

**Figure 29. A23 NB to A264 Off-Slip**



Source: Image Capture April 2024 © 2024 Google

- 2.8.8 The highway quality of the link is considered to be acceptable relative to its role, with three lanes and smooth surfacing quality.

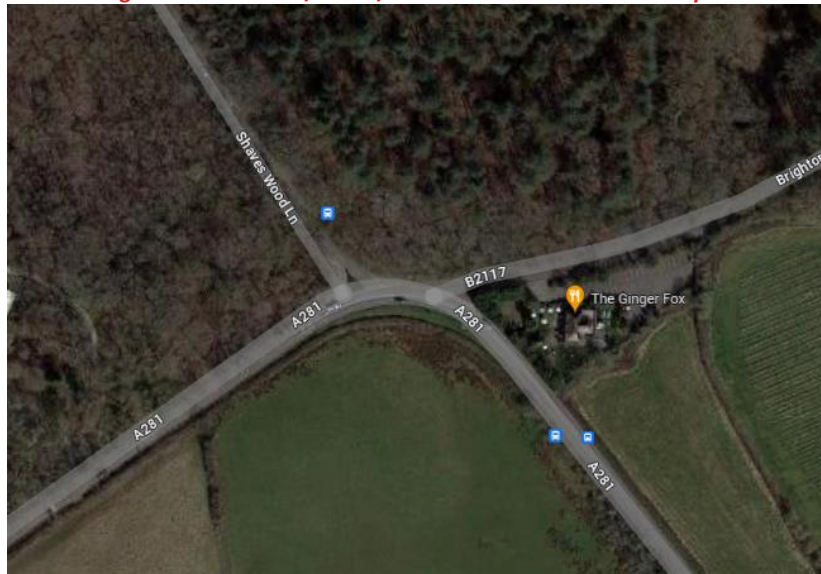
### **Future Mitigation**

- 2.8.9 It is determined that the link should not be taken forward for mitigation appraisal, given the adequate road quality, and the relatively low number of collisions not associated with wet/icy conditions. Given the link length the collisions are noted to be relatively well dispersed along the link with limited clustering of collisions.

## **2.9 A281/B2117/Shaves Wood Lane**

- 2.9.1 The A281/B2117/Shaves Wood Lane junction is located towards the south of the Mid-Sussex region, to the east of Woodmancote and to the west of Muddleswood.
- 2.9.2 The location of the junction is indicated in **Figure 30** below.

**Figure 30. A281/B2117/Shaves Wood Lane Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

- 2.9.3 Within the SYSTRA collision scoring system, the junction is ranked as the 8<sup>th</sup> highest priority for further mitigation investigation, due to the 13 collisions recorded within the seven study years; 6 serious and 7 slight in severity. Additionally, there is an uplift in vehicular flow of 9% (an increase of 91 vehicles) from the Reference Case to Scenario 6M2C in the AM peak, and of 12% (an increase of 150 vehicles) in the PM peak.
- 2.9.4 There are no District Plan allocated sites in close proximity of the junction, with the nearest being just over 3km to the north.

**Collision Detail**

- 2.9.5 Further detail on the collisions is noted in **Table 9** below.

**Table 9. A281/B2117/Shaves Wood Lane Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Dazzling sun (Driver/Rider - Vision Affected)
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)
Serious	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 approaches a turning manoeuvre at speed and collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Dazzling sun (Driver/Rider - Vision Affected)
Serious	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 2 collides with Vehicle 1	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Dry	Daylight	Fine without high winds	Cyclist collides with Vehicle 1	Following too close (Driver/Rider - Injudicious)
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Travelling too fast for conditions (Driver/Rider - Injudicious)
Slight	2	1	Wet/Damp	Daylight	Fog or mist - if hazard	Vehicle 1 collides with Cyclist	
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with stationary Cyclist	
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 misjudges upcoming junction and collides with Vehicle 2	Junction overshoot (Driver/Rider - Error)
Serious	2	2	Wet/Damp	Dark: no street lighting	Fine without high winds	Vehicle 1 fails to give way and collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 during U-turn manoeuvre	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 fails to see oncoming vehicle and collides with Vehicle 2	

2.9.6 The location of the collisions is indicated in **Figure 31** below.



**Figure 31. A281/B2117/Shaves Wood Lane Collision Locations**



2.9.7 As seen in the figure above, the majority of the collisions occur to the east of the junction, with six collisions (three serious, three slight) occurring at the B2117/A281, three collisions (two serious, one slight) occurring to the west at the Shaves Wood Lane/A281, and three collisions (one serious, two slight) occurring within the centre of the junction.

2.9.8 The quality of road layout is indicated in **Figure 32** below.

**Figure 32. A281/B2117/Shaves Wood Lane (View from A261 SE)**



Source: Image Capture April 2021 © 2024 Google

**Figure 33. A281/B2117/Shaves Wood Lane (View from B2117)**



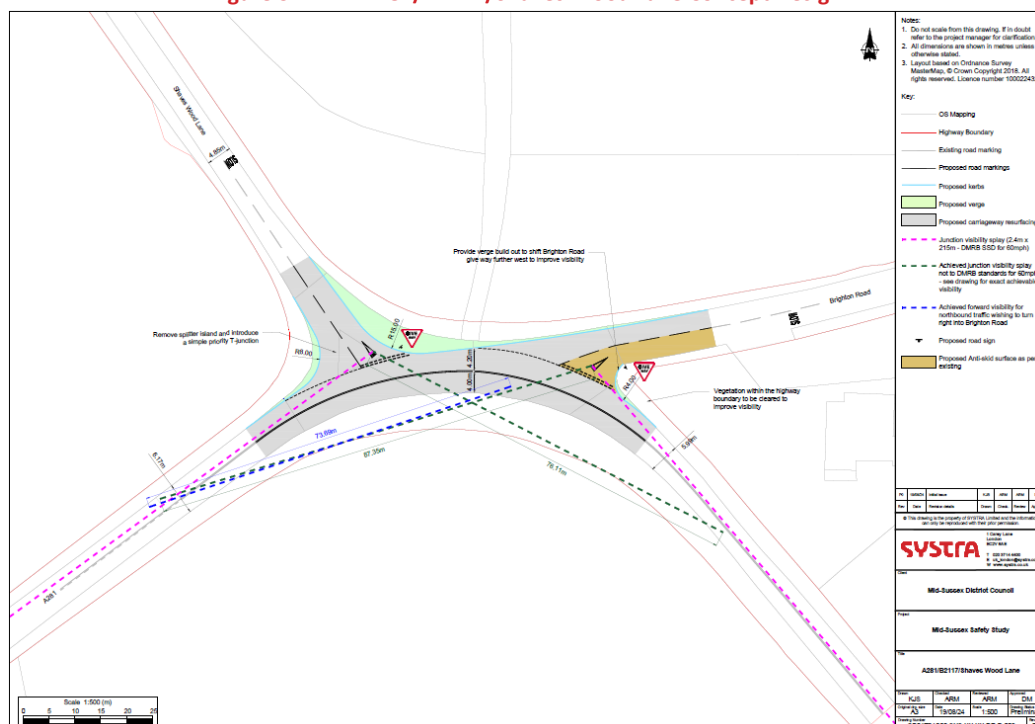
Source: Image Capture May 2024 © 2024 Google

- 2.9.9 As is evident from above, particularly from the B2117, visibility surrounding the junction is poor, with tall and dense trees surrounding the B2117, leading to difficulty in seeing oncoming vehicles from the southeast of the junction. Whilst the cutting back/ removal of the trees would improve junction visibility, it is unlikely that this will fully resolve the visibility issues given the narrow buffer to the highway boundary extent.

### Future Mitigation

- 2.9.10 Due to the high number of collisions and lack of visibility surrounding the junction, it is deemed that the A281/B2117/Shaves Wood Lane junction should be taken forward for further mitigation. The concept design is indicated in **Figure 34** below, and a full-scale drawing in **Appendix A**.

**Figure 34. A281/B2117/Shaves Wood Lane Concept Design**



2.9.11 The proposed design features include:

- **Shaves Wood Lane arm has been simplified to a priority T-junction, and narrowed by the removal of the splitter island.** This intervention will have the benefit of providing a clearer layout, reducing vehicle speeds and improving visibility for those entering the A281 from Shaves Wood Lane.
- **Brighton Road/A281 junction southeastern corner has been built-out along with A281 centre line being shifted south.** This will allow the Brighton Road give way line to be shifted further west, so as to improve sightlines for drivers exiting Brighton Road.
- **Anti-skid surface at Brighton Road has been maintained and junction warning signage and road markings has been introduced.** This is to enhance safety through awareness surrounding the approach to the junction.

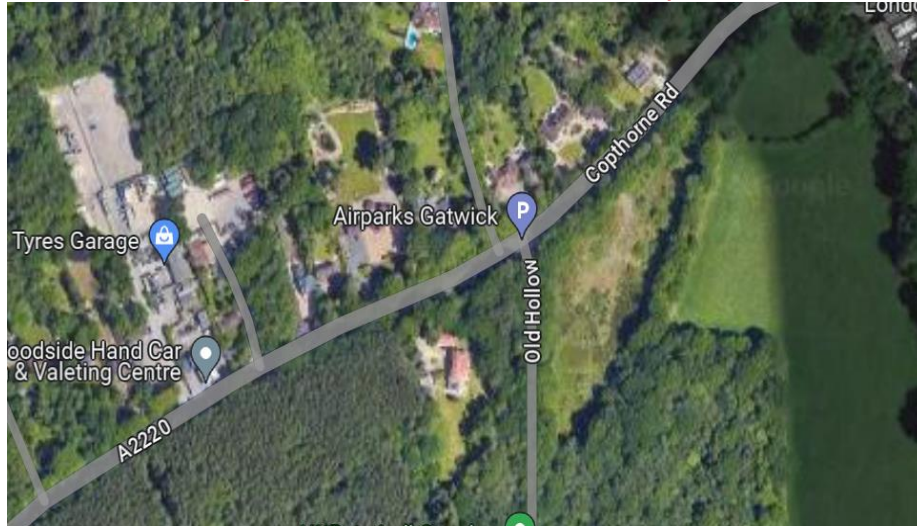
2.9.12 The estimated cost of this scheme is c.£343,000. Further detail on the costing is available within the MSDC Costing Report in **Appendix B**.

2.9.13 It is noted that West Sussex County Council Road Safety Group have a proposed improvement scheme at the A281/B2117/Shaves Wood Lane junction which is targeted for implementation in 2025/26. A design sense check has been conducted and the proposed District Plan scheme does not preclude the Road Safety Group scheme from coming forward, nor does the Road Safety Group scheme preclude the District Plan scheme from coming forward. Upon implementation of the Road Safety Group Scheme (Drawing No: AEX013-GA-001) there will be a period of monitoring for 36 months following construction to determine the suitability of the District Plan scheme to come forward in its proposed form or whether any amends will be required.

**2.10 A220/Old Hollow**

2.10.1 The A220/Old Hollow junction is located to the northwest of the Mid-Sussex region, to the east of the town of Crawley. The location and layout of the junction is indicated in **Figure 35** below.

**Figure 35. A220/Old Hollow Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.10.2 Within SYSTRA’s collision rating system, the junction is ranked as the 9<sup>th</sup> junction to consider for further investigation. The junction sifting criteria has largely picked up this junction as a result of the significant percentage traffic flow uplift through the junction, with a 38% increase in the AM peak (+742 vehicles) and 39% increase (+635 vehicles) in the PM peak. One collision has been identified at this location, marked as slight in severity.

**Collision Detail**

2.10.3 Further detail of the associated collision is provided in **Table 10** below.

**Table 10. A220/Old Hollow Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	3	1	Dry	Daylight	Fine without high winds	Vehicle 2 collided with Vehicle 3 which had slowed whilst Vehicle 1 was pulling out of junction.	Nervous/Uncertain (Driver/Rider - Behaviour)

2.10.4 The location of the collision is displayed in **Figure 36** below.

**Figure 36. A220/Old Hollow Collision Mapping**



2.10.5 The collision is noted to occur to the south of the junction along Old Hollow in close proximity to the node.

### Road Layout/Conditions

2.10.6 The road conditions of the junction is indicated in **Figure 37** below.

**Figure 37. A220/Old Hollow Junction Layout**



*Source: Image Capture June 2023 © 2024 Google*

2.10.7 As is indicated above in **Figure 37** above, the junction shows slight surface degradation along the Old Hollow Road arm. However, the lane entries are wide, with adequate visibility and Give Way signage is present.

### Future Mitigation

2.10.8 Given the low number of collisions occurring surrounding the junction, this junction has not been taken forward for mitigation stage development as part of the safety study however as individual site allocations come forward this junction can be considered for minor

improvements as part of the Transport Assessments alongside capacity considerations given the high volumes of traffic flow uplift at this junction associated with the District Plan growth

**2.11 A23/A273 Pyecombe**

2.11.1 The A23/A273 junction is located to the south of the Mid-Sussex region, on the southern border of the village of Pyecombe. The layout of the unsignalized T-junction is shown in **Figure 38** below.

**Figure 38. A23/A273 Pyecombe Junction**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.11.2 Within the collision rating system, the junction is ranked as the 10<sup>th</sup> highest priority for consideration for safety led mitigation. This is due to the seven recorded collisions surrounding the junction (two serious, five slight), and the uplift between the Reference Case and SMC62 scenarios of 11% (+150 vehicles) in the AM peak, and 5% (+58 vehicles) in the PM peak.

2.11.3 There are no District Plan allocated sites within close proximity of the junction, with the closest development located approximately 3.3km to the north.

**Collision Detail**

2.11.4 The detail of the collisions is indicated in **Table 11** below.

**Table 11. A23/A273 Pyecombe Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 failed to stop in time	

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
						at junction and collides with Vehicle 2 waiting to exit junction.	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1 as it overtook.	Poor turn or manoeuvre (Driver/Rider - Error)
Serious	2	2	Dry	Daylight	Fine without high winds	Vehicle 2 (bus) emergency stops as Vehicle 1 pulls out in front of it.	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	3	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	3	3	Dry	Daylight	Fine without high winds	Vehicle 2 and 3 collides with Vehicle 1	Disobeyed give way or stop sign markings (Driver/Rider - Injudicious)
Slight	2	4	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1	Disobeyed give way or stop sign markings (Driver/Rider - Injudicious)
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1 who pulls out in front of them.	Poor turn or manoeuvre (Driver/Rider - Error)

2.11.5 The location of the collisions is indicated in **Figure 39** below.

**Figure 39. A23/A273 Pyecombe Collision Mapping**



- 2.11.6 As is evident above, seven collisions are recorded over the seven-year study period. Six of these (Two serious and four slight) took place within the western junction of the node, whereas one collision (slight in severity) took place within the eastern junction.
- 2.11.7 A majority of the collisions are caused by a drivers either disobeying give-way markings, poor turning or manoeuvres or failing to judge oncoming vehicles speed. One of the serious collisions was caused by a vehicle entering the A23 after turning from the petrol station too abruptly.
- 2.11.8 The conditions of the existing junction are indicated in **Figure 40** below.

**Figure 40. A23/A273 Pyecombe Junction Layout**



Source: Image Capture April 2024 © 2024 Google

- 2.11.9 As depicted above, the junction is an unsignalized four arm crossroads, with a large central reserve waiting space in between the north and southbound arms of the A23. The road surfacing is smooth, however the painted lanes are faded in areas.

### **Future Mitigation**

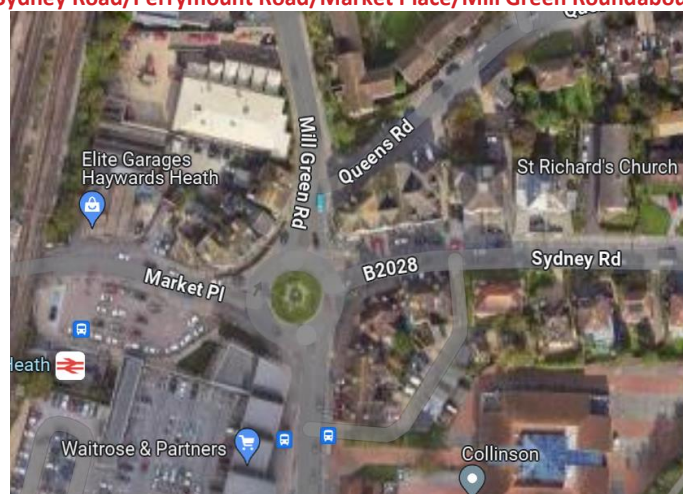
- 2.11.10 Given that a number of the collisions relate to driver behaviour error with vehicles pulling out onto the path of other vehicles this junction has been discounted for further assessment. Additionally, the level of traffic flow uplift is forecast to be relatively low and distant from allocated development plan sites.

## **2.12 Sydney Road/Perrymount Road/Market Place/Mill Green Roundabout**

- 2.12.1 The Sydney Road/Perrymount Road/Market Place/Mill Green Roundabout is located in the central region. The junction is located within the town of Haywards Heath. The junction layout is indicated in **Figure 41** below.



**Figure 41. Sydney Road/Perrymount Road/Market Place/Mill Green Roundabout Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.12.2 Within SYSTRA’s collision rating system, the roundabout is ranked 11<sup>th</sup> highest priority for further investigation surrounding potential mitigation. Four collisions, all slight in severity are recorded within the seven year study period, and between the Reference Case and SMC62 scenarios an uplift is recorded of 4% in the AM peak (+103 vehicles) and 6% in the PM peak (+134 vehicles).

2.12.3 The District Plan allocated site Lane East of Borde Hill Lane lies approximately 1.4km to the north, with a yield of 60 dwellings. Orchard Shopping Centre lies approximately 1.2km to the south with a yield of 100 dwellings.

### Collision Detail

2.12.4 The recorded collisions surrounding the junction over the seven-year study period are indicated in **Table 12** below.

**Table 12. Sydney Road/Perrymount Road/Market Place.Mill Green Roundabout Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Dry	Daylight	Fine without high winds	Passenger fell from bus as it pulled away	
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 collides with Motorcyclist	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	3	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 2 collides with Vehicle 1	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 which was undertaking a U-turn.	

2.12.5 The mapped location of the collisions is indicated in **Figure 42** below.

**Figure 42. Sydney Road/Perrymount Road/Market Place/Mill Green Road Roundabout Collision Locations**



2.12.6 As indicated the figure above, three of the four collisions are located to the east of the roundabout, and one at the western entry to the circulatory. There is no discernible causal theme between the collisions.

**Junction Layout/Conditions**

2.12.7 The existing conditions surrounding the junction is indicated in **Figure 43** below.

**Figure 43. Sydney Road/Perrymount Road/Market Place/Mill Green Road Roundabout Existing Layout**



Source: Image Capture March 2021 © 2024 Google

2.12.8 As is evident from the image above, the junction has smooth road surfacing and wide approach entry arms and roundabout circulatory. There are no immediate concerns arising from the current junction design and its relationship to the recorded incidents.

**Future Mitigation**

2.12.9 Due to the limited trends in causation of collisions, and the relatively low traffic flow uplift from the Reference Case to the S6MC2 scenario in both AM and PM peak hours, this junction is not to be considered for further mitigation assessment.

**2.13 B2110/Turners Hill**

2.13.1 The B2110/Turners Hill junction is located to the north of the Mid-Sussex region, to the south of Crawley Down. The location of the junction is indicated in **Figure 44** below.

**Figure 44. B2110/Turners Hill Junction Location**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.13.2 The junction with its associated collision scoring is ranked 12<sup>th</sup> in priority for further mitigation assessment. This is due to the eight recorded collisions, all noted to be slight in severity. There is an additional uplift in vehicles of 1% in the AM peak (+33 vehicles) and 1% in the PM peak (+29 vehicles).

**Collision Detail**

2.13.3 Further detail surrounding the collisions at the junction are noted in the **Table 13** below.

**Table 13. B2110/Turners Hill Collision Data**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to give-way	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Wet/Damp	Dark: street lighting unknown	Other	Vehicle 1 collides with Vehicle 2 after failing to give-way	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 2 collides with Vehicle 1	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Dark: no street lighting	Raining without high winds	Vehicle 1 collides with Vehicle 2 after failing to give-way	Failed to judge other person's path/speed (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Daylight	Unknown	Vehicle 2 collides with Vehicle 1	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 pulls out of junction and then reverses into Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with stationary Vehicle 2 which was giving way.	

2.13.4 The location of the collisions is indicated in **Figure 45** below.

**Figure 45. B2110/Turners Hill Collision Mapping**



2.13.5 As evident from the mapping above, a cluster of collisions occur at the approach arm of the B2110, with four collisions caused by north-south vehicles colliding with east-west vehicles.

### Junction Layout/Conditions

2.13.6 The conditions surrounding the junction are indicated through **Figure 46** below.

**Figure 46. B2110/Turners Hill Junction Conditions**



Source: Image Capture July 2021 © 2024 Google

2.13.7 As displayed in the image above, the B2110/Turners Hill junction is an unsignalized cross roads with smooth road surfacing and clear lane markings.

### **Future Mitigation**

2.13.8 Due to the low level traffic growth expected through the junction, and a lack of highway space to significantly change the junction alignment, this location has been descoped for further mitigation assessment.

## **2.14 A272/B2036 Ansty Mini-Roundabout**

2.14.1 The A272/B2036 Ansty Mini-Roundabout is located to the west of the Mid-Sussex region, to the west of Haywards Heath, and to the southwest of Cuckfield. The location of the junction and its layout is indicated in **Figure 47** below.

Figure 47. A272/B2036 Ansty Mini-Roundabout Layout



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.14.2 Through the collision scoring system, the junction is ranked as the 13<sup>th</sup> highest priority for further mitigation assessment. This is due to the five collisions recorded, one of serious severity, and four of slight severity. Additionally, there is an uplift in traffic flow between the Reference Case and SMC62 scenarios of 6% in the AM peak (+130 vehicles) and of 3% in the PM peak (+62 vehicles).

**Collision Detail**

2.14.3 The collisions recorded within the seven-year study period include one of serious severity, and four of slight. Further detail surrounding the collisions at the junction are indicated in Table 14.

Table 14. A272/B2036 Ansty Mini-Roundabout Collision Detail

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	3	2	Dry	Daylight	Fine without high winds	Vehicle 1 observes police vehicle on blue lights (Vehicle 3), enters roundabout and collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 1 collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)
Serious	1	4	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with centre of roundabout	Exceeding speed limit (Driver/Rider - Injudicious)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to see it enter the roundabout.	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after drifting into oncoming traffic.	Swerved (Driver/Rider - Error)

2.14.4 The location of the collisions surrounding the junction are indicated in **Figure 48** below.

**Figure 48. A272/B2036 Ansty Mini-Roundabout Collision Locations**



2.14.5 As indicated in the table above, a number of the collisions appear to occur by vehicles driving onto the roundabout without observing circulating traffic. Four of the collisions (1 serious and three slight) are noted to take place within the roundabout itself, and one slight collision is noted to occur on the B2036 western approach arm..

### Road Layout/Conditions

2.14.6 The conditions surrounding the junction are indicated in **Figure 49** below.

**Figure 49. A272/B2036 Ansty Mini-Roundabout Junction Conditions**



*Source: Image Capture March 2024 © 2024 Google*

- 2.14.7 As indicated in **Figure 49** above, the A272/B2036 Ansty mini-roundabout is noted to be comprised of a single lane entry on each of the approach arms. Signage is present at the entry to the roundabout to indicate the circulatory.

### **Future Mitigation**

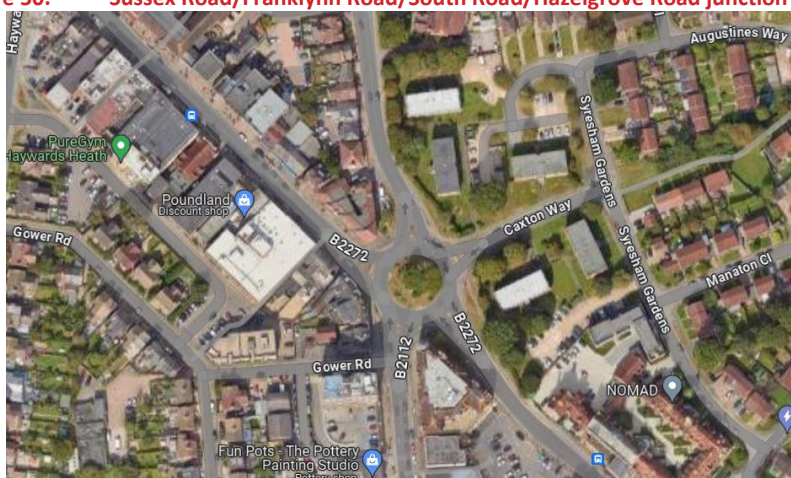
- 2.14.8 Based on the relatively low quantum of traffic growth and a majority of the collisions being a result of driver behaviour and error (without there being a clear association with the existing layout) mitigation has not been brought forward in this location.

## **2.15 Sussex Road/Franklynn Road/South Road/Hazelgrove Road**

- 2.15.1 The Sussex Road/Franklynn Road/South Road/Hazelgrove Road junction is a five-arm unsignalized roundabout located within Haywards Heath town centre. The layout of the junction is indicated in **Figure 50** below.



**Figure 50. Sussex Road/Franklynn Road/South Road/Hazelgrove Road junction layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.15.2 Within the collision rating system, the junction is ranked as the 14<sup>th</sup> priority for further analysis. This is due to 14 collisions occurring within the seven-year study period, and the uplift between the Reference Case and SMC62 scenarios of 5% in the AM peak (+122 vehicles) and 2% in the PM peak (+48 vehicles).

### Collision Detail

2.15.3 Further detail surrounding the collisions is evidenced in **Table 15** below.

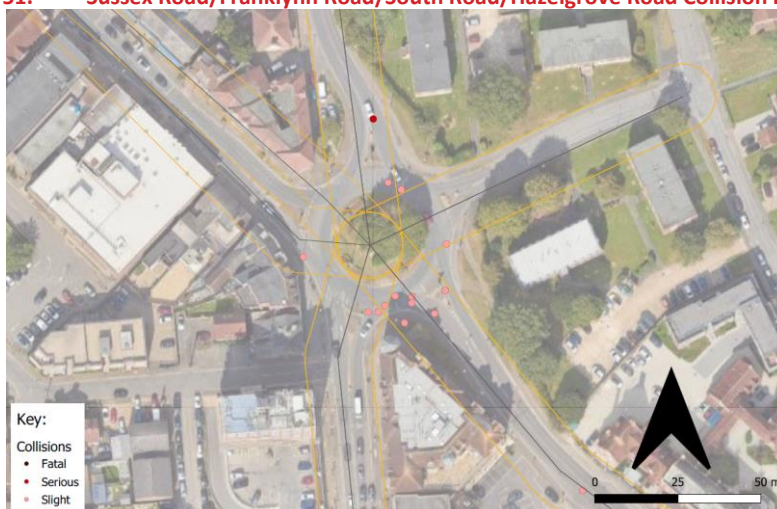
**Table 15. Sussex Road/Franklynn Road/South Road/Hazelgrove Road Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Fine without high winds	Vehicle 1 fails to notice and collides with Cyclist	Not displaying lights at night or poor visibility (Driver/Rider - Impairment)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 (motorcycle)	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2	
Serious	2	1	Dry	Daylight	Other	Cyclist collides with Vehicle 1 after vehicular swerving	Aggressive driving (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	3	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with motor cycle, which subsequently collides with Vehicle 3	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 forces vehicle 2 off the road	Aggressive driving (Driver/Rider - Behaviour)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 2 crashed due to swerving away from mobility scooter	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Careless/Reckless (Driver/Rider - Behaviour)
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Raining without high winds	Vehicle 1 collides with Cyclist	
Slight	1	1	Dry	Daylight	Fine without high winds	Passenger fell out of car due to opening door and unfastened seatbelt	Impaired by alcohol (Driver/Rider - Impairment)
Slight	2	1	Dry	Dark: street lights present and lit	Other	Vehicle 2 collides with Vehicle 1	Failed to judge other person's path/speed (Driver/Rider - Error)

2.15.4 The location of the collisions is indicated in **Figure 51** below.

**Figure 51. Sussex Road/Franklynn Road/South Road/Hazelgrove Road Collision Location**



- 2.15.5 As is evident above, eleven of the slight collisions are mapped within the southern region of the circulatory, whereas two slight and one serious collisions occur to the north side of the roundabout.
- 2.15.6 Four of the collisions occurred between vehicles failing to see cyclists upon entry to the roundabout, including the serious collision.

### Road Layout/Conditions

- 2.15.7 The road conditions surrounding the junction are indicated in **Figure 52** below.

**Figure 52. Sussex Road/Franklynn Road/South Road/Hazelgrove Road Surrounding Conditions**



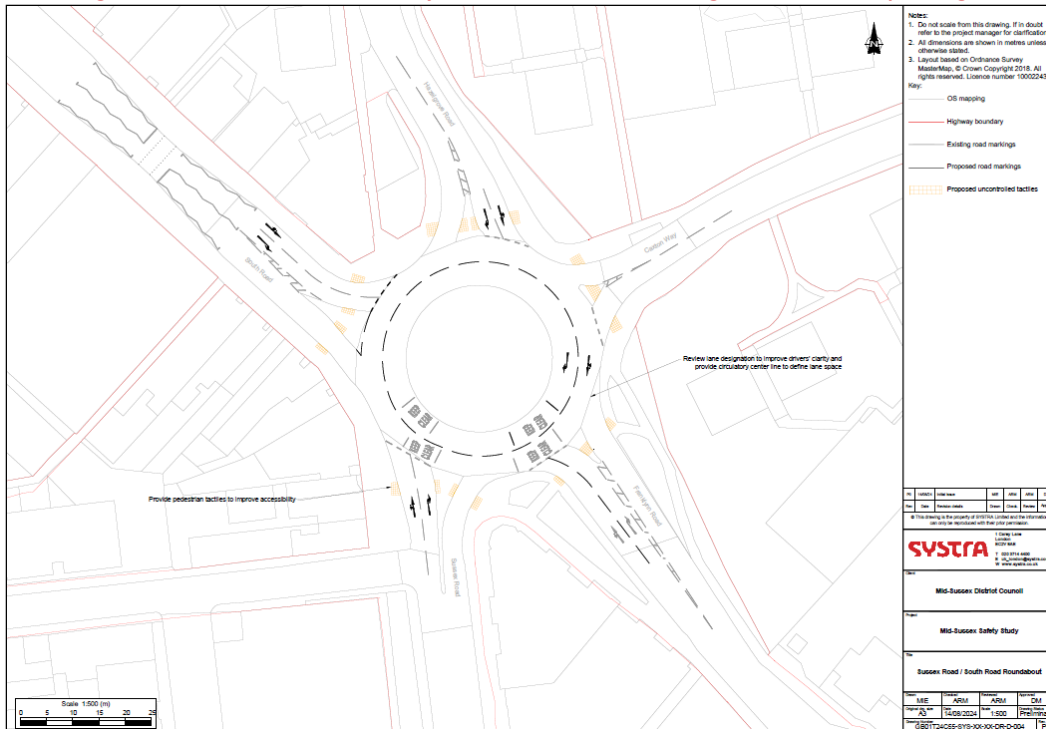
Source: Image Capture August 2021 © 2024 Google

- 2.15.8 As is indicated above, the junction features smoothed road surfacing with the B2272 (west) and B2112 (north) having two lanes marked but no directional lane markings. There is a noted lack of pedestrian/cyclist provision, including no tactile paving on the uncontrolled pedestrian crossings despite the roundabout being located in any area of high footfall at the southeastern end of the local high street on B2272.

### Future Mitigation

- 2.15.9 Due to the high number of collisions, several of which involved cyclists and vehicles colliding, this junction has been taken forward for mitigation development. Given the town centre location, consideration for improvement for pedestrians in light of the high potential footfall has been factored.
- 2.15.10 SYSTRA's concept design is indicated in **Figure 53** below, with a full-scale drawing presented in **Appendix A**.

**Figure 53. Sussex Road/Franklynn Road/South Road/Hazelgrove Road Concept Design**



2.15.11 The proposed design features include:

- **The implementing of tactile paving at all existing uncontrolled pedestrian crossings surrounding the junction.** This is to improve inclusivity and provide improved crossing facilities to all users including those with visual impairments.
- **Lane delineation and lane destination arrow markings added to the roundabout.** This is to improve clarity for users and to avoid lane changing of vehicles which could result in collisions.

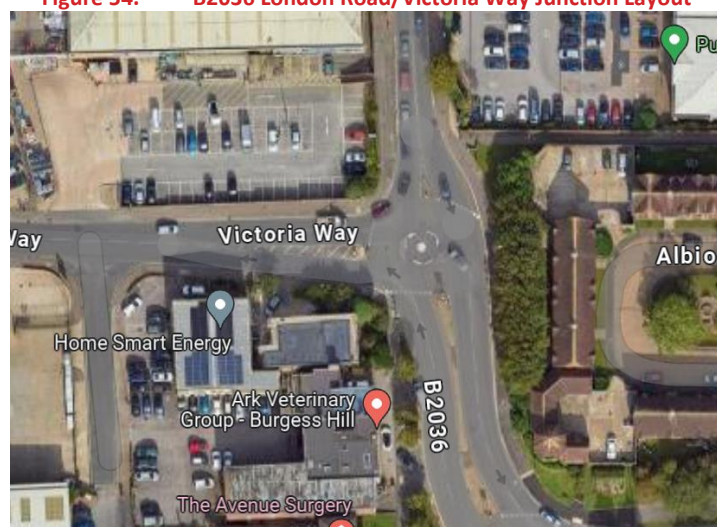
2.15.12 The estimated cost of this scheme is c.£40,000. Further detail on the costing is available within the MSDC Costing Report in **Appendix B**.

2.15.13 West Sussex County Council have advised that prior to the implementation of the District Plan scheme the requirement for the road marking changes will need to be considered. This is noted and can be reviewed in due course at subsequent design stages. The road markings proposed include providing directional arrows to minimise the number of vehicles changing lanes and ensure appropriate designation is clear to drivers on the approach arms. It is considered that this would reduce vehicle to vehicle collisions which are prominent within the collision records. The proposed road marking align with the existing directional arrows provided on Franklynn Road.

## 2.16 B2036 London Road/Victoria Way

**2.16.1** The B2036 London Road/Victoria Way junction is an unsignalized three-arm roundabout located centrally within the town of Burgess Hill. The layout of the junction is shown in **Figure 54** below.

**Figure 54. B2036 London Road/Victoria Way Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.16.2 Within the collision rating system, the junction is ranked as the 15<sup>th</sup> highest priority for further mitigation assessment. This is the result of seven recorded collisions, including one serious and six slight. Additionally, there is an uplift of 3% in the AM peak (+57 vehicles) and 4% (+80 vehicles in the PM peak) between the Reference Case and SC6M2 scenarios.

**Collision Detail**

2.16.3 Further detail of the collisions surrounding the junction are indicated in **Table 16** below.

**Table 16. B2036 London Road/Victoria Way Collision Data**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Frost/Ice	Daylight	Fine without high winds	Motorcyclists fell off vehicle due to ice	Slippery road due to weather (Road Environment Contrib)
Slight	2	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with Cyclist	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)
Serious	3	2	Wet/Damp	Daylight	Raining without high winds	Vehicle 2 collides with Vehicle 1, which subsequently collides with Vehicle 3	Failed to look properly (Driver/Rider - Error)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	2	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2	Nervous/Uncertain (Driver/Rider - Behaviour)
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)

2.16.4 The location of the collisions is indicated in the **Figure 55** below.

**Figure 55. B2036 London Road/Victoria Way Collision Locations**



2.16.5 As shown above, the majority of the mapped collisions occur within the circulatory (five slight and one serious). One slight collision occurs on the B2036 southern arm, and one on the Victoria Way western arm.

### Road Layout/Conditions

2.16.6 The conditions surrounding the junction are indicated in **Figure 56** below.

**Figure 56. B2036 London Road/Victoria Way Road Conditions**



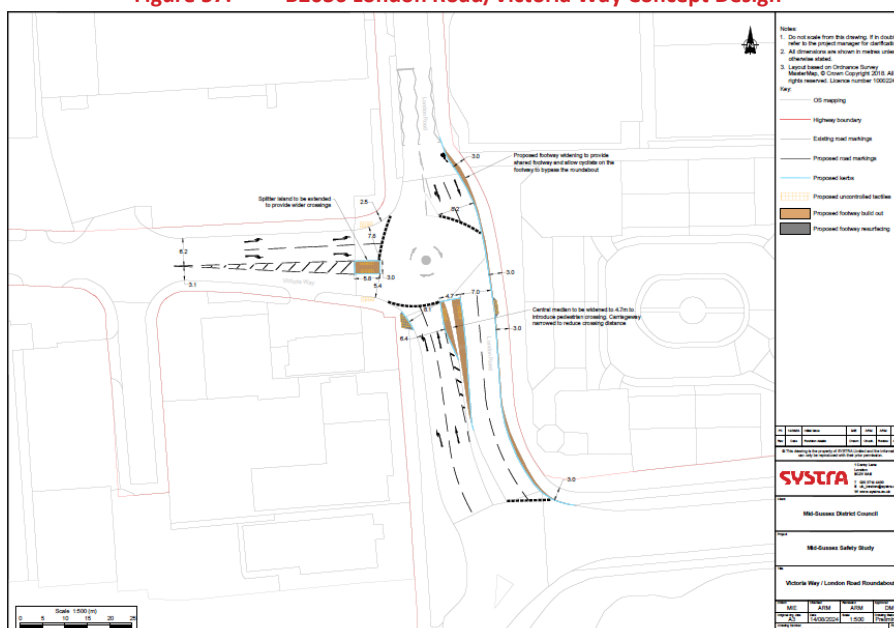
Source: Image Capture June 2023 © 2024 Google

2.16.7 It is indicated above the roundabout features smooth road surfacing and high level of visibility across the arms. Each arm of the roundabout has two approach lanes with no lane destination arrows.

### Future Mitigation

2.16.8 Due to the high number of recorded collisions, included conflict with vehicles and cyclists, this junction has been taken forward for mitigation development. SYSTRA’s proposed concept design is shown in **Figure 57** below and within **Appendix A**.

**Figure 57. B2036 London Road/Victoria Way Concept Design**



2.16.9 The proposed design features include:

- **The central median has been widened on the southern arm of the London Road roundabout, to provide an uncontrolled pedestrian crossing on this arm. This crossing will incorporate tactile paving as required.** This mitigation is to improve accessibility across the junction along an existing desire line.
- **Lane designation arrow markings are to be implemented.** This is to improve safety, with the reduction in likelihood of vehicles colliding as a result of lane changing.
- **Victoria Way splitter island has been extended to accommodate pedestrians crossing north/south, incorporating tactile paving as required.** This is to improve pedestrian safety, and improve accessibility for those with visual impairments. .
- **Footway widening proposed along the eastern side of London Road, to provide a 3m shared footway which would tie into the existing shared footway on Queen Elizabeth Avenue. A dropped kerb has also been introduced north of the roundabout.** These mitigations have been introduced to improve pedestrian safety, and enable cyclists to bypass the roundabout hence avoiding interaction and conflict with vehicles.

2.16.10 The estimated cost of this scheme is c.£107,000. Further detail on the costing is available within the MSDC Costing Report in **Appendix B**.

2.16.11 It is noted that West Sussex County Council Road Safety Group have a proposed improvement scheme at the B2036 London Rd/Victoria Way junction which is targeted for implementation in 2025. A design sense check has been conducted and the proposed District Plan scheme does not preclude the Road Safety Group scheme from coming forward, nor does the Road Safety Group scheme preclude the District Plan scheme from coming forward. Upon implementation of the Road Safety Group Scheme (Drawing No: AEW0012-WSCC-B2036-DR-OV) there will be a period of monitoring for 36 months following construction to determine the suitability of the District Plan scheme to come forward in its proposed form or whether any amends will be required.

## 2.17 B2118 London Road/Henfield Road

2.17.1 The London Road/Henfield Road junction is located to the south of the Mid-Sussex region, to the north of the village of Albourne. London Road/Henfield Road is a three-arm unsignalized T-junction. The location and layout of the junction is shown in **Figure 58** below.

**Figure 58. B2118 London Road/Henfield Road Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.17.2 Within SYSTRA’s collision rating system, the junction is ranked as the 16<sup>th</sup> priority for further mitigation testing. This is the result of one collision of slight severity, and a significant uplift in traffic flows between the Reference Case and SMC62 scenarios of 48% (+606 vehicles) in the AM peak, and 33% (+409 vehicles) in the PM peak.

2.17.3 The junction lies approximately 250 metres to the east of the South of Reeds Lane site; which has a capacity of 1850 dwellings.

### Collision Detail

2.17.4 Further detail surrounding the collision is indicated in **Table 17** below.

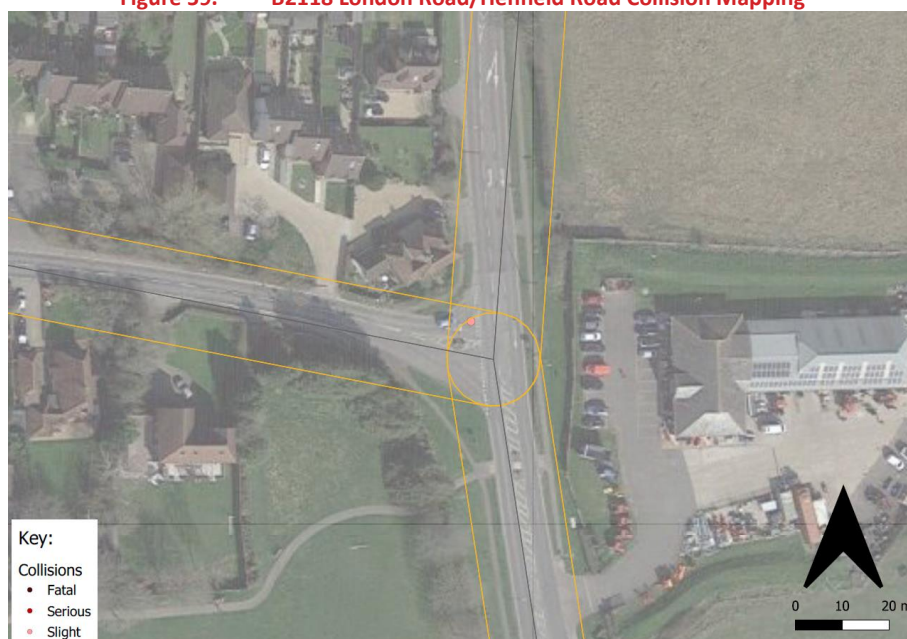


**Table 17. B2118 London Road/Henfield Road Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 fails to observe oncoming vehicle and collides with Vehicle 2	Failed to look properly (Driver/Rider - Error)

2.17.5 The location of the collision is shown in **Figure 59** below.

**Figure 59. B2118 London Road/Henfield Road Collision Mapping**



2.17.6 The collision was the result of the vehicle pulling out of Henfield Road and colliding with a northbound vehicle traveling along London Road.

2.17.7 The road conditions are indicated in **Figure 60** below.

**Figure 60. B2118 London Road/Henfield Road Conditions**



Source: Image Capture June 2023 © 2024 Google

- 2.17.8 As indicated above, the junction has wide radii with Henfield Road arm subject to significant wear, with faded road markings.

### **Future Mitigation**

- 2.17.9 Given the low number of collisions occurring surrounding the junction, this junction has not been taken forward for mitigation stage development as part of the safety study however as individual site allocations come forward this junction can be considered for minor improvements as part of the Transport Assessments alongside capacity considerations given the high volumes of traffic flow uplift at this junction associated with the District Plan growth.

## **2.18 B2112/Lodge Lane**

- 2.18.1 The B2112/Lodge Lane junction is located to the southwest of the Mid-Sussex region, a short distance to the south of Hassocks. The junction is a four arm unsignalized crossroad, with a forked road and central grassy verge on the Lodge Lane arm. The layout and location of the junction is indicated in **Figure 61** below.

**Figure 61. B2112/Lodge Lane Junction Layout and Location**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.18.2 The junction is 17<sup>th</sup> highest priority for further mitigation assessment within SYSTRA’s scoring system. This is due to the nine collisions which took place within the seven-year study period, and the associated uplift in vehicles between the Reference Case and SMC62 scenarios of 8% (+105 vehicles) in the AM and 5% (+59 vehicles) in the PM peak.

### Collision Detail

2.18.3 Further detail on the collisions surrounding the junction are indicated in **Table 18** below.

**Table 18. B2112/Lodge Lane Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 2 collided with fence due to swerving away from Vehicle 1	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)
Slight	2	2	Wet/Damp	Daylight	Unknown	Vehicle 1 collides with Vehicle 2	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)
Slight	3	2	Wet/Damp	Daylight	Raining without high winds	Vehicle 2 collides with Vehicle 1 as they pulled out of junction, causing further collision with Vehicle 3.	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Dark: no street lighting	Fine without high winds	Vehicle 2 collides with Vehicle 1 due to a misjudgement of speed of oncoming vehicle	Careless/Reckless (Driver/Rider - Behaviour)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Wet/Damp	Daylight	Fine without high winds	Moped Driver loses control	Dazzling sun (Driver/Rider - Vision Affected)
Slight	2	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1 after pulling out in the path of an oncoming vehicle	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Wet/Damp	Dark: no street lighting	Raining without high winds	Loss of control due to passenger interference	Loss of control (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 2 collides with Vehicle 1 after failing to see oncoming vehicle	Failed to look properly (Driver/Rider - Error)
Slight	3	4	Wet/Damp	Dark: no street lighting	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to see oncoming vehicle causing collision with Vehicle 3.	Failed to look properly (Driver/Rider - Error)

2.18.4 Further information on the location of the collisions is presented in **Figure 62** below.

**Figure 62. B2112/Lodge Lane Collision Mapping**



2.18.5 As indicated above, six of the mapped collisions are noted to have occurred to the west of the junction, two to the east and one to the north. A high proportion of collisions are noted to have occurred as a result of vehicles pulling out of Lodge Lane and misjudging the amount of time available for exiting before colliding with oncoming traffic.

### Road Layout/Conditions

2.18.6 The conditions surrounding the junction are indicated in **Figure 63** below.

**Figure 63. B2112/Lodge Lane Junction Conditions**



Source: Image Capture May 2023 © 2024 Google

2.18.7 As indicated above, the forked arrangement of the junction results in several potential turning movements in close proximity from each of the minor arms.

**Future Mitigation**

2.18.8 The causation factors indicate that the collisions are not a result of the junction layout but rather a failing of drivers to look properly and misjudgement of gaps and time available for vehicles to turn. This junction has therefore not been taken forward for mitigation development.

**2.19 B2116/Twineham Lane**

2.19.1 B2116/Twineham Lane is an unsignaled forked T-junction located to the east of the Mid-Sussex region. The layout of the junction is indicated in **Figure 64** below.

**Figure 64. B2116/Twineham Lane Junction Layout**



2.19.2 The junction is ranked 18<sup>th</sup> within SYSTRA’s collision scoring system, as a result of five collisions (one serious and four slight in severity). There is an expected increase in vehicular flow between the Reference Case and SMC62 scenarios of 70% (+312 vehicles) in the AM peak, and 47% (+210 vehicles) in the PM peak.

### Collision Detail

2.19.3 Further detail on the collisions is provided in **Table 19** below.

**Table 19. B2116/Twineham Lane Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Serious	2	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1 who has pulled out in front of oncoming vehicle.	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Wet/Damp	Daylight	Raining without high winds	Vehicle 1 collides with Vehicle 2 who has pulled out in front of oncoming vehicle.	Failed to look properly (Driver/Rider - Error)
Slight	2	4	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to give way	Junction restart (Driver/Rider - Error)
Slight	2	3	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to see oncoming vehicle	Failed to look properly (Driver/Rider - Error)
Slight	2	2	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after turning too fast into the junction	Careless/Reckless (Driver/Rider - Behaviour)

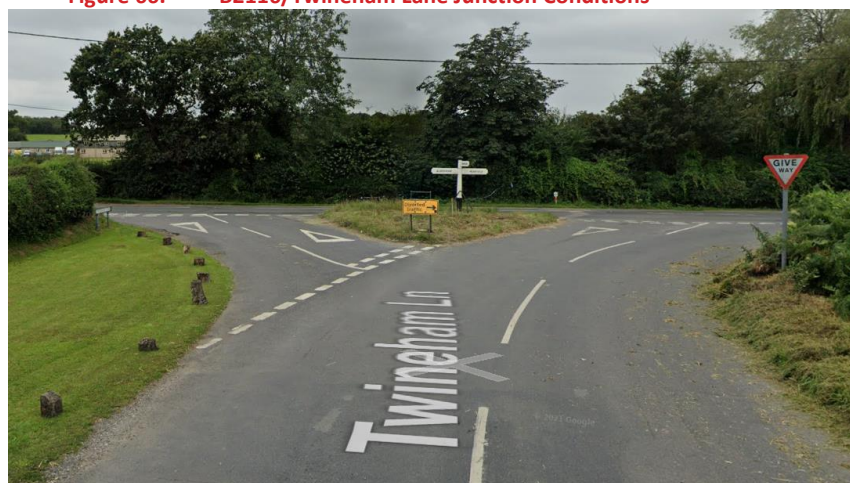
2.19.4 The location of the collisions surrounding the B2116/Twineham Lane junction is indicated in **Figure 65** below. It should be noted that two of the collisions overlap in the image below as they are mapped to the same location.

**Figure 65. B2116/Twineham Lane Collisions Locations**



- 2.19.5 As indicated above, all of the collisions occur toward the western fork of Twineham Road and its merge with the B2116.
- 2.19.6 The conditions surrounding the junction are indicated in **Figure 66** below.

**Figure 66. B2116/Twineham Lane Junction Conditions**



*Source: Image Capture August 2021 © 2024 Google*

- 2.19.7 As seen above, the junction features widened lanes with clear road markings and Give Way signage. It is notable that the eastern fork of Twineham Lane is short, at a length of approximately 12 metres.

**Future Mitigation**

- 2.19.8 Given that the collisions are largely considered to be a result of driver error and one as a result of speeding rather than a result of the junction layout, this location has not been taken forward for mitigation development as part of the safety study. A number of collisions are a result of misjudgement of gaps as well as speed of vehicles turning into Twineham Lane however the traffic flow percentage uplift has been the key driver for the inclusion of this junction within overall rankings. As individual site allocations come forward this junction can be considered for minor improvements as part of the Transport Assessments alongside capacity considerations given the high volumes of traffic flow uplift at this junction associated with the District Plan growth.

**2.20 Gander Hill/Portsmouth Lane/Summerhill Lane**

- 2.20.1 The Gander Hill/Portsmouth Lane/Summerhill Lane junction is located in central Mid-Sussex region, lying to the north of the town of Haywards Heath. The junction is comprised of a four-arm unsignalized roundabout as shown in **Figure 67** below.

**Figure 67. Gander Hill/Portsmouth Lane/Summerhill Lane Junction Layout**



Source: Imagery © 2024 Maxar Technologies, Map Data © 2024

2.20.2 The junction is ranked 19<sup>th</sup> on the SYSTRA collision scoring system, and this is a result of the nine collisions occurring surrounding the junction within the seven-year study period, and the uplift of 12% (+177 vehicles) in the AM peak and 8% (+63 vehicles) in the PM peak.

**Collision Detail**

2.20.3 Further detail surrounding the collisions at the junction is in **Table 20** below.

**Table 20. Gander Hill/Portsmouth Lane/Summerhill Lane Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2 due to failing to see vehicle on roundabout	Failed to look properly (Driver/Rider - Error)
Slight	2	2	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2 due to failing to see vehicle on roundabout	Failed to look properly (Driver/Rider - Error)
Slight	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 after failing to give way	Failed to look properly (Driver/Rider - Error)
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Vehicle 2	
Slight	2	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Cyclist	



SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	2	1	Dry	Daylight	Fine without high winds	Cyclist collides with Vehicle 1	
Slight	2	1	Wet/Damp	Dark: street lights present and lit	Fine without high winds	Vehicle 2 collides with Vehicle 1	Failed to look properly (Driver/Rider - Error)
Serious	2	2	Dry	Daylight	Fine without high winds	Vehicle 2 collides with Vehicle 1	Disobeyed give way or stop sign markings (Driver/Rider - Injudicious)
Slight	2	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle 1 collides with Cyclist	Defective lights or indicators (Vehicle Defects)

2.20.4 The location of the collisions is indicated in **Figure 68** below.

**Figure 68. Gander Hill/Portsmouth Lane/Summerhill Lane Collision Location**



2.20.5 As evidenced above, eight of the collisions are mapped to occur within the junction, with one occurring on the Portsmouth Lane on approach to the junction from the north.

2.20.6 A high proportion of the collisions occur as a result of vehicles failing to see oncoming vehicles from other arms when entering the roundabout.

### Road Layout/Conditions

2.20.7 The conditions surrounding the junction are indicated in **Figure 69** below.

**Figure 69. Gander Hill/Portsmouth Lane/Summerhill Lane Junction Conditions**



Source: Image Capture March 2024 © 2024 Google

2.20.8 As shown above, the roundabout is comprised of single lanes entering the circulatory and has adequate signage and visibility. It is noted that a high proportion of collisions occurred as a result of driver error rather than any notable trends associated with the physical junction layout

### **Future Mitigation**

2.20.9 Due to the relatively low uplift in the traffic flow between the Reference Case and SC6M2 scenario and lack of discernible collision trends associated with the junction layout, this roundabout has not been taken forward for mitigation scheme development.

## **2.21 A23 from A23/B2210 NB On-Slip to A23**

2.21.1 The A23 between the A23/B2210 NB-On Slip to A23 is located to the northwest of the Mid-Sussex region. The location of the link is indicated in **Figure 70** below.

**Figure 70. A23 from A23/B221 NB On-Slip to A23 Location**



Source: Imagery © 2024 Landsat / Copernicus, Maxar Technologies, Map Data © 2024

2.21.2 The link is ranked 20<sup>th</sup> within SYSTRA’s collision scoring system. This is the result of 11 recorded collisions, four serious and seven slight in severity. Additionally, an uplift in traffic flow of 4% in the AM peak (+246 vehicles) and 3% (+113 vehicles in the PM peak) is recorded between the Reference Case and SC6M2 scenarios.

### Collision Detail

2.21.3 Further detail on the collisions surrounding the link is indicated in **Table 21** below.

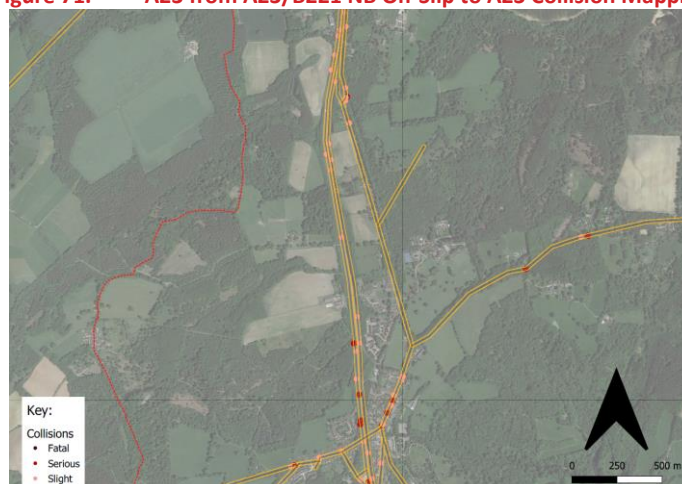
**Table 21. A23 from A23/B221 NB On-Slip to A23 Collision Detail**

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	1	1	Dry	Daylight	Fine without high winds	Vehicle lost control	Inexperience with vehicle type (Driver/Rider - Behaviour)
Serious	2	2	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 at high speed conducting over/undertaking	Loss of control (Driver/Rider - Error)
Slight	2	1	Flood	Dark: no street lighting	Raining with high winds	Vehicle 1 loses control on standing water and collides with Vehicle 2	Travelling too fast for conditions (Driver/Rider - Injudicious)
Slight	1	1	Flood	Dark: street lights present but unlit	Snowing with high winds	Vehicle 1 collides with central reserve	Loss of control (Driver/Rider - Error)
Slight	4	2	Dry	Daylight	Fine without high winds	Presence of animals results in sudden braking leads to collision of four vehicles	Animal or object in carriageway (Road Environment Contrib)

SEVERITY	NO. VEHICLES	NO. CASUALTIES	RD SURFACE	LIGHTING	WEATHER	DESC.	FURTHER INFO
Slight	5	1	Dry	Daylight	Fine without high winds	Vehicle 1 collides with Vehicles 2, 3 and 5 as part of targeted police unit	Aggressive driving (Driver/Rider - Behaviour)
Serious	2	1	Wet/Damp	Daylight	Fine without high winds	Vehicle 1 collides with Vehicle 2 due to accelerating rather than braking	Loss of control (Driver/Rider - Error)
Serious	2	1	Dry	Daylight	Fine without high winds	Vehicle 2 collides into Trailer	Careless/Reckless (Driver/Rider - Behaviour)
Slight	1	1	Dry	Dark: street lights present and lit	Fine without high winds	Vehicle collides with barrier after drifting	Fatigue (Driver/Rider - Impairment)
Serious	1	1	Dry	Daylight	Fine without high winds	Motorcyclist loss of control and drifts off road	Impaired by alcohol (Driver/Rider - Impairment)
Slight	1	1	Wet/Damp	Daylight	Raining without high winds	Vehicle collides with road signpost	Loss of control (Driver/Rider - Error)

2.21.4 **Figure 71** below indicates the location of the collisions along the A23 link.

**Figure 71. A23 from A23/B221 NB On-Slip to A23 Collision Mapping**



2.21.5 As is evident above, the collisions within the seven-year study period occur relatively evenly throughout the length of the link, with the largest cluster in close proximity to the B221 On-Slip to the south.

2.21.6 A high proportion of the collisions are associated with driver error. There is limited commonality between the causation of the collisions, however two are the result of wet conditions.

2.21.7 The conditions surrounding the link are indicated in **Figure 72** below.

**Figure 72. A23 from A23/B211 NB On-Slip to A23 Road Conditions**



*Source: Image Capture April 2024 © 2024 Google*

2.21.8 As indicated above, the conditions surrounding the link are suitable, with smooth road surfacing, clear lane markings and frequent street lighting.

### **Future Mitigation**

2.21.9 Due to the high proportion of collisions associated with driver error rather than issues with the highway layout itself, it has been determined that this link should not be taken forward to further mitigation testing stages.

### 3. SUMMARY & CONCLUSION

3.1.1 This Report has acted as a Safety Review surrounding Mid-Sussex through the development of their District Plan. As part of this, SYSTRA have undertaken a sifting process surrounding the entirety of the road network; scoring all junctions and road links based on the number of collisions, and the predicted uplift in traffic flow between the 2040 Reference Case (includes committed development and infrastructure up to 2039) and the 6m2 District Plan scenario includes committed development/infrastructure as well as District Plan growth and associated mode shift assumptions up to 2039).

3.1.2 The resultant 20 junctions/links deemed to be the highest priority for further assessment are:

- Borde Hill Lane / Balcombe Road / Hanlye Lane (junction);
- Cuckfield Road / Gatehouse Lane / Bishopstone Lane (junction);
- A23 NB Between B2115 and B2110 (link);
- A23 / A272 Southbound Off-Slip (junction);
- A2300 / Bishopstone Lane (junction);
- A23 / A281 Eastbound On-Slip (junction);
- A23 NB to A264 Off-Slip (link);
- A281 / B2117 / Shaves Wood Lane (junction);
- A2220 / Old Hollow (junction);
- A23 / A273, Pyecombe (junction);
- Sydney Road / Perrymount Road / Market Place / Mill Green Road Roundabout (junction);
- B2110 / B2028 Turners Hill (junction);
- A272 / B2036 Ansty Mini-Roundabout (junction);
- Sussex Road / Franklynn Road / South Road / Hazelgrove Road / Caxton Way Roundabout (junction);
- B2036 London Road / Victoria Way (junction);
- London Road / Henfield Road (junction);
- B2112 / Lodge Lane (junction);
- B2116 / Twineham Lane (junction);
- Gander Hill / Portsmouth Lane / Summerhill Lane (junction);
- A23 from A23 / B2210 NB On-Slip to A23 (link).

3.1.3 A number of additional factors have been considered surrounding each junction and link to determine which to take forward to mitigation assessment stage. This has included trends in causation of collision, proximity to District Plan allocated sites development, and feasibility to mitigate the junction based on surrounding conditions.

3.1.4 Following further assessment, the junctions and links seen as appropriate for further mitigation are as follows:

- **Cuckfield Road/Gatehouse Lane/Bishopstone Lane** – Due to apparent trends associated with a lack of visibility and shifting of the dominant traffic flow movement through the junction;
- **A281/B2117/Shaves Wood Lane** – Due to the high number of collisions, and current lack of visibility particularly from the B2117 and forked junction arrangement creating multiple turning movements at the junction;

- **Sussex/Franklynn Road/ South Road Roundabout** - Due to the high number of collisions, involving cyclists and vehicles colliding, and the consideration of improvement for pedestrians in light of the high potential footfall in a town centre region;
- **B2036 London Road/ Victoria Way** – Due to the high number of recorded collisions, including conflict with vehicles and cyclists; and
- **A23/A272 Southbound Off-slip** – Due to the high number of collisions and wide off-slip encouraging high speeds on approach to the roundabout.

3.1.5 SYSTRA have developed a series of mitigations surrounding these junctions, and they are summarised in **Table 22** below.

**Table 22. Mid-Sussex Junction Mitigations**

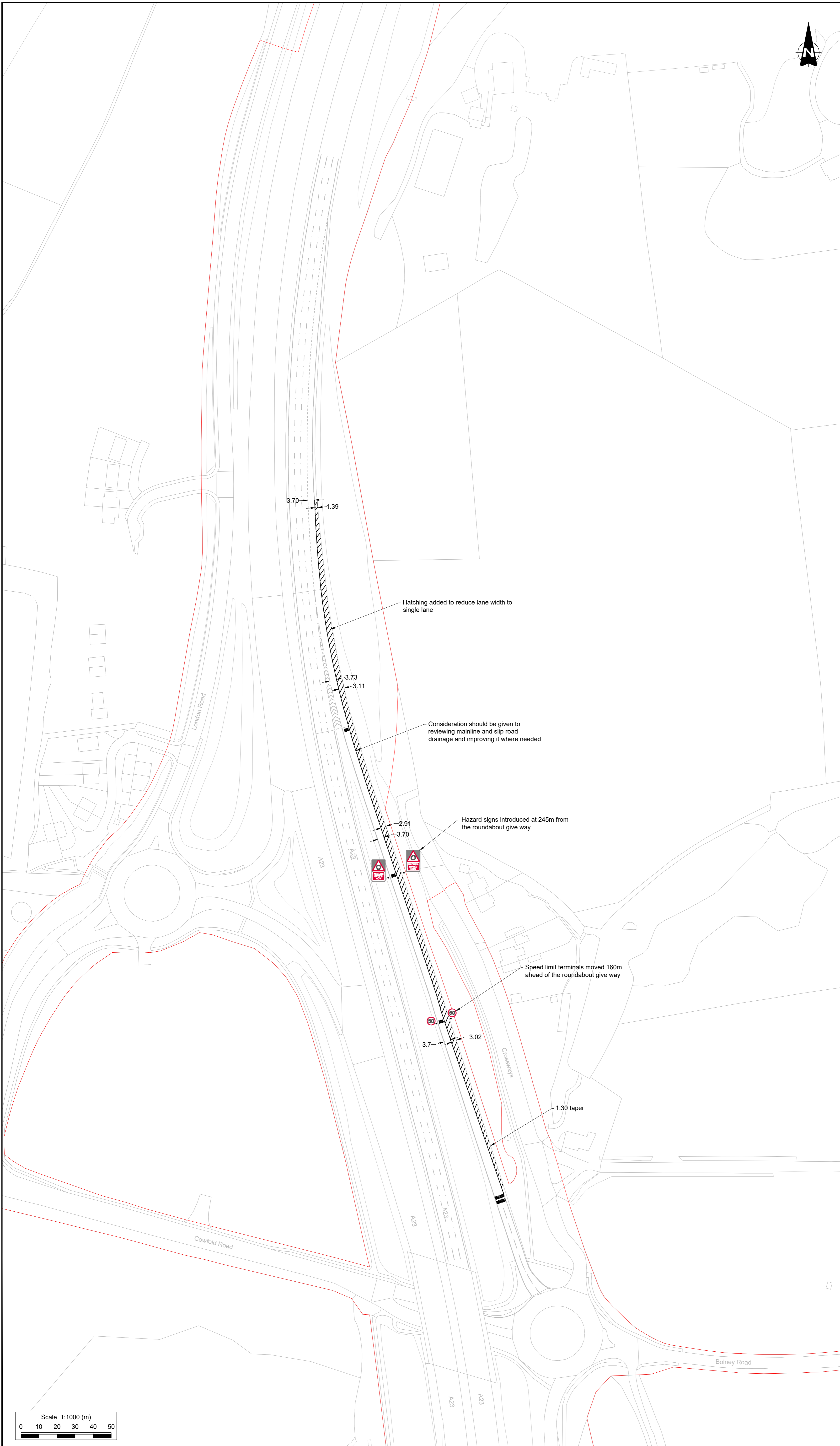
JUNCTION		EST. COST
<p>Cuckfield Road/Gatehouse Lane/Bishopstone Lane</p>	<ul style="list-style-type: none"> <li>• 40 mph speed limit roundings are moved 40m south of existing location to reduce vehicular speeds through the junction;</li> <li>• Advanced cycling warning signage to increase awareness of cyclist movement;</li> <li>• Priority at the junction changed from having the east-west as main movement to the north-south;</li> <li>• Gatehouse Lane has been stopped up as showed in Burgess Hill development. Additionally, pedestrian guardrails and bollards have been introduced on both sides of the stopped-up section to increase safety for people walking, wheeling and cycling;</li> <li>• Bishopstone Lane and Cuckfield Road junction north-western corner has been build-out to narrow down the junction bell mouth in order to slow down vehicles exiting Bishopstone Lane; and</li> <li>• A give way warning sign has been introduced at the Bishopstone Lane and Cuckfield Road junction to clearly define the priority.</li> </ul>	<p>c. £265,000</p>
<p>A281/B2117/Shaves Wood Lane</p>	<ul style="list-style-type: none"> <li>• Shaves Wood Lane arm has been simplified to a priority T-junction and narrowed by removing the splitter island; in order to provide a clearer layout, reducing speeds and improving visibility;</li> <li>• Brighton Road and A281 junction south-eastern corner has been build-out along with A281 centre line being shifted south. This design change will allow Brighton Road give way line to be shifted further west in order to improve sightlines for drivers exiting Brighton Road;</li> <li>• Anti-skid surface at Brighton Road has been maintained and junction warning signage and road markings has been introduced.</li> </ul>	<p>c. £343,000</p>

JUNCTION		EST. COST
Sussex/Franklynn Road/ South Road Roundabout	<ul style="list-style-type: none"> <li>Tactile paving has been introduced at all the existing uncontrolled pedestrian crossing to improve inclusivity and provide clear crossing points for disabled users; and</li> <li>Lane delineation added to roundabout, in conjunction with lane destination marking to improve clarity for users and avoid conflicts.</li> </ul>	c. £40,000
B2036 London Road/ Victoria Way	<ul style="list-style-type: none"> <li>Central median has been widened on the southern arm of the London Road roundabout, to provide an uncontrolled pedestrian crossing on this arm. Tactile paving will be incorporated as required to improve accessibility;</li> <li>Lane designation arrows marking have been introduced to improve clarity for users and avoid conflicts at roundabout exits;</li> <li>Victoria Way spitter island has been extended to accommodate pedestrians crossing north/south;</li> <li>Footway widening proposed along the eastern side of London Road, to provide a 3m shared footway which would tie into the existing shared footway on Queen Elizabeth Avenue. A dropped kerb north of the roundabout has been introduced to enable cyclists to bypass the roundabout to improve safety.</li> </ul>	c. £107,000
A23/A272 Southbound Off-slip	<ul style="list-style-type: none"> <li>Existing wide slip road lane (6.7m wide) has been reduced to single lane (3.7m wide lane) with continuous white line and hatching (~3m wide) to prevent two vehicles exiting and travelling through the slip lane side by side which could lead to collisions;</li> <li>Advanced warning signs of the roundabout introduced at 245m from the roundabout give way to raise awareness of the approaching junction;</li> <li>50mph speed limit roundels moved to 160m from the roundabout give way in accordance with DMRB SSD for a 50mph road; and</li> <li>1:30 hatching taper introduced to enable two lane approach closer to the roundabout. Additionally, SLOW marking has been added throughout the slip road and destination markings introduced to delineate movements at the roundabout and avoid conflicts between vehicles</li> </ul>	c.£33,500

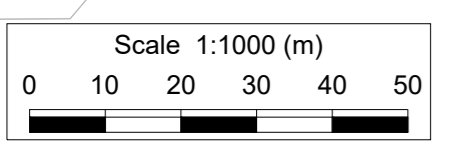


3.1.6 With the proposed junction mitigations presented above, it is determined that the impacts of the development associated with the District Plan development allocations and growth projections are adequately mitigated, with the schemes focusing on interventions which additionally improve the conditions for active modes, improve visibility and reduce vehicular speeds in the local area.

## Appendix A – Safety Study Concept Designs



- Notes:
1. Do not scale from this drawing. If in doubt refer to the project manager for clarification.
  2. All dimensions are shown in metres unless otherwise stated.
  3. Layout based on Ordnance Survey MasterMap © Crown Copyright 2018. All rights reserved. Licence number 100022432.
- Key:
- OS mapping
  - Highway boundary
  - Existing road markings
  - Proposed road markings
  - Proposed road sign



PO	14/08/24	Initial issue	MIE	ARM	ARM	DM
Rev	Date	Revision details	Drawn	Check	Review	Approv

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**Mid-Sussex District Council**

Project  
**Mid-Sussex Safety Study**

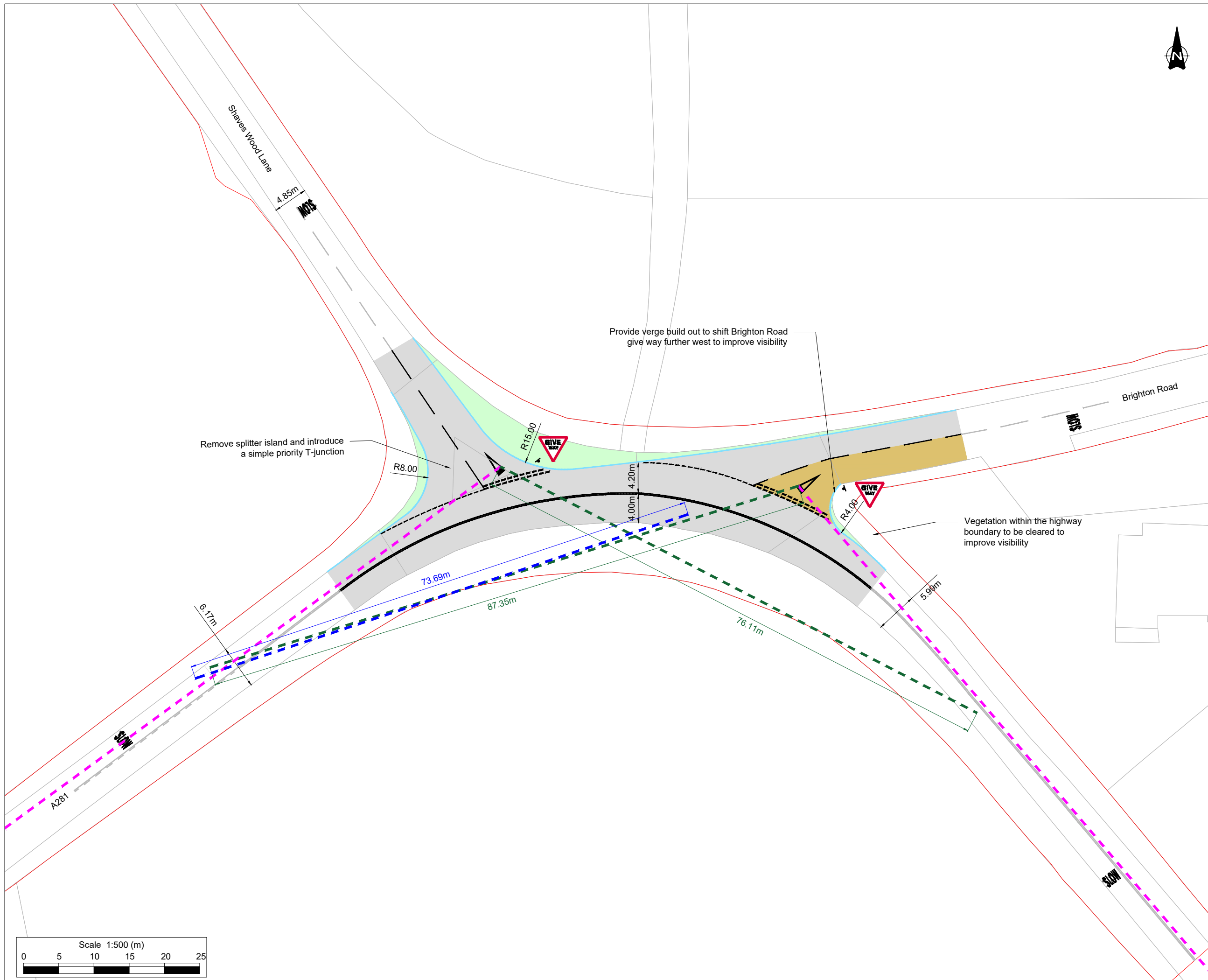
Title  
**A23 Bolney Junction - Southbound off-slip**

Drawn	MIE	Checked	ARM	Reviewed	ARM	Approved	DM	
Original dtp size	A1	Date	14/08/2024	Scale	1:1000	Drawing Status	Preliminary	
Drawing Number	GB01T24C55-SYS-XX-XX-DR-D-002						Rev.	P0



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- Key:
- OS Mapping
  - Highway Boundary
  - Existing road marking
  - Proposed road markings
  - Proposed kerbs
  - Proposed verge
  - Proposed carriageway resurfacing
  - Junction visibility splay (2.4m x 215m - DMRB SSD for 60mph)
  - Achieved junction visibility splay not to DMRB standards for 60mph - see drawing for exact achievable visibility
  - Achieved forward visibility for northbound traffic wishing to turn right into Brighton Road
  - Proposed road sign
  - Proposed Anti-skid surface as per existing



PO	19/08/24	Initial issue	KJS	ARM	ARM	DM
Rev	Date	Revision details	Drawn	Check.	Review	Approv

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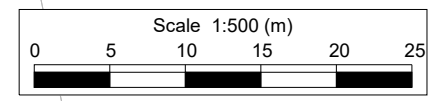
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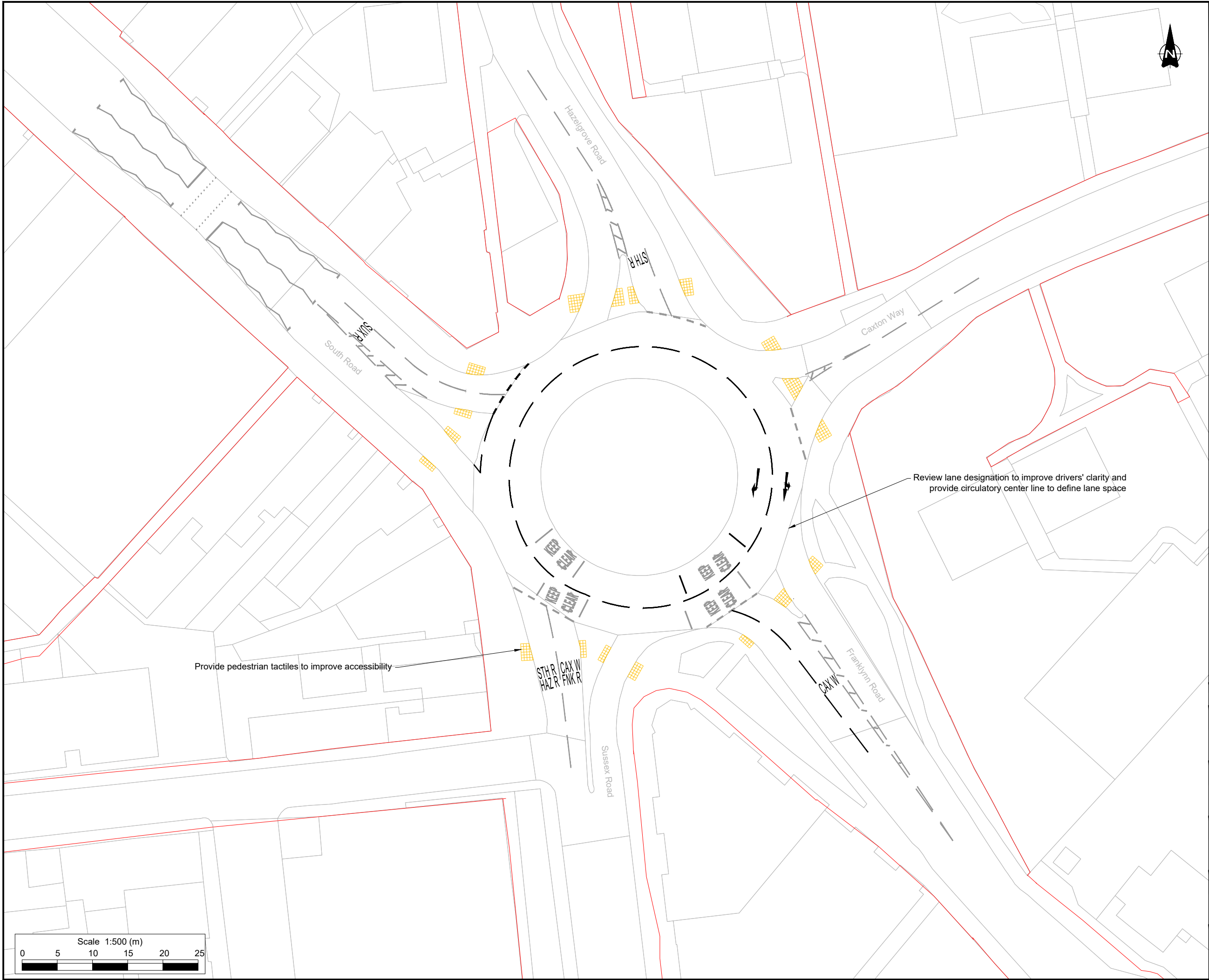
Client  
**Mid-Sussex District Council**

Project  
**Mid-Sussex Safety Study**

Title  
**A281/B2117/Shaves Wood Lane**

Drawn	KJS	Checked	ARM	Reviewed	ARM	Approved	DM	
Original drg. size	A3	Date	19/08/24	Scale	1:500	Drawing Status	Preliminary	
Drawing Number	GB01T24C55-SYS-XX-XX-DR-D-003						Rev	P0





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- Key:
- OS mapping
  - Highway boundary
  - Existing road markings
  - Proposed road markings
  - Proposed uncontrolled tactiles

Provide pedestrian tactiles to improve accessibility

Review lane designation to improve drivers' clarity and provide circulatory center line to define lane space

PO	14/08/24	Initial issue	MIE	ARM	ARM	DM
Rev	Date	Revision details	Drawn	Check.	Review	Approv

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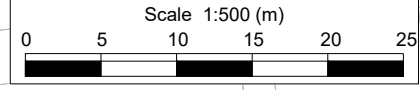
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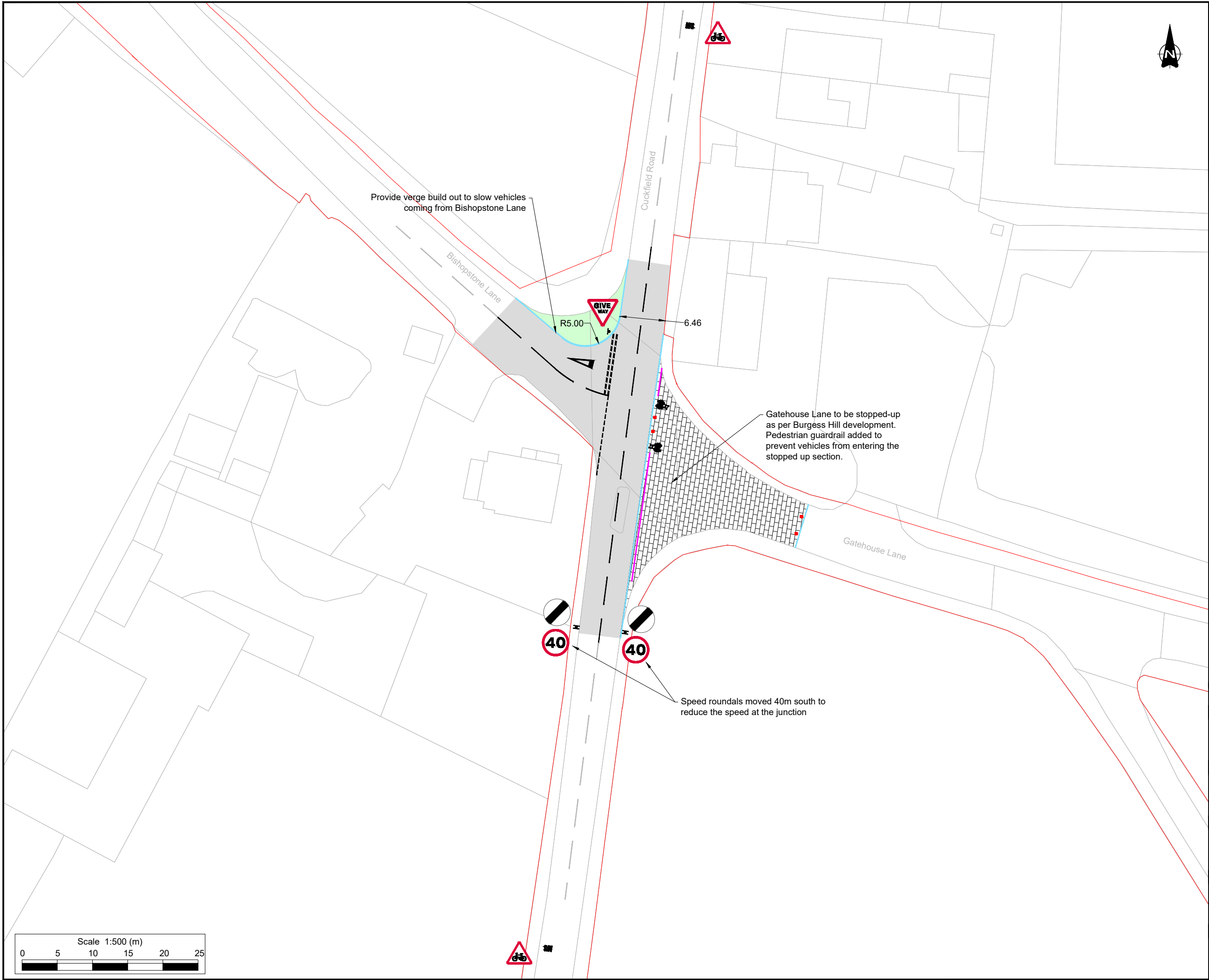
Client  
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Project  
**Mid-Sussex Safety Study**

Title  
**Sussex Road / South Road Roundabout**

Drawn	MIE	Checked	ARM	Reviewed	ARM	Approved	DM	
Original drg. size	A3	Date	14/08/2024	Scale	1:500	Drawing Status	Preliminary	
Drawing Number	GB01T24C55-SYS-XX-XX-DR-D-004						Rev	P0





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- Key:
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  - Existing road markings
  - Proposed road markings
  - Proposed road sign
  - Proposed kerbs
  - Proposed stopped up road
  - Proposed verge
  - Proposed carriageway resurfacing
  - Proposed pedestrian guardrail
  - Proposed bollard

PO	14/08/24	Initial issue	MIE	ARM	ARM	DM
Rev	Date	Revision details	Drawn	Check.	Review	Approv

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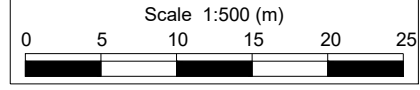
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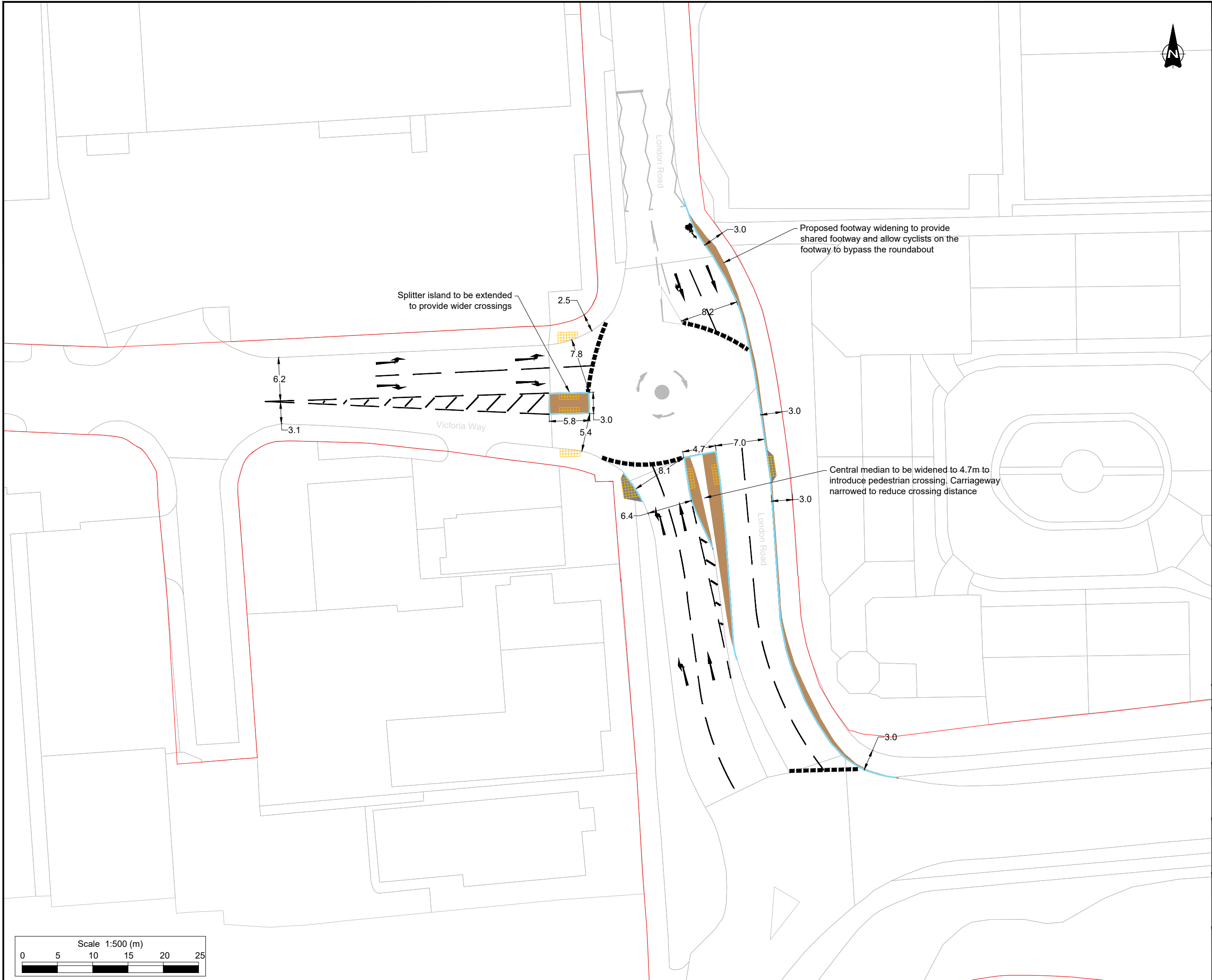
Client  
**Mid-Sussex District Council**

Project  
**Mid-Sussex Safety Study**

Title  
**Bishopstoke Lane / Cuckfield Road Junction**

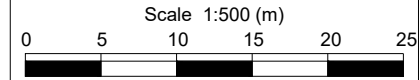
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Original drg. size	A3	Date	14/08/2024	Scale	1:500	Drawing Status	Preliminary	
Drawing Number	GB01T24C55-SYS-XX-XX-DR-D-001						Rev	P0





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- Key:
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  - Highway boundary
  - Existing road markings
  - Proposed road markings
  - Proposed kerbs
  - Proposed uncontrolled tactile
  - Proposed footway build out
  - Proposed footway resurfacing



PO	14/08/24	Initial issue	MIE	ARM	ARM	DM
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Title  
**Victoria Way / London Road Roundabout**

Drawn	MIE	Checked	ARM	Reviewed	ARM	Approved	DM	
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Drawing Number	GB01T24C55-SYS-XX-XX-DR-D-005						Rev	P0

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