

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

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1. INTRODUCTION

Objectives

- 1.1. This report comprises a Response Report undertaken with reference to the series of Interim Stage 1 Road Safety Audit (RSA) reports relating to the local authority highway proposals associated with the Hinckley National Rail Freight Interchange (HNRFI).
- 1.2. The RSAs were conducted independently of the design team by Midlands Road Safety and comprise of several separate reports which are appended to this report. For simplicity, this response report relates to all of the reports produced. The purpose of the Audits is as described in the Audit Reports.
- 1.3. This Response Report has been based on the template in DMRB standard GG 119.
- 1.4. The text of the Audit reports has been copied into this report for ease of reference. Locations of the items raised are as given in the Audit.

Key Personnel

- 1.5. The following key personnel have been involved in this Road Safety Audit:

	Name	Key Contact	Role	Contact Details
RSA Team	BWB Consulting Ltd	Chris Berry	Audit Team Leader	██████████@midlandsroadsafety.co.uk
Design Organisation	BWB Consulting Ltd	Sam Carter	Operations Director	██████████@bwbconsulting.com ██████████

2. ITEMS RAISED AT THE STAGE 1 AUDIT: DECISION LOG

23-1363.01-RSA1 – Amendments to J2 and New Link Road

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.2	<p>Location: M69 J2 southern circulatory carriageway.</p> <p>Summary: Confusing road markings risk side swipe type collisions.</p> <p>Around the southern carriageway of the circulatory the lane destinations show an "ahead" and a "right turn" arrow. However, approaching the junction and on the approaches before this point, "ahead" and "ahead and right" arrows are shown. This could lead to late lane changes, sudden and unexpected braking and side swipe type collisions due to driver confusion and late decision making as a result of confusing and misleading lane destinations.</p> <p>Recommendation:</p> <p>It is recommended that the markings are amended so that they are consistent with the available movements around the southern half of the circulatory and on the westbound link road exit.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>Road markings on the circulatory will be reviewed to ensure consistency.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: M69 southbound approach to the new signalised junction.</p> <p>Summary: Poor forward visibility of signals risks late braking and junction overshoot type collisions.</p> <p>The southbound off-slip approach to the proposed signals at Junction 2 has a significant vertical and horizontal alignment change on the approach to the current Give-Way line. There is a concern that, given these changes and the existing signing infrastructure, that forward visibility towards the signal heads will not be provided for vehicles.</p> <p>Recommendation:</p> <p>It is recommended that the signals are located and designed, including raised poles and/or gantry signals if needed, so as to provide adequate forward visibility for approaching vehicles. Furthermore, it is recommended that the signing on the approach is amended so as not to pose an obstruction.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Visibility on the existing southbound diverge slip road will be assessed in detail and design of the signals reviewed to ensure that suitable visibility is available for the design speed of the connector road to the primary signal heads and the stop line.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.4	<p>Location: B4669 Hinckley Road approach to the M69 Junction 2.</p> <p>Summary: Bridleway crossing relocation risks vehicle to equestrian collisions. The existing bridleway crossing on the B4669 is set back from the carriageway by approximately 26m. Under the new arrangement equestrians will cross in front of the signal stop line, resulting in a diversion from the desire line and bringing riders towards the circulatory carriageway and traffic signals. There are concerns that the added noise and proximity to circulatory traffic may result in horses being 'spooked' and potentially result in vehicle to horse / equestrian collisions.</p> <p>Recommendation:</p> <p>It is recommended that consultation is undertaken with local horse-riding groups and that, should the above concerns be realised, that the bridleway crossing is relocated.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Crossing point has been relocated further east to better sit on the desire line and shorten crossing distance.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.5	<p>Location: Roundabout 2 – proposed uncontrolled pedestrian crossings.</p> <p>Summary: Narrow crossings on a shared route risk cycle to pedestrian collisions. A 3m wide shared footway / cycleway is proposed along the northern side of the link road. However, the crossing point and route across the northern splitter island appear to be narrow and may not be of sufficient width to safely accommodate pedestrian and cycle movements. This risks cycle to pedestrian collisions.</p> <p>Recommendation:</p> <p>It is recommended that all crossings linking shared footway / cycleway routes are of sufficient width to safely accommodate shared use.</p>	<p>Agree with RSA recommendation: Yes</p> <p>All crossings on the link road have been reviewed to ensure the width of splitter islands and refuges is suitable.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.6	<p>Location: General.</p> <p>Summary: Risk of risk severity caused from secondary collisions.</p> <p>There are several potential hazards identified along the link road that could promote a secondary collision type potentially resulting in an increased severity of injury to vehicle occupants. This relates to references on plan to retaining walls, embankments, acoustic fencing, and proximity of balancing ponds all of which can present a secondary hazard to an errant vehicle.</p> <p>Recommendation:</p> <p>It is recommended that a full Road Restraint Risk Assessment is carried out in the first instance and outcomes reviewed against a local context given the limitation this approach can have in terms of outcomes and recommendations. It is further recommended that locations for signing are identified at the earliest opportunity to ensure compromises on design are not discovered later on and that the Design Team should ensure that adequate land can be provided, with consideration for any resulting protection measures, to accommodate traffic signs and any other street infrastructure associated with the wider proposals.</p>	<p>Agree with RSA recommendation: Yes</p> <p>A full RRRAP will be carried out and road restraint design incorporated into the AIP reports in production for the structures associated with the link road.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.7	<p>Location: 10m bridleway corridor.</p> <p>Summary: Risk of pedestrian, cycling and horse riding collisions.</p> <p>There are several instances on plan where the 10m bridleway corridor narrows at bends in the route where forward visibility towards an oncoming user may be limited. It is not possible to ascertain the resulting width at these pinch points and thus likelihood of collisions and conflict between these users.</p> <p>Recommendation:</p> <p>It is recommended that appropriate widths are maintained along the entirety of the bridleway corridor.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Forward visibility along the bridleway corridor will be reviewed during the detailed design. For the area noted by the RSA, the width of the corridor locally narrows to 3m. The designer will review this with the overseeing organisation with a view to agreeing a suitable forward visibility and will consider whether minor changes to the alignment of the bridleway in this location are required to achieve this.</p>		

23-1363.02 – Hinckley Road/New Road Junction

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.2	<p>Location: Northern side of the proposed pedestrian crossing – New Road arm.</p> <p>Summary: Parking abutting the crossing may restrict visibility for / of crossing pedestrians, risking vehicle to pedestrian collisions. It was observed on site that a number of vehicles frequently park immediately adjacent to the property to the east of the crossing. There is a risk that a parked vehicle will obstruct visibility for and of pedestrians waiting to cross here, and that pedestrians may therefore enter the carriageway when it is unsafe to do so risking vehicle to pedestrian collisions.</p> <p>Recommendation:</p> <p>It is recommended that waiting restrictions are provided and / or kerb alignment amended to ensure that the visibility envelope is kept unobstructed.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>Following consultation with the overseeing organisation the eastern crossing has been removed from the scheme.</p>		

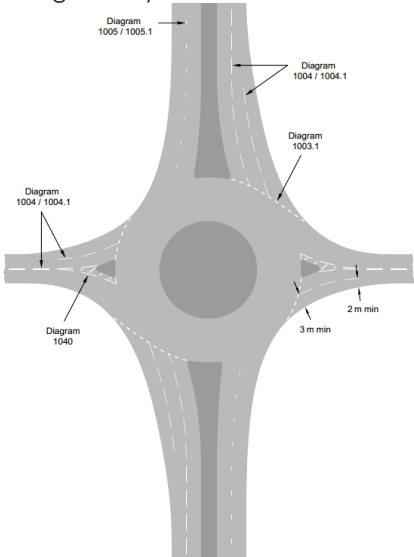
RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: Northern side of the proposed pedestrian crossing – New Road arm.</p> <p>Summary: Private driveway access risks damage to the crossing and trip type hazards and vehicles entering the junction when it is unsafe to do so.</p> <p>There is a private driveway access located immediately behind the northern side of the proposed pedestrian crossing, on the northern side of New Road. Should vehicles overrun the crossing there is a risk of damage to the tactile paving, creating trip type hazards. Furthermore, vehicles exiting from the driveway will enter the junction at a point where they cannot see a traffic signal, potentially entering in conflict with other movements resulting in collisions within the junction.</p> <p>Recommendation:</p> <p>It is recommended that the private driveway arrangement is amended such that vehicles will not overrun the crossing and will be able to enter the junction with visibility of traffic signals.</p>	<p>Agree with RSA recommendation: Yes</p> <p>This eastern crossing has been removed and the private means of access is unaffected by the proposals.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.4	<p>Location: Station Road, Stoney Stanton - southern side of the pedestrian crossing.</p> <p>Summary: Pedestrian crossing within depot access risks damage to the crossing / tactile paving overrun and trip type incidents. The proposed pedestrian crossing is situated within a long section of dropped kerb that appears to provide access to a depot car park, with the vehicular access directly behind the proposed pedestrian crossing. This could lead to vehicles overrunning the crossing in order to access the car park, posing a risk of collisions with pedestrians, unexpected stopping of vehicles within the junction risking shunts and damage to the tactile paving resulting in pedestrian trips.</p> <p>Recommendation:</p> <p>Whilst on site it was unclear whether the site continues to serve the purpose of its initial construction. It is recommended that the current access arrangement is reviewed and, if possible, amended so as to separate vehicle movements from both the crossing and signals so as to provide safe access and avoid safety problems at the crossing.</p> <p>Should this not be possible, it is recommended that the signal arrangement is amended appropriately and that the need for a pedestrian arm on this side of the junction is reconsidered subject to expected desire lines as no facility currently exists on this arm.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Junction has been amended to ensure that the access to the south of New Road is accessible and vehicles emerging can do so prior to the new stop line.</p>		

23-1363.03 – A47/The Common Junction

There are no problems identified with this junction.

23-1363.04 – A5/Coal Pit Lane Junction

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.2	<p>Location: Coal Pit Lane, B4027 and A5 northbound approaches to the junction.</p> <p>Summary: Narrow lane widths risk side-swipe type collisions.</p> <p>The proposed two-lane approaches appear to show lane widths of under 3.0m. Given the high-speed approaches and high percentage of HGV movements observed and expected through the junction, there is a risk that narrow lanes may result in side-swipe type collisions.</p> <p>Recommendation:</p> <p>It is recommended that the lane widths are reviewed, and that localised widening is provided so that suitable lane widths can be provided</p>	<p>Agree with RSA Recommendation: No</p> <p>The lanes on the approaches to the roundabout flare from 1 to 2 lanes. The geometry here is in accordance with CD116 and the markings for the second lane commence as early as possible in accordance with para 6.1.3 of Traffic Signs Manual Chapter 5 which states: <i>'Where the carriageway is widened on the approach to a roundabout and extra lanes provided, drivers should be made aware of this by marking the lanes as early as possible. However, no lane should be less than 2 m wide at the start of the taper, or less than 3 m wide at the Give Way line (see Figure 6-1)'.</i></p>  <p style="text-align: center;">Figure 6-1 Conventional roundabout</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Summary: Outside lane entry path curvature risks kerb strikes / side swipe type collisions.</p> <p>There is a concern that the entry path curvature from the offside lane on the B4027 approach will direct drivers toward the centre of the roundabout, risking kerb strikes.</p> <p>Furthermore, the realignment of the approach also means that vehicles in the nearside lane are likely to “squeeze” drivers in the offside lane, risking side-swipe type collisions.</p> <p>Recommendation:</p> <p>It is recommended that the entry path curvature is amended to guide vehicles in the offside lane around the circulatory.</p>	<p>Agree with RSA recommendation: In Part</p> <p>The geometry will be reviewed to ensure that the approach arm kerb lines are tangential with the road markings and centre island on the roundabout to ensure that traffic is directed to the correct location. The realignment of the arm is required to improve the entry path deflection and is seen as a significant safety benefit over the existing alignment.</p>		

23-1363.05 – Coventry Road

There are no problems identified with this junction.

23-1363.06 – A47/Normandy Way Junction

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.2	<p>Location: Ashby Road – southern arm o the junction.</p> <p>Summary: Narrow refuge for shared use risks cyclist to pedestrian collisions.</p> <p>It was observed on site that a shared footway / cycleway is present along the southern side of the A47 through the junction. There is a concern that the proposed central island that segregates the two opposing traffic flows on this arm is not wide enough to safely accommodate shared use and there is therefore a risk of cycle to pedestrian collisions here.</p> <p>Recommendation: It is recommended that the facility is amended to accommodate safe shared use.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>The refuge has been widened to 3.5m to allow cyclists to use the staggered toucan crossing proposed.</p>		
4.1	<p>The intervisibility between the eastern and western A47 arms of the junction and the northern Ashby Road arm are currently restricted by the adjacent building lines. Whilst it is appreciated that this is an existing problem, the amendments to the stop line positioning will increase the length for which visibility is not provided, although visibility at the entry to the junction is good. As part of the detailed design, it is recommended that the inter-green times are checked and amended as necessary to accommodate the changes.</p>	<p>This will be checked against the topo survey and any improvements that can be made will be incorporated into the detailed design</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
4.2	The western side of the existing pedestrian crossing on the northern arm of the Ashby Road approach currently has a significant gradient. As part of the detailed design, it is recommended that the gradient at the realigned side of the crossing is amended so as to mitigate the impact of on mobility impaired pedestrians.	This will be considered as part of the detailed design and improved as far as possible.		
4.3	As with AC 1 above, it was observed that at present visibility of approaching vehicles for pedestrians crossing the A47 eastern arm and Ashby Road northern arm is restricted by vegetation as well as the adjacent property boundaries. As part of the detailed design, it is recommended that the site clearance includes maximising inter-visibility for and of pedestrians at the crossing points.	Site clearance will assess all potential opportunities for vegetation clearance to improve junction intervisibility.		

23-1363.07 – B4669/Stanton Lane Junction

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
	Whilst on site it was observed that a level difference was present between the base of the hedgerow to the west of the Stanton Lane junction and the existing verge and footway. As part of the proposals this approach will be widened to accommodate the central hatched area and traffic signals infrastructure. As part of the detailed design, it is recommended that the finished levels of the footway and embankment here are reviewed and amended so that there is not an immediate drop to the back of the footway that would pose a risk of injury to pedestrians.	The levels will be reviewed as part of the detailed design and any retaining or level difference will be provided with appropriate edge restraint to protect pedestrians.		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
4.2	The proposals include a significant set-back for the signals and stop line on the Stanton Lane arm of the junction. As part of the detailed design, it is recommended that suitable inter-greens and vehicle detection are provided so as to ensure that vehicles are able to clear the junction before opposing phases in the signals are 'released'.	The recommendation is noted, however the designer has reduced the set back of the stop line now that the topo survey of the junction has been completed which should eliminate the issue noted.		

23-1363.08 – Stanton Lane

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
	<p>Location: Stanton Lane / Hinckley Road – general.</p> <p>Summary: Significant discrepancies in vehicle speeds may lead to shunts and overtaking collisions. It is proposed to reduce the speed on Stanton Lane and Hinckley Road to 40mph from the existing national speed limit. This represents a significant reduction with no changes to the surrounding environment that would indicate why a 40mph speed would be viewed as 'appropriate' by drivers. As such, there is a risk of significant disparities between vehicle speeds should some drivers continue at higher speeds whilst others comply to the proposed lower limit, resulting in shunts and overtaking collisions.</p> <p>Recommendation:</p> <p>It is recommended that a speed survey is undertaken to determine likely compliance with the lower limit. Should speeds be significantly higher than the proposed limit and compliance therefore unrealistic, given a sign only reduction is likely to result in a small reduction in measured speeds, it is recommended that additional measures to support the lower limit are provided, or that the proposed limit is amended in accordance with the results returned from the speed survey.</p>	<p>Agree with RSA recommendation: In Part</p> <p>The reduction in speed limit is in place to make this route less attractive for traffic to reroute and as such its implementation is considered to be appropriate and required. The alignment of Stanton Lane contains bends which reduce forward visibility down to c. 120m in two instances which is the desirable minimum value for 70kph design speed roads. However, in order to inform the detail of how the design of the speed reduction is completed, the designer will consult with the overseeing authority with regards to a speed survey and option for road markings, supplementary repeaters and other speed reduction measures.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: Hinckley Road - proposed build out to the south of the junction with Underwood Drive.</p> <p>Summary: Proposed feature may be struck by vehicles exiting from the adjacent field access. Whilst on site it was observed that there is a field access opposite the proposed feature on the northern side of Hinckley Road. It is unclear whether a farm vehicle (potentially with a trailer) would be able to turn in/out of the access without overrunning the feature, leading to it being damaged and potentially rendering it inconspicuous to other road users, risking kerb strikes and loss of control collisions</p> <p>Recommendation:</p> <p>It is recommended that a swept path analysis is undertaken using appropriate farm vehicles to assess whether they can access/egress the field access without overrunning the feature. If not, it is recommended that the arrangement is amended to accommodate the required movements.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Further to consultation with the overseeing organisation, the gateway feature has been removed from the design as on street parking in the area will have the same effect on reduction of traffic speeds and single file operation.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.4	<p>Location: Proposed traffic calming feature – Stanton Lane.</p> <p>Summary: High speed approach and low opposing flow risks late breaking and kerb strikes / loss of control / head on collisions. Traffic flows on Stanton Lane were observed to be low, with little two-way traffic observed at the same time. There is a concern that drivers will seldom be required to give way to oncoming vehicles and, as such, will not be prepared to slow or stop when approaching the give way. This is exacerbated by the location of the proposed feature – within the outbound lane on Stanton Lane – meaning that vehicles required to give way will not have a feature to negotiate or be informed of such. This, along with the potential high-speed approach as detailed in Problem 2 above means that there is a risk of vehicles striking the kerbed build out, as well as failures to give way and late braking, resulting in loss of control or head-on collisions. In the experience of the Audit Team, these types of features in this scenario and as a first response to reducing speed on entry to a village can result in collisions when used in isolation.</p> <p>Recommendation: It is recommended that the gateway feature type is amended and / or that additional supportive measures are provided to ensure slow approach speeds at the feature. It is also recommended that should this feature type be provided, that the build-out is located within the in-bound lane, on the side that drivers will be required to give way.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Further to consultation with the overseeing organisation, the gateway feature has been removed from the design as on street parking in the area will have the same effect on reduction of traffic speeds and single file operation.</p>		

23-1363.09-RSA1 – B4669 Leicester Road

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
	<p>Location: Proposed bus stop – adjacent to the Sapcote Church School.</p> <p>Summary: Lack of forward visibility risks head on collisions involving overtaking vehicles. The bus stop is to be relocated from a lay-by arrangement outside of the Co-Op to an on-carriageway location adjacent to the Sapcote Church School. This is close to a right-hand bend in Leicester Road where the building line obstructs forward visibility of eastbound vehicles. Should a driver or rider decide to overtake a stationary bus here there is a risk that they will not see or be seen by an eastbound vehicle, risking a head-on/side swipe type collision.</p> <p>Recommendation: It is recommended that the bus stop is relocated such that a westbound overtaking vehicle will be able to complete their manoeuvre safely and with adequate forward visibility based on the speed of approaching, eastbound vehicles.</p>	<p>Agree with RSA recommendation: Yes</p> <p>The on carriageway bus stop adds to the general traffic calming features that are proposed through Sapcote in order to make this route less desirable for re-routeing traffic and therefore vehicles should be discouraged from overtaking stopped buses. The location of the bus stop has been considered to ensure that suitable visibility is available to parked buses. In addition, 47m of forward visibility (in line with LCC Table DG4) is available from behind a parked bus to oncoming vehicles so that should vehicles decide to overtake a parked bus, they are able to see oncoming vehicles. The designer has realigned the northern kerbline of the B4669 to improve forward visibility for eastbound vehicles.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: Leicester Road - proposed Zebra crossing</p> <p>Summary: Restricted visibility risks vehicle to pedestrian collisions.</p> <p>When crossing north to south, visibility for and of pedestrians crossing or waiting to cross is restricted to the east by the building line and boundary wall of the adjacent properties. This would be especially the case for wheelchair and pushchair users. Should they enter the carriageway when unsafe to do so there is a risk of vehicle to pedestrian collisions.</p> <p>Recommendation:</p> <p>It is recommended that unobstructed pedestrian visibility commensurate with measured vehicle speeds is provided at the crossing point.</p>	<p>Agree with RSA recommendation: Yes</p> <p>While the zebra crossing replaces an existing uncontrolled crossing and is seen as an improvement in pedestrian safety, the designer has reviewed the location and the northern B4669 kerb line has been amended to provide more footway width and to ensure suitable forward visibility to users waiting to use the crossing. This is illustrated on the revised drawings.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.4	<p>Location: Leicester Road – footway to the east of the proposed Zebra crossing.</p> <p>Summary: Narrow footway risks vehicle to pedestrian collisions. The footway immediately to the east of the proposed Zebra crossing is very narrow (<1m), with insufficient width for two-way pedestrian movements meaning pedestrians have to enter the carriageway in order to pass one another at a point where visibility of eastbound traffic is obscured by the adjacent property (refer to Problem 2). The location of the crossing will encourage an increase pedestrian movements along this narrow footway, risking vehicle to pedestrian collisions Recommendation:</p> <p>Recommendation:</p> <p>It is recommended that the crossing is relocated to a location where sufficient footway widths on the approaches are available.</p>	<p>Agree with RSA recommendation: In Part</p> <p>The zebra crossing is a replacement for an existing uncontrolled crossing point and as a result additional pedestrians are unlikely to utilise the narrow section of footway. It is the opinion of the designer that a controlled crossing point makes it more likely that pedestrians will choose to cross the road to avoid using the narrow section of footway and as a result, the proposals reduce the safety risk posed by this existing section of footway. This said, the designer has revised the northern kerbline of the B4669 to provide a wider footway where possible and to enhance visibility to pedestrians crossing. Furthermore, the removal of the central islands on the B4669 means that large vehicles are less likely to mount the kerbs as they have the full width of the carriageway in which to manoeuvre rather than being restricted in width by refuge islands.</p>		
3.5	<p>Location: Leicester Road - proposed traffic calming build-out.</p> <p>Summary: Lack of illumination risks collisions with the feature during the hours of darkness.</p> <p>There are no street lights close to the proposed traffic calming feature location and there are several mature trees in close proximity. This means that the feature may be inconspicuous during the hours of darkness, risking it being struck by eastbound vehicles resulting in loss of control incidents.</p> <p>Recommendation:</p> <p>It is recommended that the feature is sufficiently illuminated during the hours of darkness.</p>	<p>Agree with the RSA recommendation: Yes</p> <p>Further to discussions with the overseeing organisation, the gateway feature has been removed from the design.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.6	<p>Location: Proposed traffic calming feature – Leicester Road.</p> <p>Summary: Low opposing flow risks late breaking and kerb strikes / loss of control / head on collisions.</p> <p>Traffic flows on Leicester Road were observed to be low, with little opposing two-way traffic observed. There is a concern that drivers will seldom be required to give way to oncoming vehicles and, as such, will not be prepared to slow or stop when approaching the give way. This is exacerbated by the location of the proposed feature – within the outbound lane on Leicester Road – meaning that vehicles required to give way will not have a feature to negotiate and therefore slow down in anticipation. This means that there is a risk of vehicles striking the kerbed build out, as well as failures to give way and late braking, resulting in loss of control or head-on collisions. In the experience of the Audit Team, these types of features in this scenario and as a first response to reducing speed on entry to a village, can result in collisions when used in isolation.</p> <p>Recommendation:</p> <p>It is recommended that the gateway feature type is amended and / or that additional supportive measures are provided to ensure slow approach speeds at the feature. It is also recommended that should this feature type be provided, that the build-out is located within the in-bound lane, on the side that drivers will be required to give way.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Further to discussions with the overseeing organisation, the gateway feature has been removed from the design.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
4.1	Whilst on site it was observed that several vehicles were parked along the western side of Church Street. With the proposed amendments to the kerbline here, vehicles parking here will potentially cause an obstruction to turning large vehicles and to visibility for and of emerging vehicles. It is therefore recommended that, as part of the detailed design, waiting restrictions are provided at the junction.	The designer has considered this point and revised the design to leave this section of Church Street unchanged, meaning that vehicles that currently park along this stretch of carriageway (noting the presence of several driveways) will continue to be able to do so.		

23-1363.10 – B581 Mitigation

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
	<p>Location: Existing signalised junction of the B4114 and B581 Coventry Road.</p> <p>Summary: Location of new advanced stop lines limits traffic signal visibility and risks vehicle to cycle shunts / collisions. The proposed advanced stop line waiting areas on the northern and eastern arms of the junction are in advance of the majority of the traffic signals within the junction. Should signal visibility be restricted there is a risk that following motorists will move off prior to cyclists getting underway, risking collisions between the two .</p> <p>Recommendation:</p> <p>It is recommended that the signal and stop line arrangements are such that cyclists have a clear view of the traffic signals when waiting within the advanced stop line area.</p>	<p>Agree with RSA recommendation: Yes</p> <p>Locations of advanced stop lines will be reviewed and amended where required.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: B4114 Coventry Road – on the exit from the junction with the B581 Coventry Road.</p> <p>Summary: Alignment for straight ahead southbound vehicle movements risks late lane changes and side-swipe type collisions.</p> <p>The alignment of the ahead movement, when travelling southbound, means that drivers are naturally directed to continue into the right turn lane inadvertently, risking late lane changes and potential side-swipe or shunt type collisions.</p> <p>Recommendation:</p> <p>It is recommended that the two-lane arrangement on the exit from the junction is started further south and the road markings amended so as to encourage drivers to make a conscious decision to enter the right turn lane.</p>	<p>Agree with RSA recommendation: Yes</p> <p>The alignment and lane markings will be reviewed and amendment made to address the problem.</p>		

23-1363.11 – Bostock Close PDC

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
	<p>Location: Station Road – western side of the proposed pedestrian crossing to the south of Bostock Close.</p> <p>Summary: Restricted visibility risks vehicle to pedestrian collisions. When crossing west to east, visibility of approaching vehicles is restricted by the horizontal alignment of the carriageway and by the adjacent vegetation. This restricts visibility for and of pedestrians crossing at the proposed located and may result in them entering the carriageway when it is unsafe to do so, risking vehicle to pedestrian collisions.</p> <p>Recommendation: It is recommended that the crossing is relocated such that visibility of approaching vehicles is provided for pedestrians. For example, this could be to the northern side of the junction with Bostock Close on the apex of the bend.</p>	<p>Agree with RSA recommendation: Yes</p> <p>The crossing point has been relocated to the north side of Bostock Close to provide better visibility.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Overseeing organisation response	Agreed RSA action
3.3	<p>Location: Station Road – eastern side of the proposed pedestrian crossing to the south of Bostock Close.</p> <p>Summary: Restricted visibility risks vehicle to pedestrian collisions. When crossing east to west, visibility of approaching northbound vehicles is restricted by the vertical alignment of the carriageway and by the adjacent vegetation. This restricts visibility for and of pedestrians crossing at the proposed located and may result in them entering the carriageway when it is unsafe to do so, risking vehicle to pedestrian collisions.</p> <p>Recommendation: It is recommended that the crossing is relocated such that visibility of approaching vehicles is provided for pedestrians. For example, this could be to the northern side of the junction with Bostock Close on the apex of the bend.</p>	<p>Agree with RSA recommendation: Yes</p> <p>The crossing point has been relocated to the north side of Bostock Close to provide better visibility. The hedges on the north eastern side of the B581 sit within the highway boundary and can be cut back to ensure that they do not impede visibility.</p>		
4.1	<p>Whilst the footway to the south of the proposed crossing is shown as being 1.4m in width on the drawing, on site the footway is significantly narrowed by overgrown vegetation and leaf litter. As part of the detailed design, it is recommended that consideration is given to edging up the footway to ensure that the maximum width available is provided to pedestrians.</p>	<p>Agreed. There is a significant amount of overgrown vegetation which reduces the usable width of the footway and which will be considered as part of the site clearance works.</p>		

3. DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS

Design Organisation Statement

1.6. On behalf of the Design Organisation, I certify that:

- The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

Name:	Sam Carter
Signed & Dated:	
Position:	Project Lead
Organisation:	BWB Consulting Ltd

Overseeing Organisation Statement

1.7. On behalf of the Overseeing Organisation I certify that:

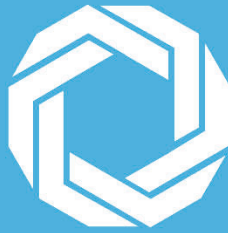
- The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and
- The agreed RSA actions will be progressed.

Name:	
Signed & Dated:	
Position:	
Organisation:	



A **CAF** GROUP COMPANY





Midlands Road Safety Ltd

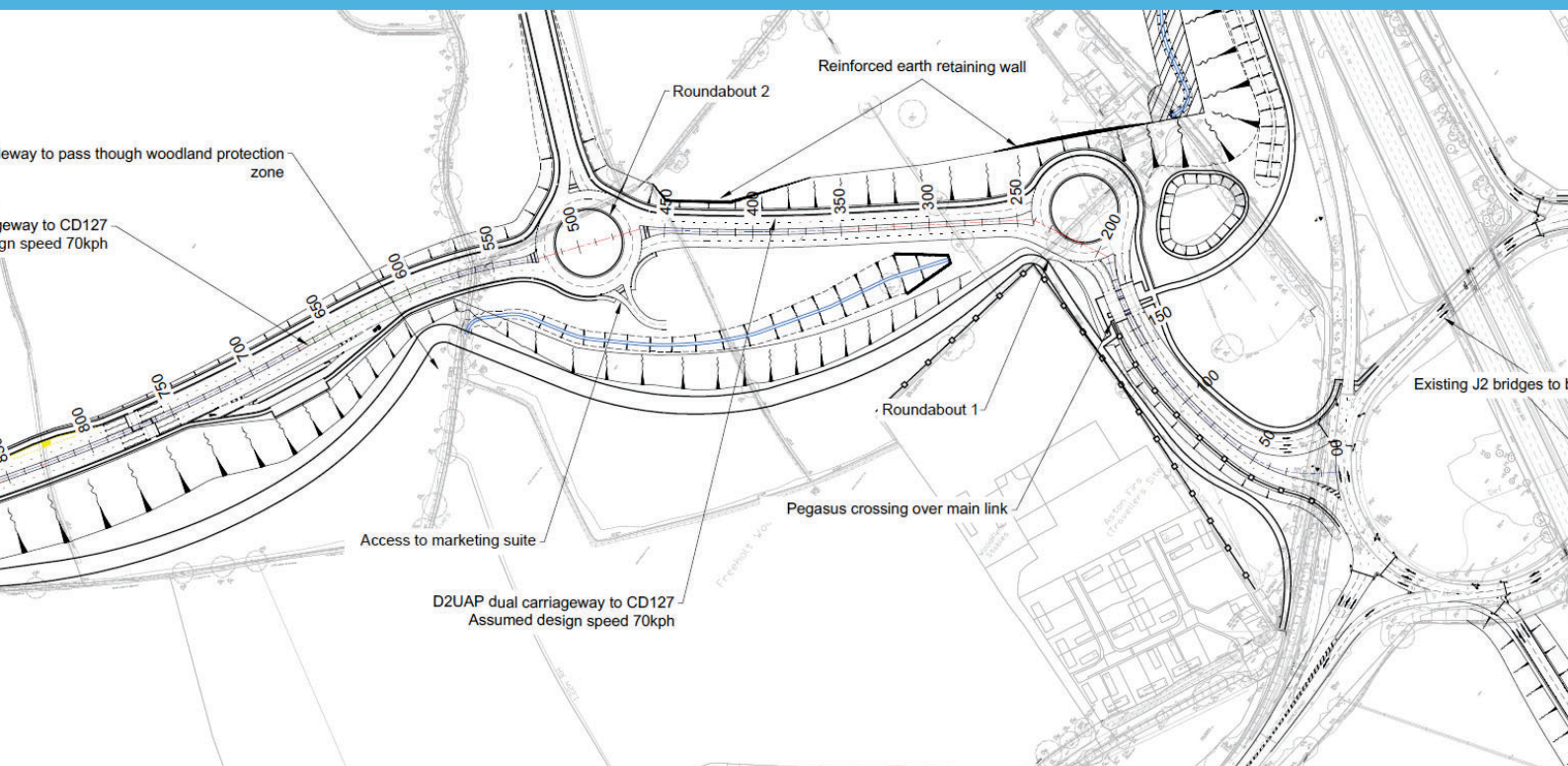
PROPOSED HINCKLEY RAIL INTERCHANGE ACCESS ROAD

M69 JUNCTION 2 / B4668, HINCKLEY

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.01-RSA1



PROPOSED HINCKLEY RAIL INTERCHANGE ACCESS ROAD

M69 JUNCTION 2 / B4668, HINCKLEY

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.01-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	25.10.2023	CB	SP

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3.	SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT	5
4.	ADDITIONAL CONSIDERATIONS	11
5.	AUDIT STATEMENT	11

APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on a link road and access junctions for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley, Leicestershire. The works include;

- Amendments to the M69 junction 2 roundabout to provide the primary access to include an additional arm alongside signalisation;
- Creation of a secondary access via a new three-arm roundabout junction with the B4668 Leicester Road to the west of the site;
- Construction of a new distributor link road through the site, with an initial dual carriageway section between the M69 and western site access (approximately 990m) to accommodate the majority of the development traffic, followed by approximately 1,500m of single carriageway to accommodate largely local traffic; and
- Provision of a shared cycle route adjacent to the road and links for pedestrians to access the existing Public Right of Way network and Burbage Common.

1.2 The report, which relates to the site access junctions and the A47 Link Road, was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisations are Leicestershire County Council and National Highways.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSORSA, NH RSA Certificate of Competency

Audit Team Member

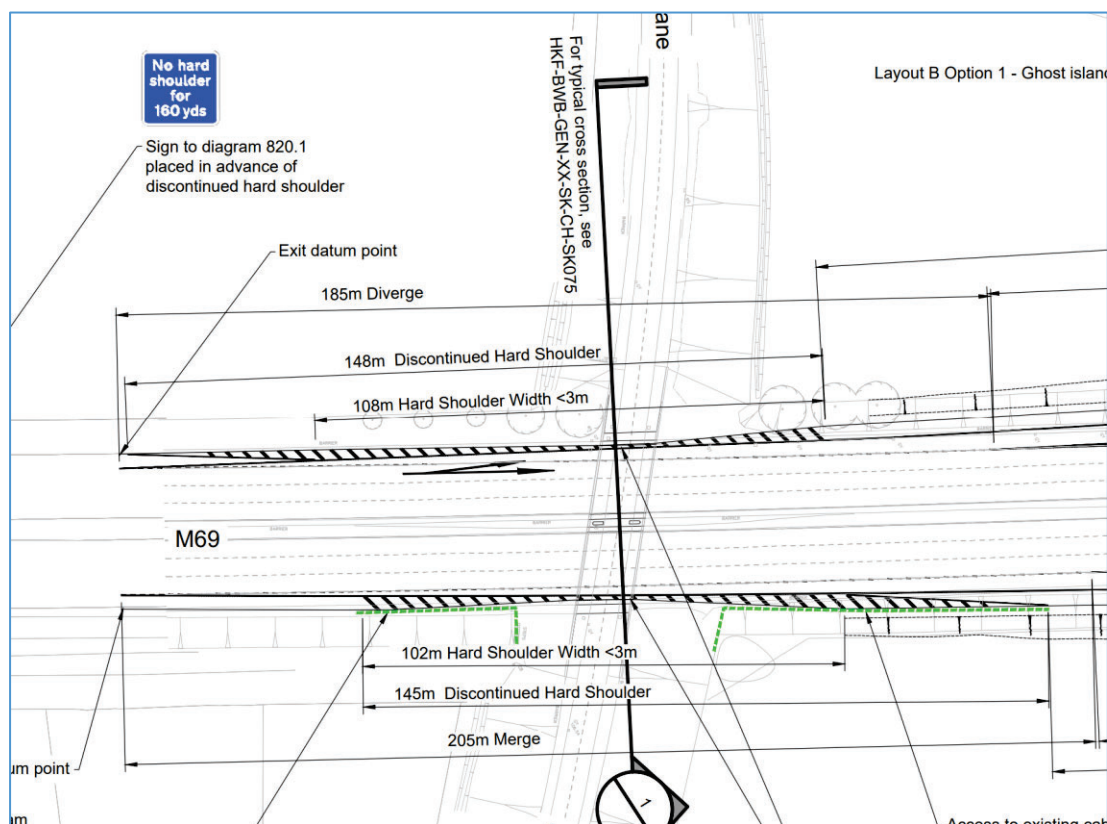
Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 3rd October 2023 between the hours of 11:25 and 11:45 (B4668 junction), and between 15:00 and 15:35 (M69 junction and link road junction). During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being light, with no pedestrians and one cycle movement being observed.

1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have been made aware of two departures from design standards. Whilst the submission for these departures remains in preparation, the two departures are:

- Proposed section of discontinuous hard shoulder of new south facing diverge slip at M69 J2; and
- Proposed section of discontinuous hard shoulder of new north facing diverge slip at M69 J2.

1.6 The location of these departures is detailed below:



1.7 Having reviewed the implications of these departures on the safety of the network, whilst amendments to the existing vehicle restraint system will be required to accommodate the works no indication is shown on plan of this. It will be essential that working widths and containment levels past identified hazards are maintained and that adequate protection is afforded to maintenance and emergency workers operating in this area. The formal departures report will be awaited before commenting further.

- 1.8 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.9 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.
- 1.10 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.11 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

3.1. The Audit Team has identified six safety problems to be addressed.

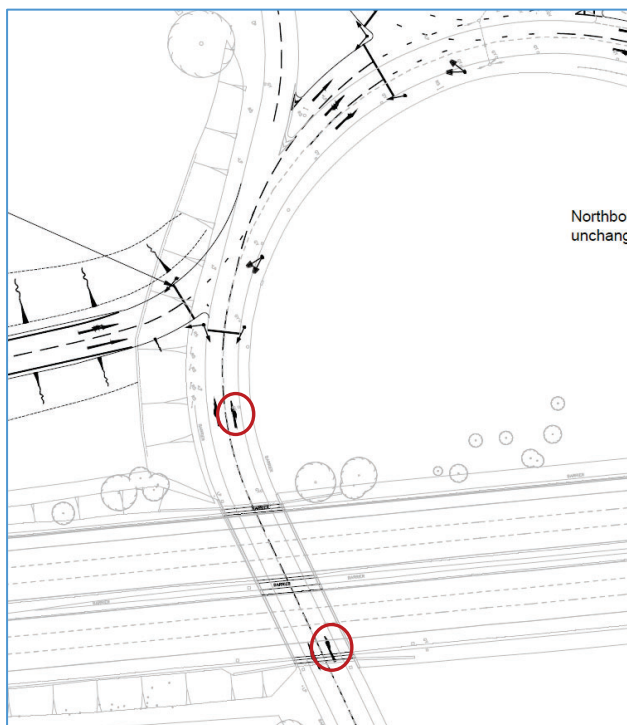
M69 Junction 2 / B4668 Roundabout Terminal Junctions

3.2. Problem 1

Location: M69 J2 southern circulatory carriageway.

Summary: Confusing road markings risk side swipe type collisions.

Around the southern carriageway of the circulatory the lane destinations show an “ahead” and a “right turn” arrow. However, approaching the junction and on the approaches before this point, “ahead” and “ahead and right” arrows are shown. This could lead to late lane changes, sudden and unexpected braking and side swipe type collisions due to driver confusion and late decision making as a result of confusing and misleading lane destinations.



Recommendation:

It is recommended that the markings are amended so that they are consistent with the available movements around the southern half of the circulatory and on the westbound link road exit.

3.3. **Problem 2**

Location: M69 southbound approach to the new signalised junction.

Summary: Poor forward visibility of signals risks late braking and junction overshoot type collisions.

The southbound off-slip approach to the proposed signals at Junction 2 has a significant vertical and horizontal alignment change on the approach to the current Give-Way line. There is a concern that, given these changes and the existing signing infrastructure, that forward visibility towards the signal heads will not be provided for vehicles.



Recommendation:

It is recommended that the signals are located and designed, including raised poles and/or gantry signals if needed, so as to provide adequate forward visibility for approaching vehicles. Furthermore, it is recommended that the signing on the approach is amended so as not to pose an obstruction.

3.4. **Problem 3**

Location: B4669 Hinckley Road approach to the M69 Junction 2.

Summary: Bridleway crossing relocation risks vehicle to equestrian collisions.

The existing bridleway crossing on the B4669 is set back from the carriageway by approximately 26m. Under the new arrangement equestrians will cross in front of the signal stop line, resulting in a diversion from the desire line and bringing riders towards the circulatory carriageway and traffic signals. There are concerns that the added noise and proximity to circulatory traffic may result in horses being 'spooked' and potentially result in vehicle to horse / equestrian collisions.



Recommendation:

It is recommended that consultation is undertaken with local horse-riding groups and that, should the above concerns be realised, that the bridleway crossing is relocated.

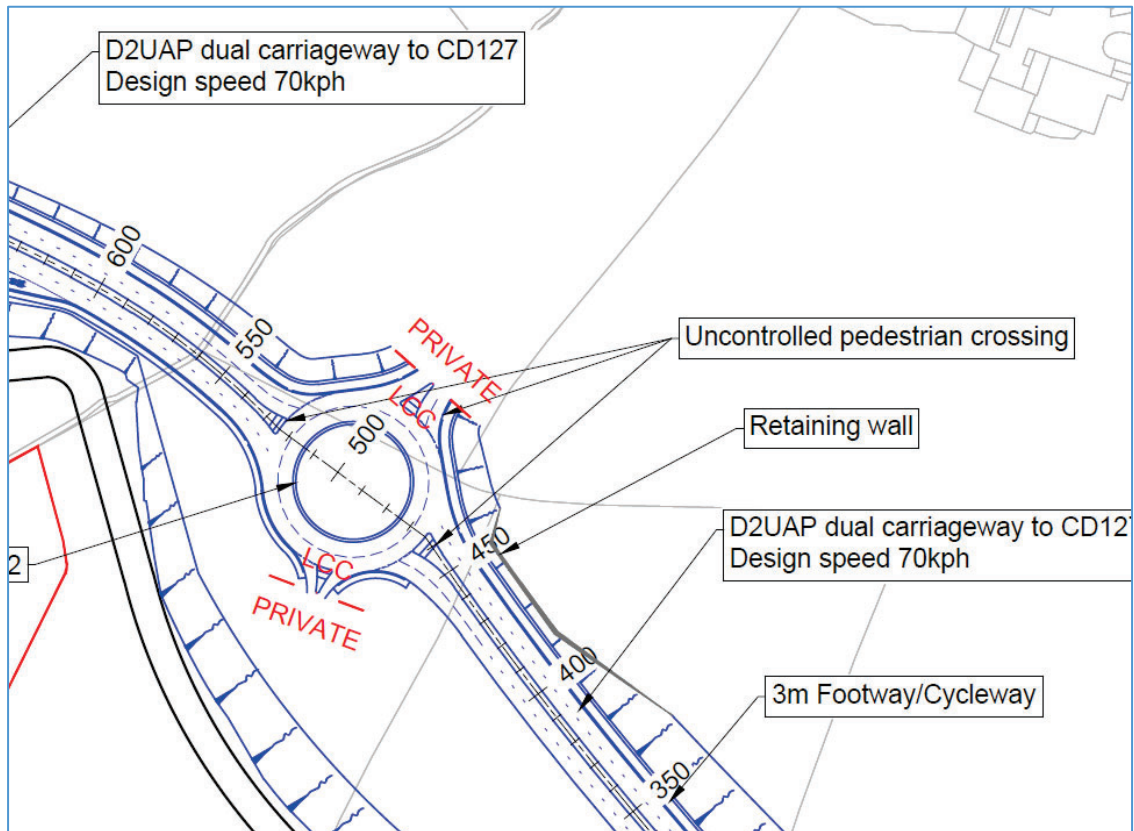
Proposed Link Road

3.5. Problem 4

Location: Roundabout 2 – proposed uncontrolled pedestrian crossings.

Summary: Narrow crossings on a shared route risk cycle to pedestrian collisions.

A 3m wide shared footway / cycleway is proposed along the northern side of the link road. However, the crossing point and route across the northern splitter island appear to be narrow and may not be of sufficient width to safely accommodate pedestrian and cycle movements. This risks cycle to pedestrian collisions.



Recommendation:

It is recommended that all crossings linking shared footway / cycleway routes are of sufficient width to safely accommodate shared use.

3.6. **Problem 5**

Location: General.

Summary: Risk of risk severity caused from secondary collisions.

There are several potential hazards identified along the link road that could promote a secondary collision type potentially resulting in an increased severity of injury to vehicle occupants. This relates to references on plan to retaining walls, embankments, acoustic fencing, and proximity of balancing ponds all of which can present a secondary hazard to an errant vehicle.

Recommendation:

It is recommended that a full Road Restraint Risk Assessment is carried out in the first instance and outcomes reviewed against a local context given the limitation this approach can have in terms of outcomes and recommendations. It is further recommended that locations for signing are identified at the earliest opportunity to ensure compromises on design are not discovered later on and that the Design Team should ensure that adequate land can be provided, with consideration for any resulting protection measures, to accommodate traffic signs and any other street infrastructure associated with the wider proposals.

3.7. Problem 6

Location: 10m brideway corridor.

Summary: Risk of pedestrian, cycling and horse riding collisions.

There are several instances on plan where the 10m brideway corridor narrows at bends in the route where forward visibility towards an oncoming user may be limited. It is not possible to ascertain the resulting width at these pinch points and thus likelihood of collisions and conflict between these users.



Recommendation:

It is recommended that appropriate widths are maintained along the entirety of the brideway corridor.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. No additional considerations have been identified at this stage.

5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

Signe 

Date: 30.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd


Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-SK-CH-SK016	Highway General Arrangement Layout	P05
HRF-BWB-GEN-XX-SK-CH-SK020	Powner Land Dedication as Highway	P02
HRF-BWB-GEN-XX-SK-CH-SK044	B4668 Roundabout Segregated Left Turn Lane	P01
HRF-BWB-GEN-XX-SK-CH-SK049	M69 J2 South Facing Slip Roads Merge and Diverge	P03
HRF-BWB-HGN-XX-DR-CH-00100	M69-A47 Link Road General Arrangement	P08
HRF-BWB-LSI-D1-DR-CH-00100_Document 2.4A	Highway Plans Sheet 1	P03
HRF-BWB-LSI-D1-DR-CH-00100_Document 2.4D	Highway Plans Sheet 4	P03

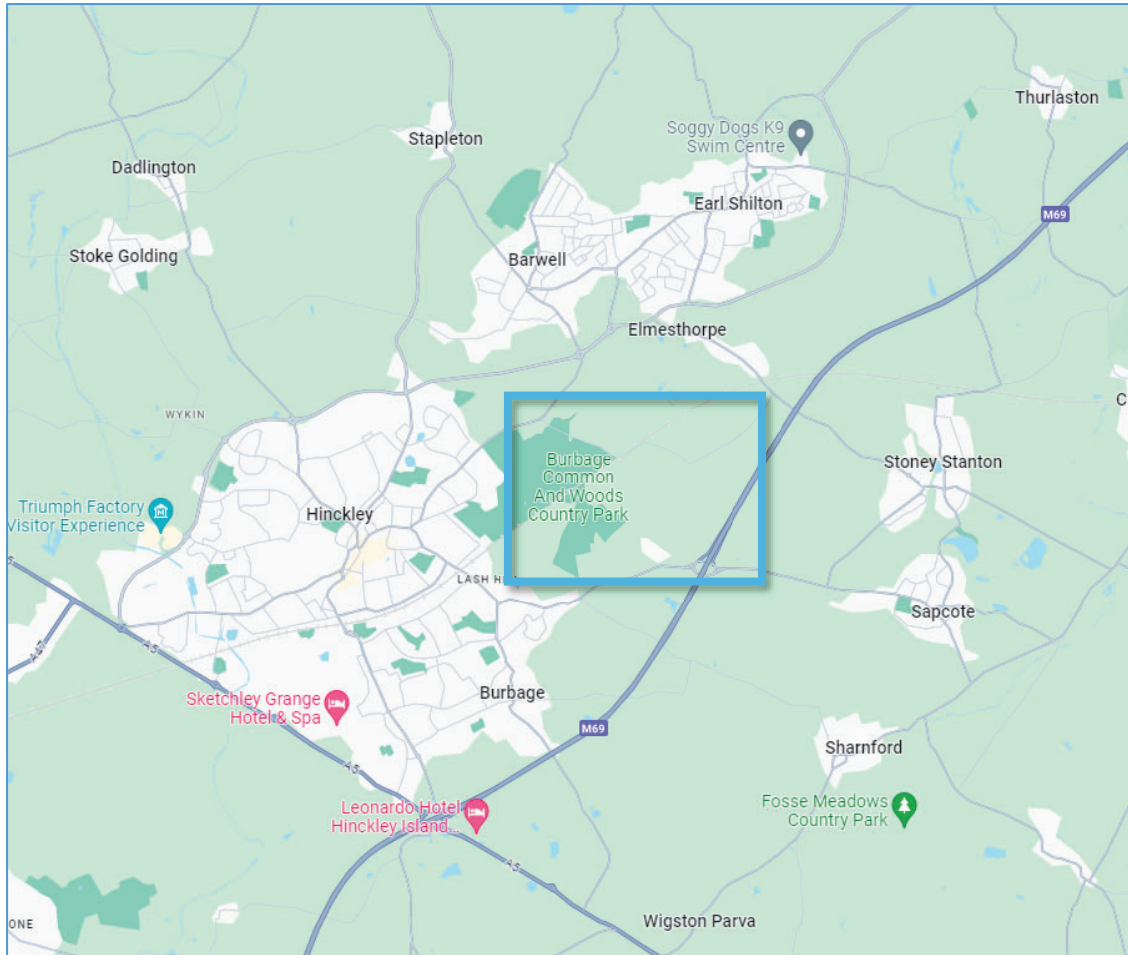
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (Link Road & Access Junctions)	-	13.10.2023
BWB Consulting	WCHAR	P2	
BWB Consulting	Transport Assessment	06	March 2023

APPENDIX B

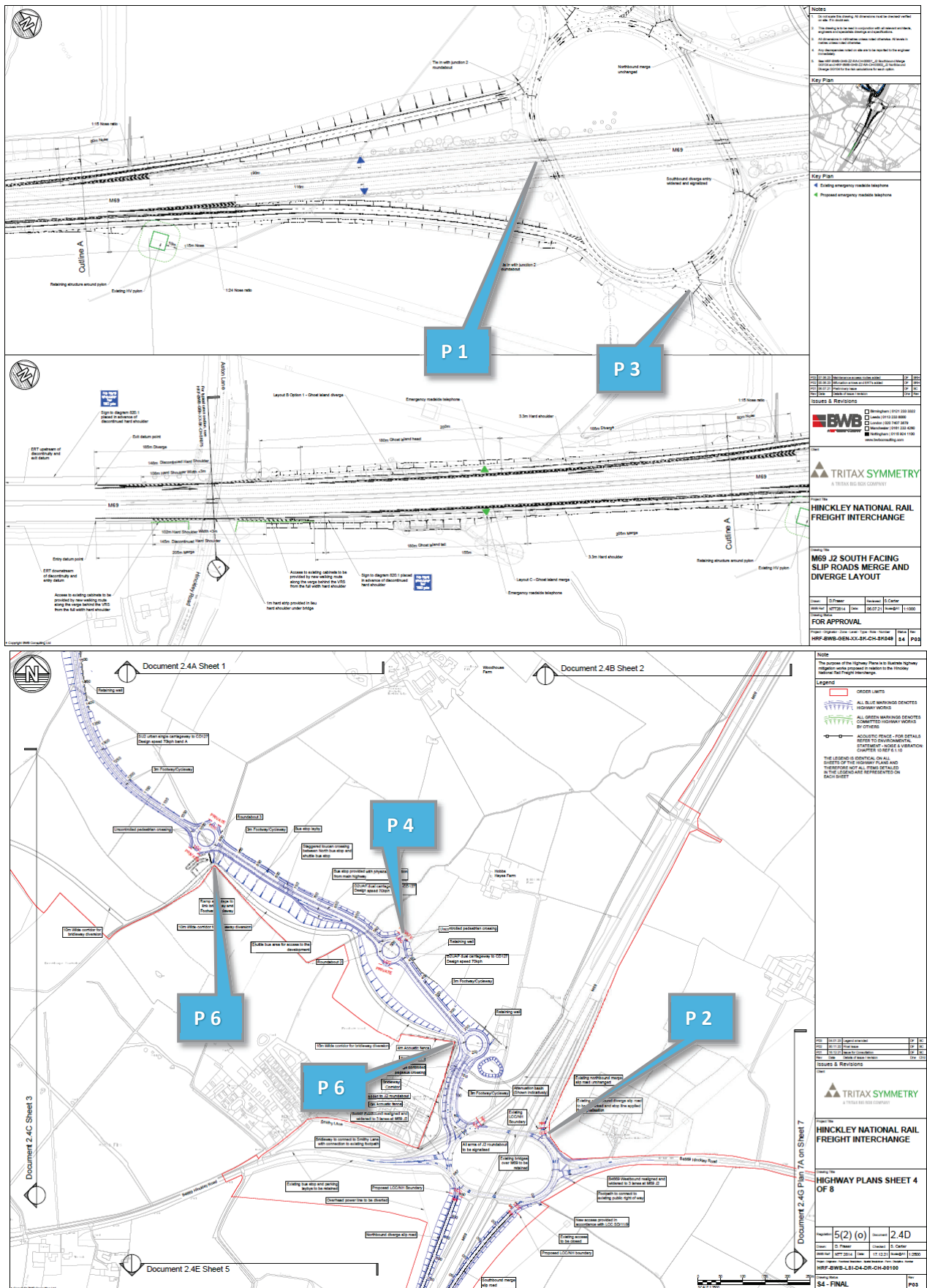
The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

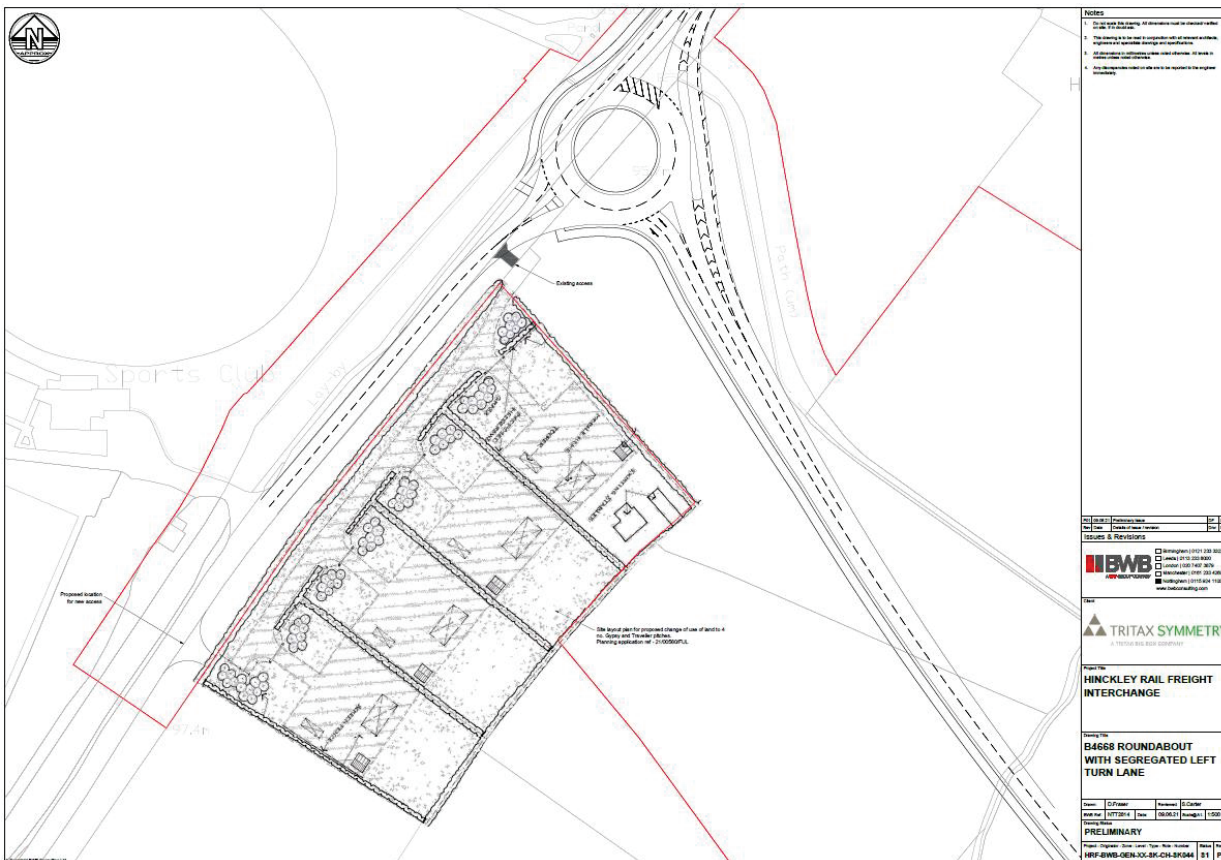
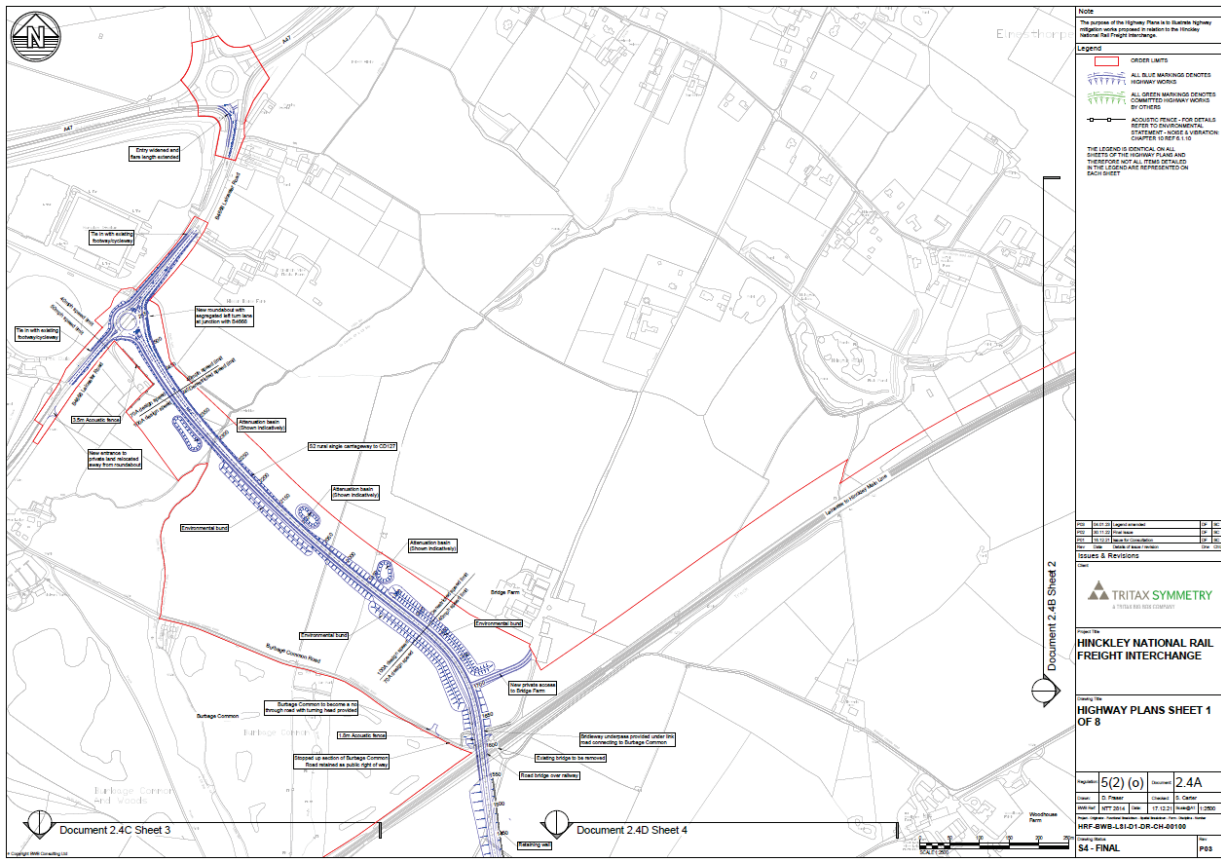
Figure 1 – Site Location

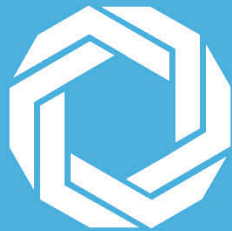


[Mapping source; Google Maps]

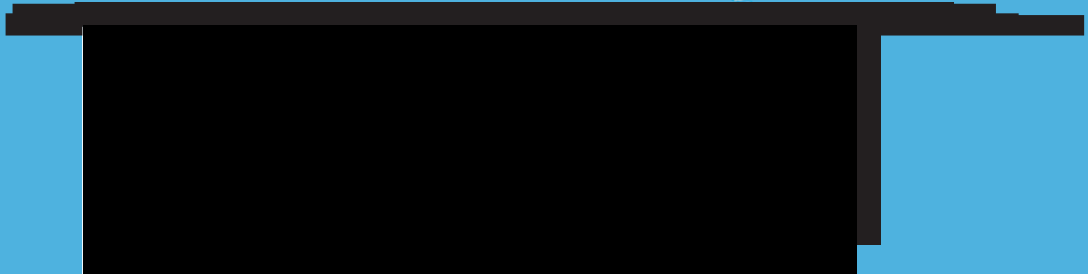
Figure 2 – Problem Location Plan

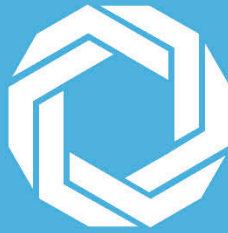






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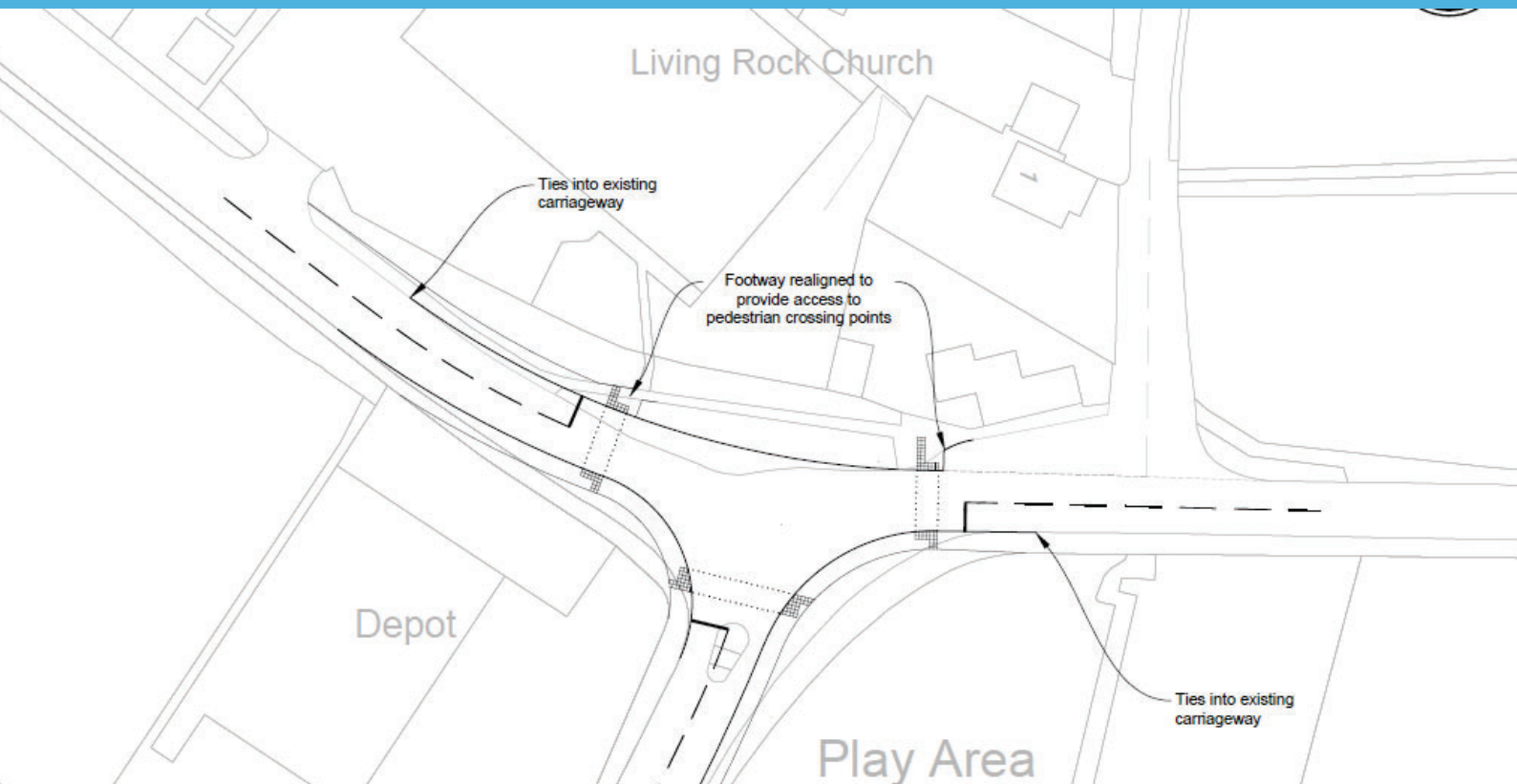
PROPOSED JUNCTION SIGNALISATION

B581 STATION ROAD JUNCTION WITH NEW ROAD AND HINCKLEY ROAD, STONEY STANTON

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.02-RSA1



PROPOSED JUNCTION SIGNALISATION

B581 STATION ROAD JUNCTION WITH NEW ROAD AND HINCKLEY ROAD,
STONEY STANTON

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.02-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED] [midlandsroadsafety.co.uk](mailto:[REDACTED]@midlandsroadsafety.co.uk)

Revision	Date of Issue	Author	Checked
First Issue	27.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed replacement of the existing mini-roundabout and provision of a signalised junction, incorporating traffic signal-controlled pedestrian crossings, at the junction of the B581 Hinckley Road and New Road in Stoney Stanton, Leicestershire. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.

1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 12:25 and 12:45. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being light, with occasional pedestrians and no cycle movements being observed.

1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.

1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.

1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.

- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

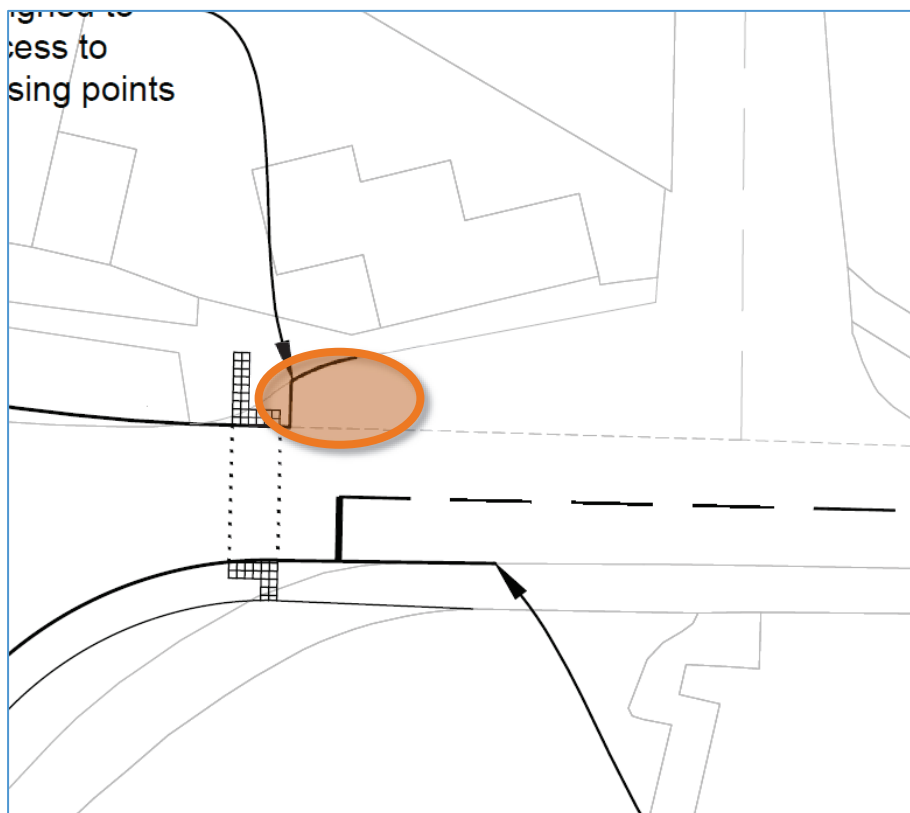
3.1. The Audit Team has identified three safety problems to be addressed.

3.2. **Problem 1**

Location: Northern side of the proposed pedestrian crossing – New Road arm.

Summary: Parking abutting the crossing may restrict visibility for / of crossing pedestrians, risking vehicle to pedestrian collisions.

It was observed on site that a number of vehicles frequently park immediately adjacent to the property to the east of the crossing. There is a risk that a parked vehicle will obstruct visibility for and of pedestrians waiting to cross here, and that pedestrians may therefore enter the carriageway when it is unsafe to do so risking vehicle to pedestrian collisions.



Recommendation:

It is recommended that waiting restrictions are provided and / or kerb alignment amended to ensure that the visibility envelope is kept unobstructed.

3.3. **Problem 2**

Location: Northern side of the proposed pedestrian crossing – New Road arm.

Summary: Private driveway access risks damage to the crossing and trip type hazards and vehicles entering the junction when it is unsafe to do so.

There is a private driveway access located immediately behind the northern side of the proposed pedestrian crossing, on the northern side of New Road. Should vehicles overrun the crossing there is a risk of damage to the tactile paving, creating trip type hazards. Furthermore, vehicles exiting from the driveway will enter the junction at a point where they cannot see a traffic signal, potentially entering in conflict with other movements resulting in collisions within the junction.



Recommendation:

It is recommended that the private driveway arrangement is amended such that vehicles will not overrun the crossing and will be able to enter the junction with visibility of traffic signals.

3.4. Problem 3

Location: Station Road, Stoney Stanton - southern side of the pedestrian crossing.

Summary: Pedestrian crossing within depot access risks damage to the crossing / tactile paving overrun and trip type incidents.

The proposed pedestrian crossing is situated within a long section of dropped kerb that appears to provide access to a depot car park, with the vehicular access directly behind the proposed pedestrian crossing. This could lead to vehicles overrunning the crossing in order to access the car park, posing a risk of collisions with pedestrians, unexpected stopping of vehicles within the junction risking shunts and damage to the tactile paving resulting in pedestrian trips.



Recommendation:

Whilst on site it was unclear whether the site continues to serve the purpose of its initial construction. It is recommended that the current access arrangement is reviewed and, if possible, amended so as to separate vehicle movements from both the crossing and signals so as to provide safe access and avoid safety problems at the crossing.

Should this not be possible, it is recommended that the signal arrangement is amended appropriately and that the need for a pedestrian arm on this side of the junction is reconsidered subject to expected desire lines as no facility currently exists on this arm.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. No Additional Considerations were identified as part of this Audit.

5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

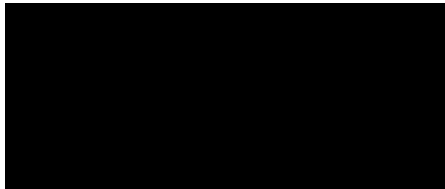
5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSORSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

Sig

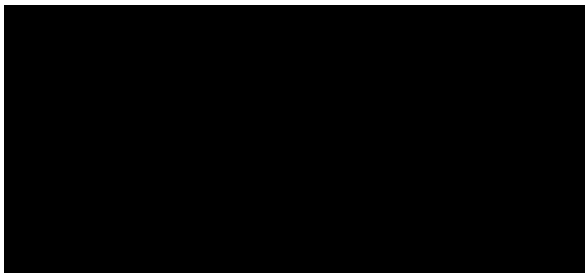


Date: 26.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 26.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-104	Proposed Signals	P2
HRF-BWB-GEN-XX-DR-TR-124	Proposed Signals (Swept Paths)	P1

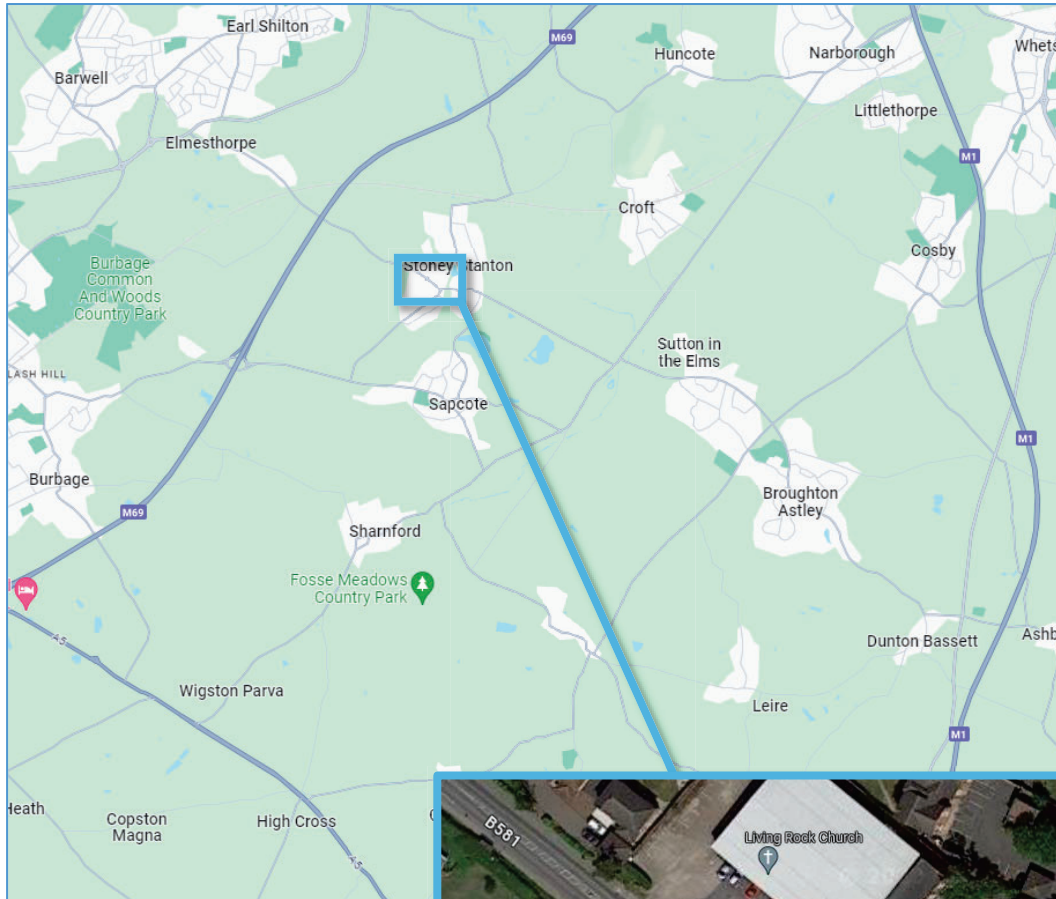
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

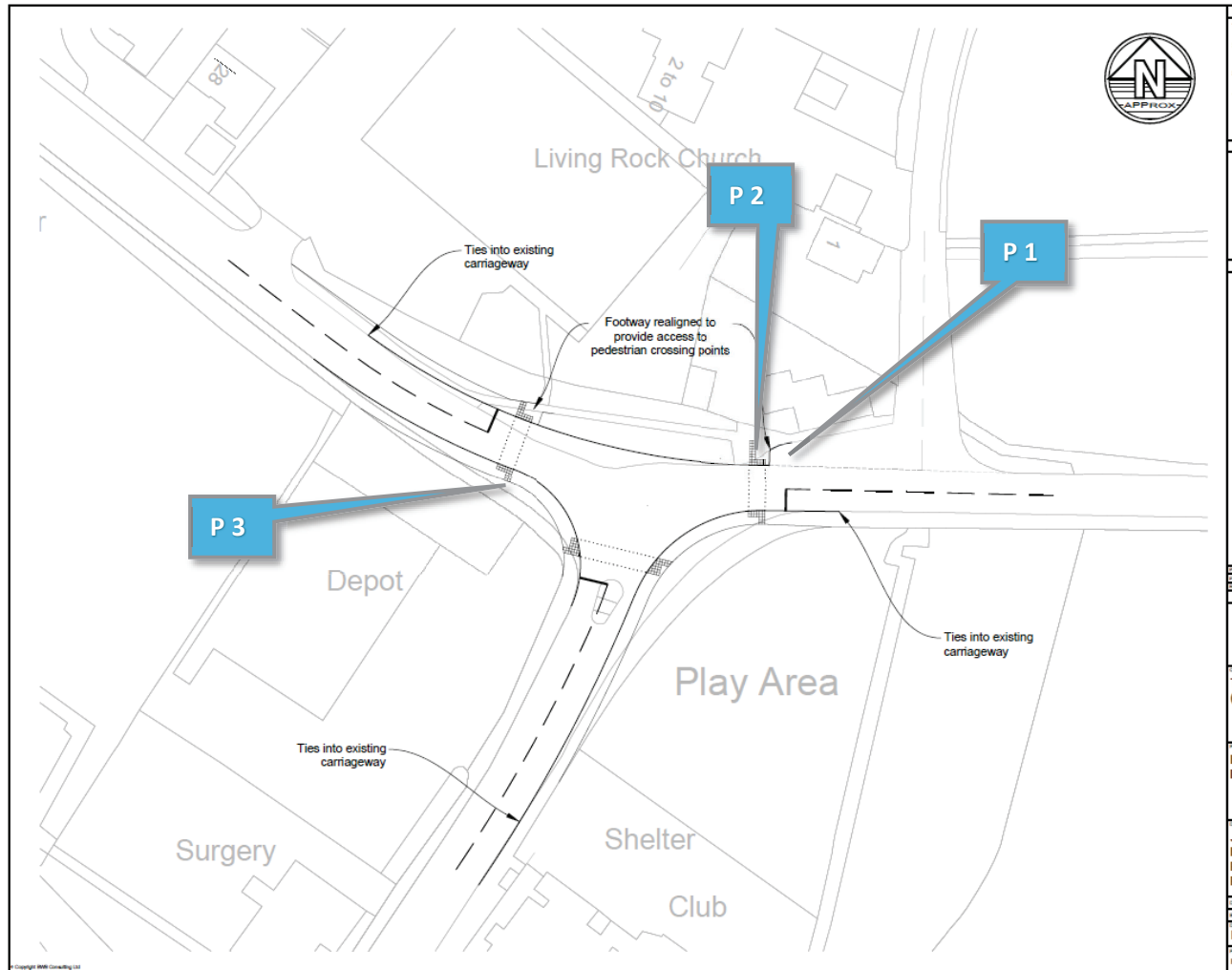
Figure 1 – Site Location

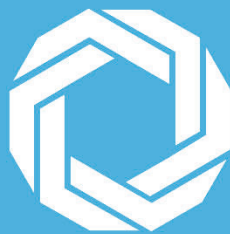


[Mapping source; Google Maps]

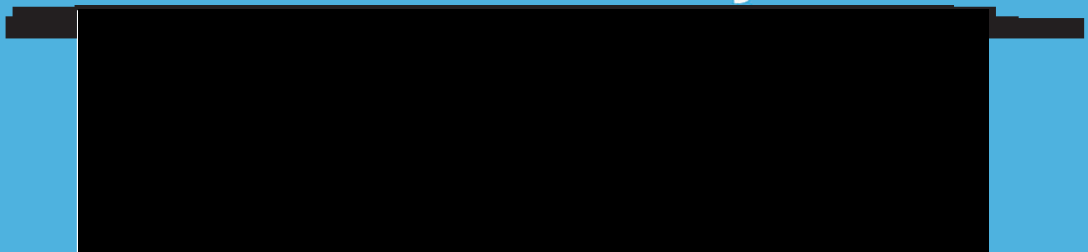


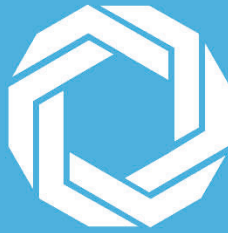
Figure 2 – Problem Location Plan





Midlands Road Safety Ltd





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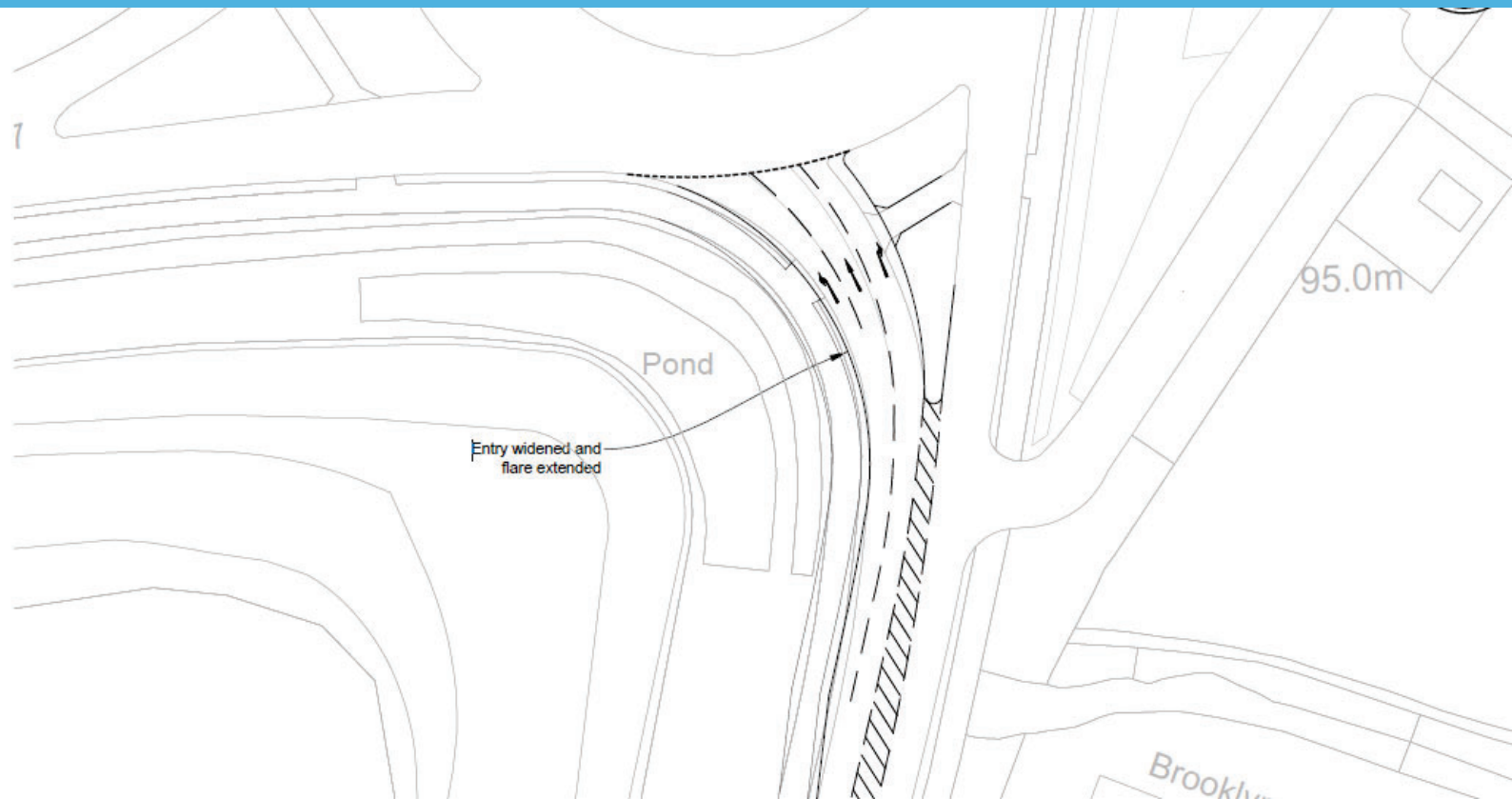
PROPOSED ROUNDABOUT ENTRY WIDENING

A47 NORMANDY WAY JNC B4668 LEICESTER ROAD, HINCKLEY

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.03-RSA1



PROPOSED ROUNDABOUT ENTRY WIDENING

A47 NORMANDY WAY JNC B4668 LEICESTER ROAD, HINCKLEY

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.03-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	27.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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5.	AUDIT STATEMENT	4

APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed widening of the southern B4668 Leicester Road entry to the roundabout junction with the A47 in Hinckley, Leicestershire. The proposals include widening the Leicester Road approach and extending the existing flare to increase capacity at the junction, requiring the narrowing of the existing central splitter island and the verge to the western side of the junction. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.

1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.1 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 11:35 and 11:45. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being light, with occasional pedestrians and no cycle movements being observed.

1.2 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.

1.3 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.

1.4 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

- 1.5 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of “Additional Considerations” will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.6 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

- 3.1. The Audit Team has identified no safety problems to be addressed.

End of the ‘Safety Problems’ in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

- 4.1. No Additional Considerations were identified as part of this Audit.

5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

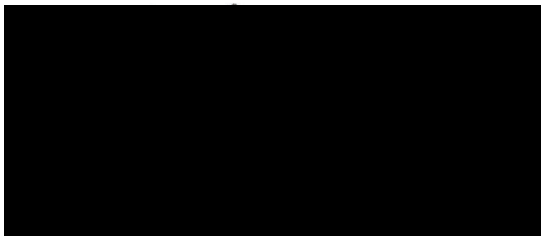


Date: 26.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Signed: 

Date: 26.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-105	Proposed Mitigation	P1
HRF-BWB-GEN-XX-DR-TR-125	Proposed Mitigation (Swept Paths)	P1

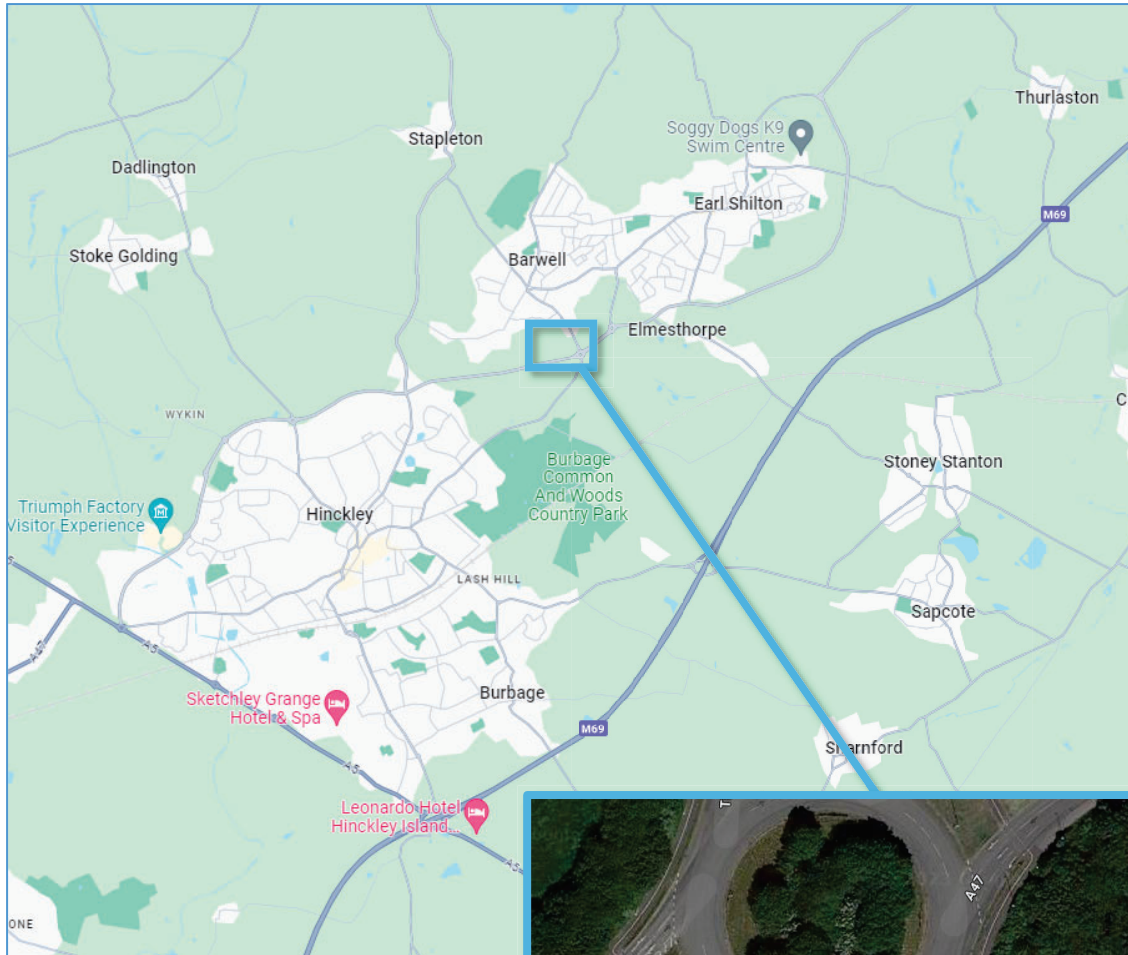
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

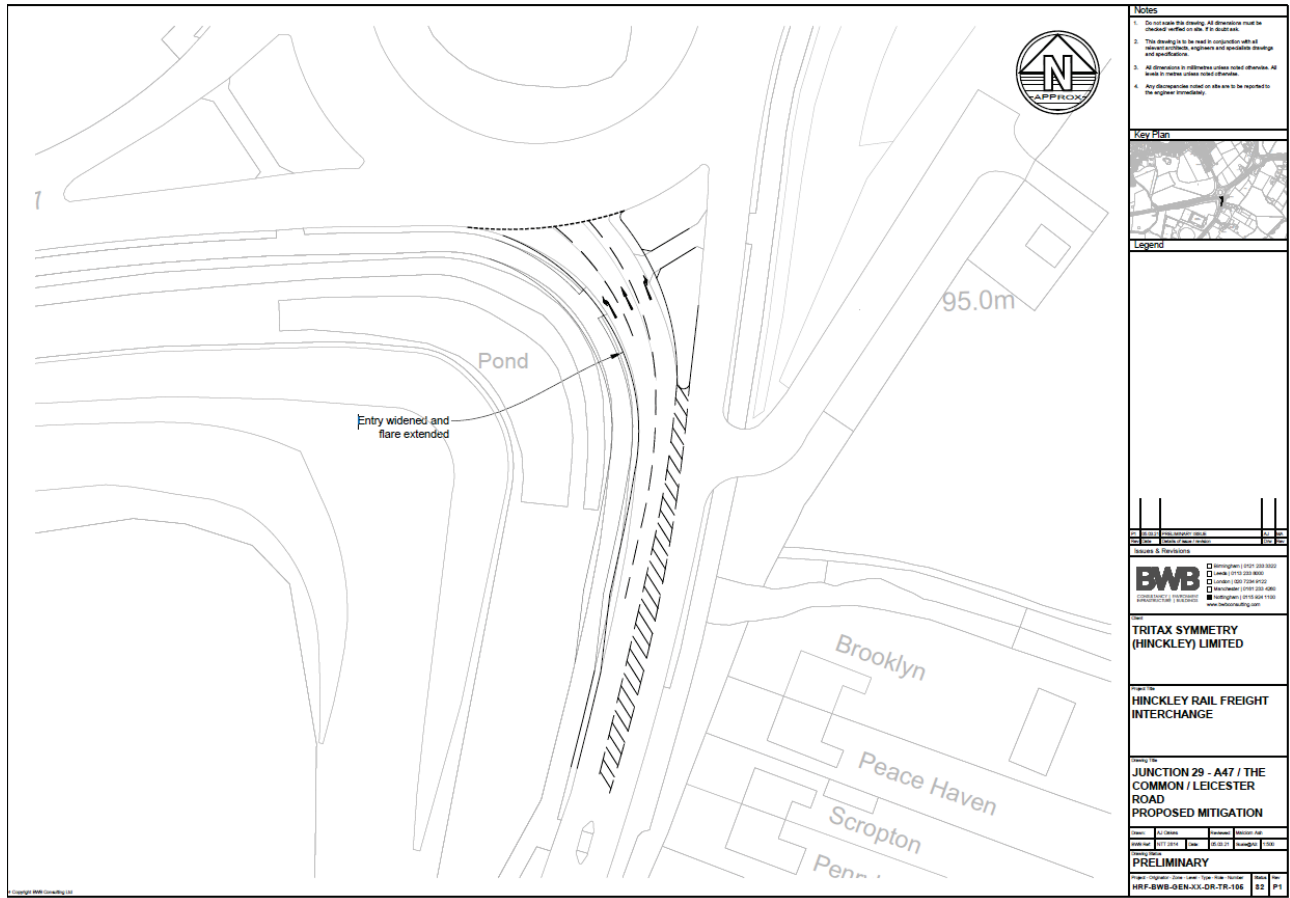
Figure 1 – Site Location

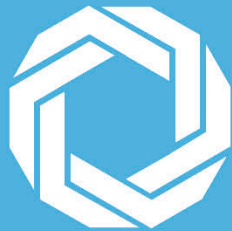


[Mapping source; Google Maps]



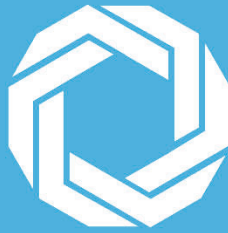
Figure 2 – Problem Location Plan





Midlands Road Safety Ltd





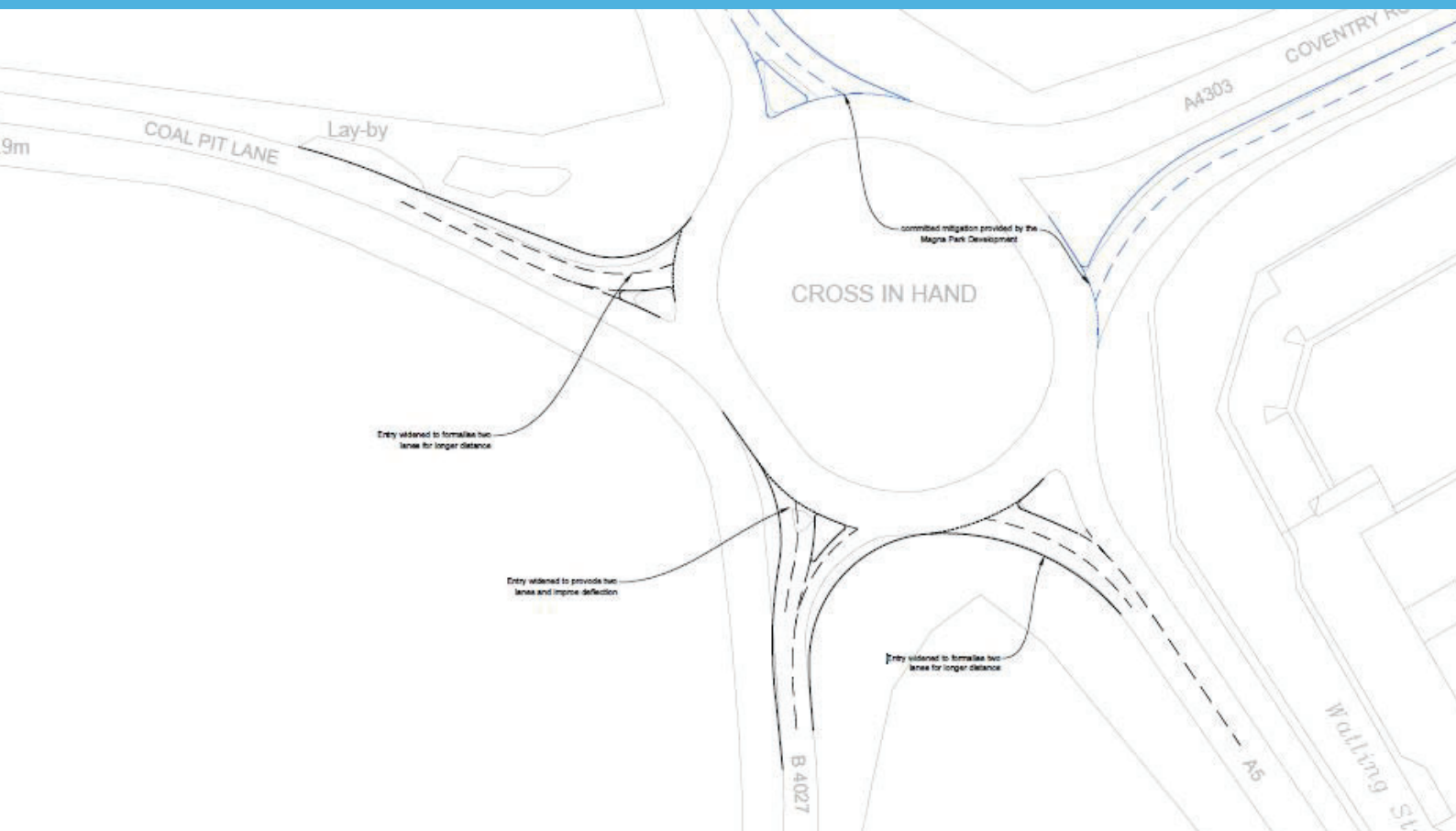
Midlands Road Safety Ltd

PROPOSED ROUNDABOUT ENTRY WIDENING A5 JUNCTION WITH A4303 AND COAL PIT LANE, MAGNA PARK

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.04-RSA1



PROPOSED ROUNDABOUT ENTRY WIDENING

A5 JUNCTION WITH A4303 AND COAL PIT LANE, MAGNA PARK

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.04-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED] [midlandsroadsafety.co.uk](mailto:[REDACTED]@midlandsroadsafety.co.uk)

Revision	Date of Issue	Author	Checked
First Issue	27.10.2023	CB	SP
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4.	ADDITIONAL CONSIDERATIONS	6
5.	AUDIT STATEMENT	6

APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed widening of the A5 Watling Street, B6027 Lutterworth Road and the Coal Pit Lane approaches to the Cross in Hand Roundabout in Lutterworth, Warwickshire. The proposals include the formalisation and extension of the two-lane approaches on each arm and realignment of the Lutterworth Road entry arm to help improve deflection. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.

1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisations are National Highways and Warwickshire County Council.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 10:30 and 11:00. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with no pedestrians and no cycle movements being observed.

1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.

1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.

1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.

- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

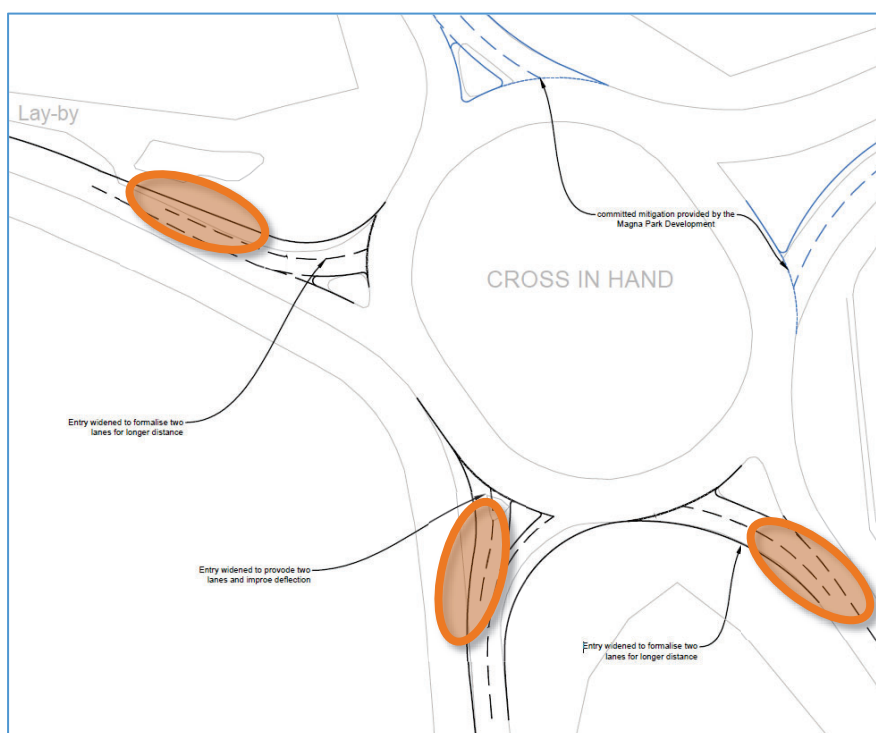
3.1. The Audit Team has identified two safety problems to be addressed.

3.2. Problem 1

Location: Coal Pit Lane, B4027 and A5 northbound approaches to the junction.

Summary: Narrow lane widths risk side-swipe type collisions.

The proposed two-lane approaches appear to show lane widths of under 3.0m. Given the high-speed approaches and high percentage of HGV movements observed and expected through the junction, there is a risk that narrow lanes may result in side-swipe type collisions.



Recommendation:

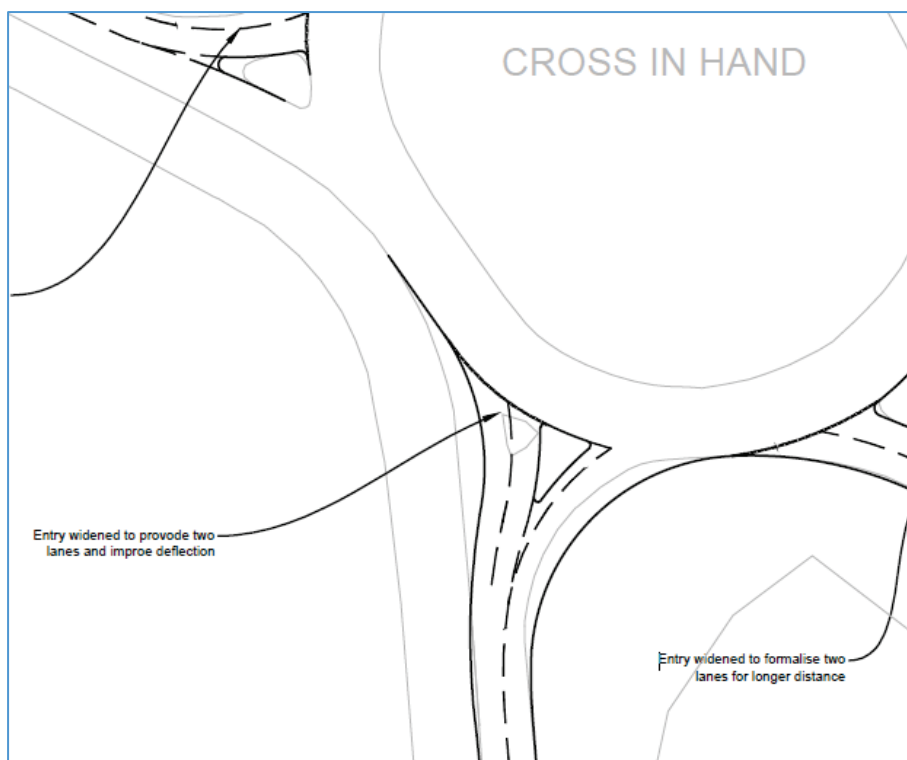
It is recommended that the lane widths are reviewed, and that localised widening is provided so that suitable lane widths can be provided.

3.3. **Problem 2**

Location: B4027 entry to the roundabout.

Summary: Outside lane entry path curvature risks kerb strikes / side swipe type collisions.

There is a concern that the entry path curvature from the offside lane on the B4027 approach will direct drivers toward the centre of the roundabout, risking kerb strikes. Furthermore, the realignment of the approach also means that vehicles in the nearside lane are likely to “squeeze” drivers in the offside lane, risking side-swipe type collisions.



Recommendation:

It is recommended that the entry path curvature is amended to guide vehicles in the offside lane around the circulatory.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

- 4.1. No Additional Considerations were identified as part of this Audit.

5. AUDIT STATEMENT

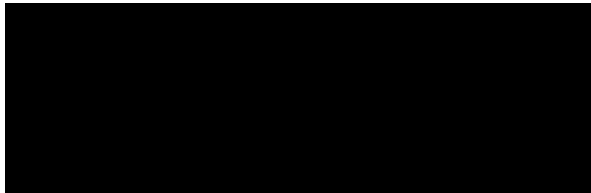
- 5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. **AUDIT TEAM LEADER:**

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

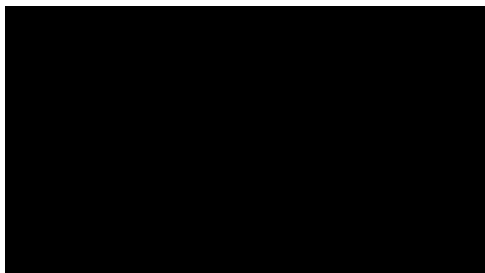


Date: 26.10.2023

5.3. **AUDIT TEAM MEMBER:**

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 26.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-106	Proposed Mitigation	P3
HRF-BWB-GEN-XX-DR-TR-126	Proposed Mitigation (Swept Paths)	P1

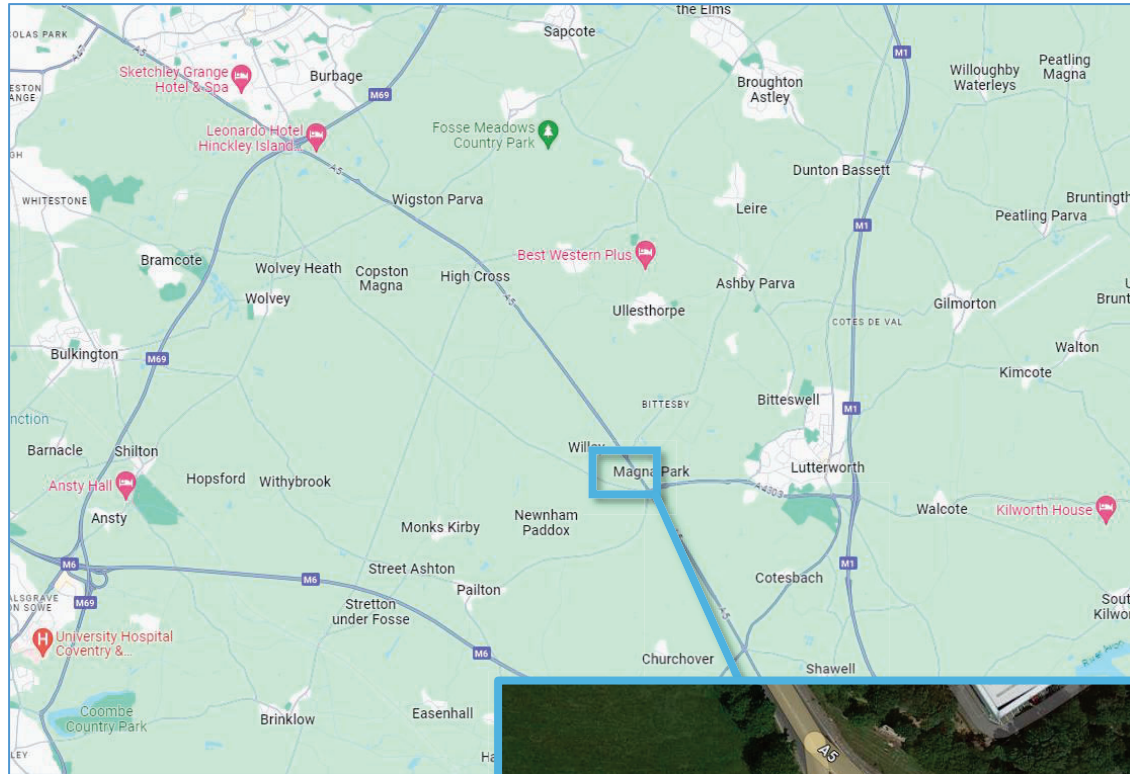
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

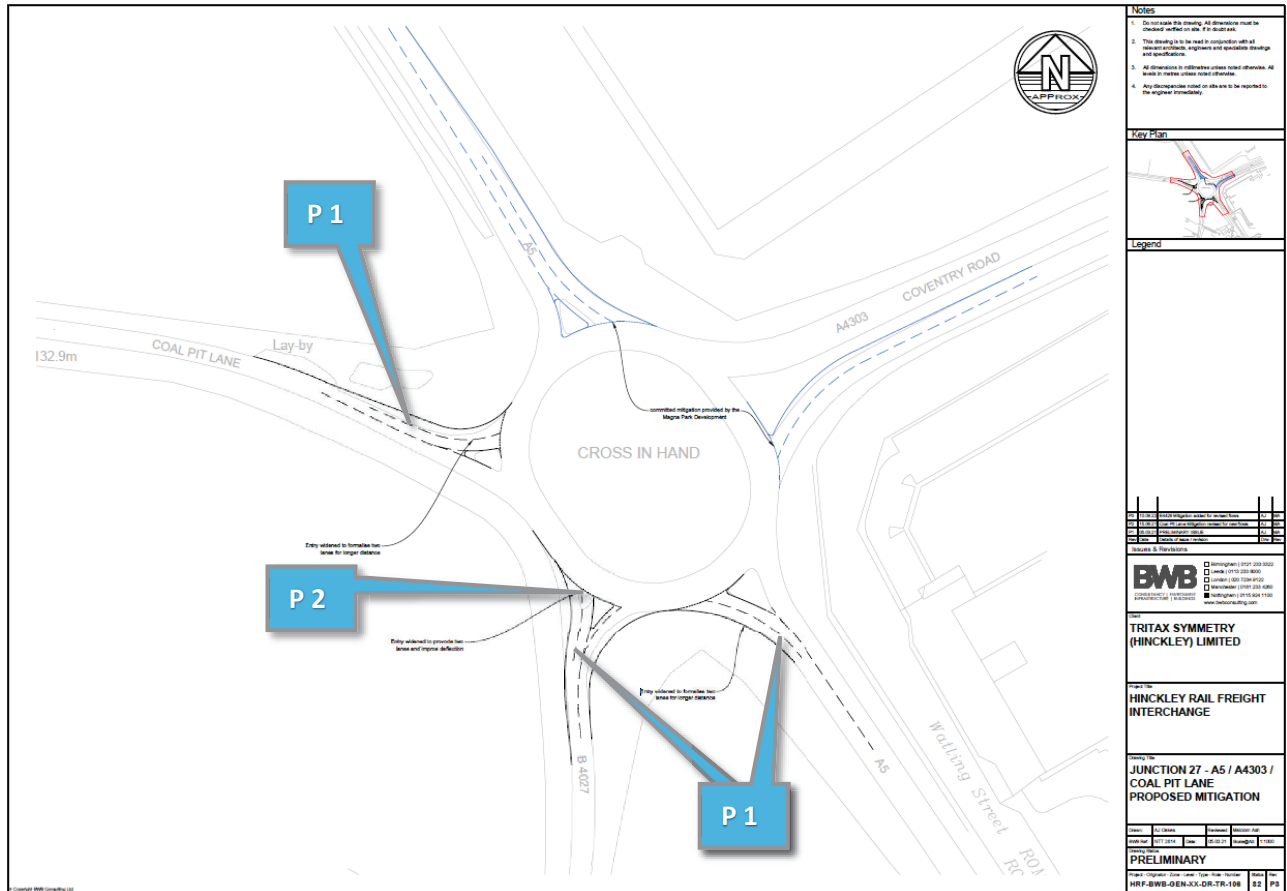
Figure 1 – Site Location

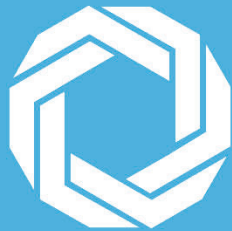


[Mapping source; Google Maps]

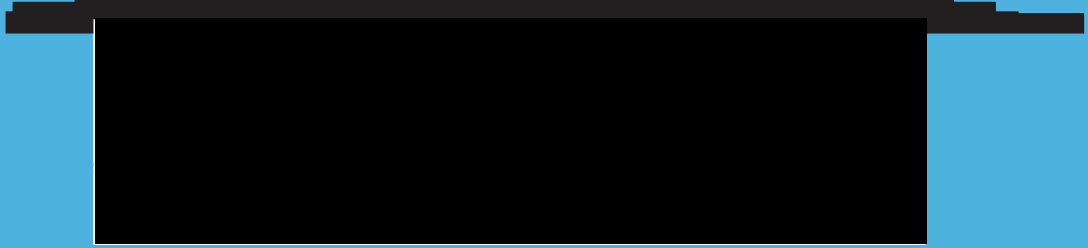


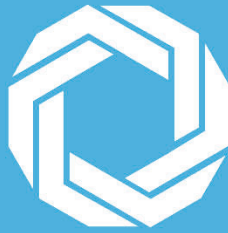
Figure 2 – Problem Location Plan





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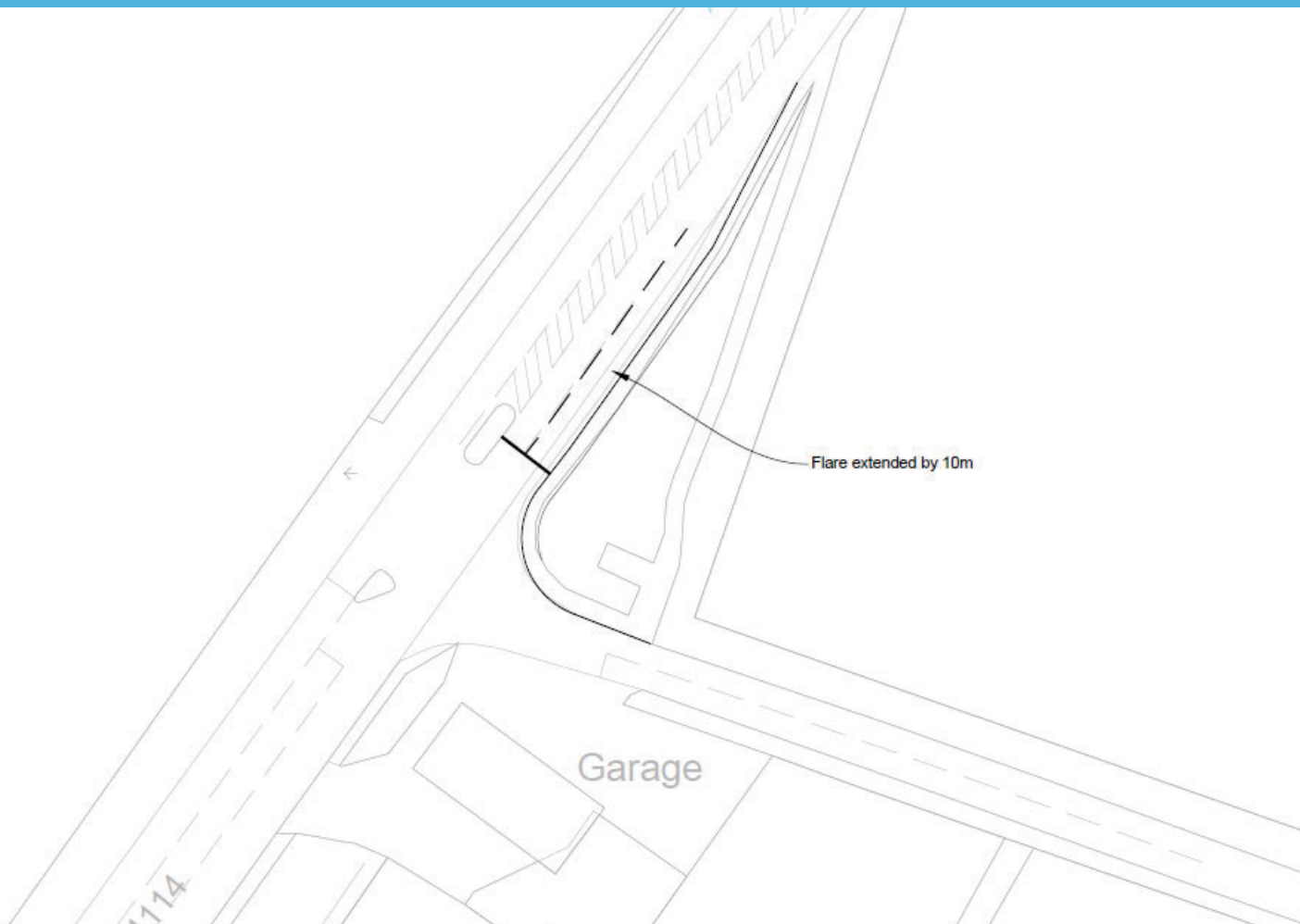
PROPOSED JUNCTION FLARE EXTENSION

B4114 COVENTRY ROAD JNC CROFT ROAD, CROFT

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.05-RSA1



PROPOSED JUNCTION FLARE EXTENSION

B4114 COVENTRY ROAD JNC CROFT ROAD, CROFT

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.05-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED] [midlandsroadsafety.co.uk](mailto:[REDACTED]@midlandsroadsafety.co.uk)

Revision	Date of Issue	Author	Checked
First Issue	27.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES	
A.	DRAWINGS AND DOCUMENTS REVIEWED
B.	SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

- 1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed extension of the left turn lane flare at the signalised junction of the B4114 Coventry Road and Croft Road (Junction 50) in Stoney Stanton, Leicestershire, by 10m. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.
- 1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.
- 1.3 The Audit Team Membership was as follows:
- Audit Team Leader
Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency
- Audit Team Member
Simon Prescott, MIHE NH RSA Certificate of Competency
- 1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 15:40 and 15:55. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with no pedestrians and no cycle movements being observed.
- 1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.
- 1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.
- 1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.

- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

- 3.1. The Audit Team has identified no safety problems to be addressed.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

- 4.1. No additional considerations were identified as part of this report.

5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

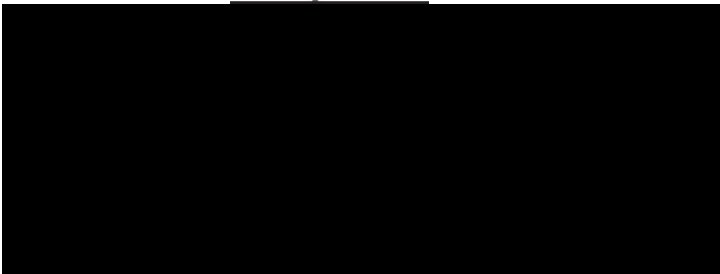


Date: 26.10.2023

5.3. AUDIT TEAM MEMBER:

Sarah Cooke, BA (Hons)

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 26.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-107	Junction 50 Proposed Mitigation	P1
HRF-BWB-GEN-XX-DR-TR-127	Junction 50 Proposed Mitigation (Swept Paths)	P1

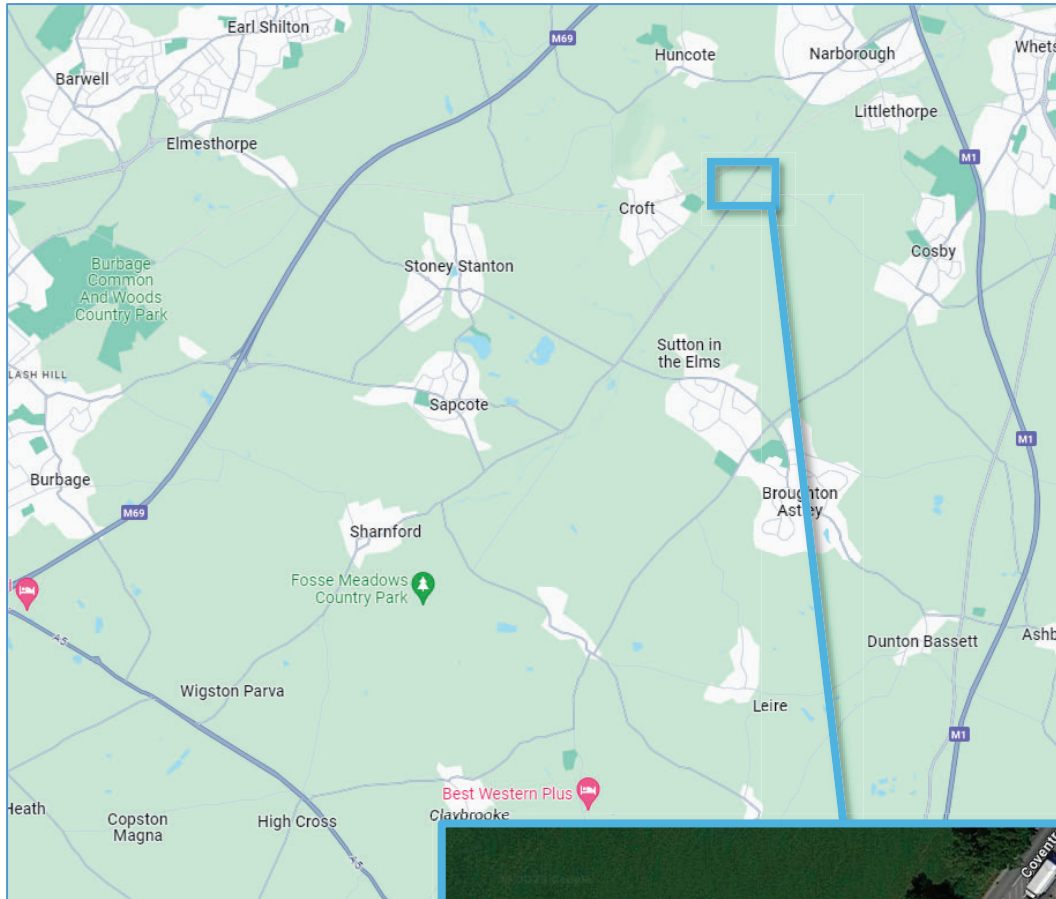
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

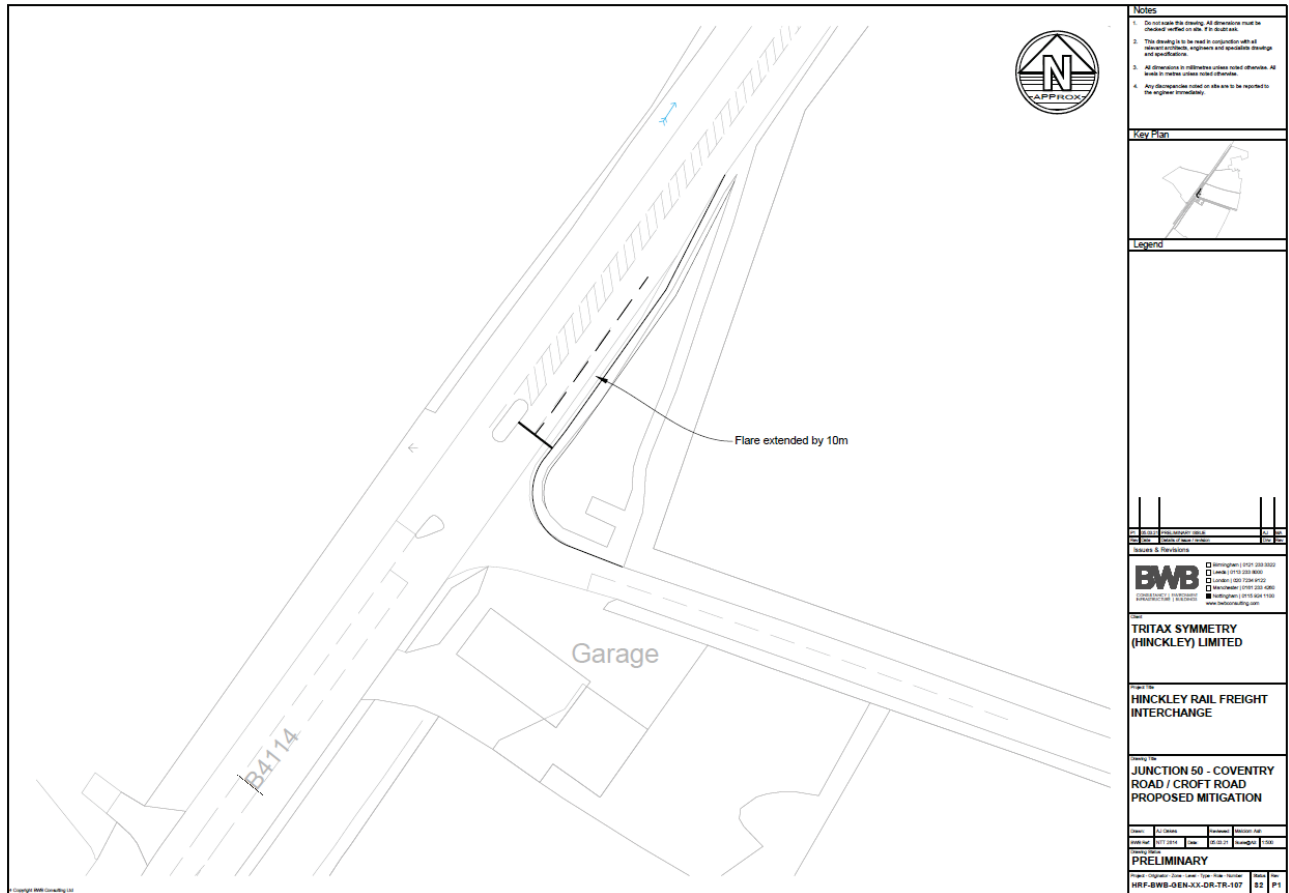
Figure 1 – Site Location

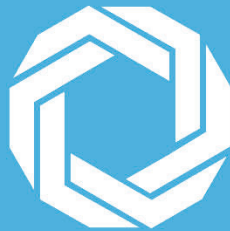


[Mapping source; Google Maps]

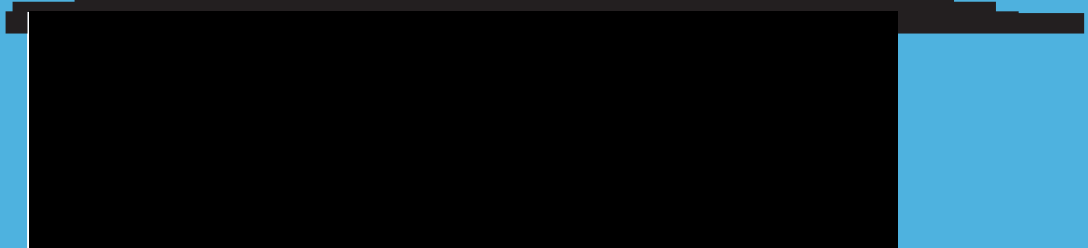


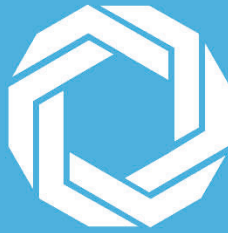
Figure 2 – Problem Location Plan





Midlands Road Safety Ltd





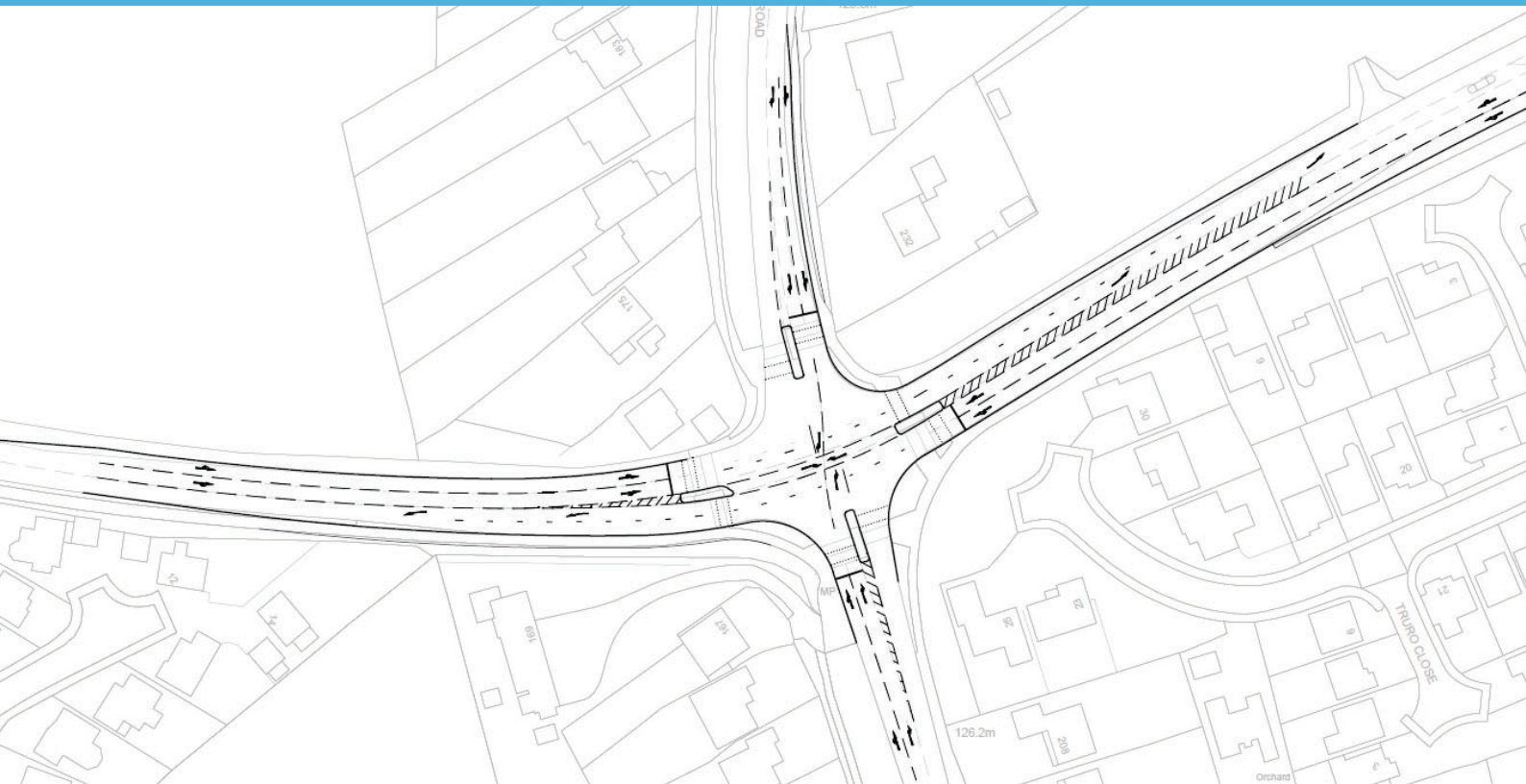
Midlands Road Safety Ltd

**PROPOSED JUNCTION WIDENING
A47 NORMANDY WAY JUNCTION WITH ASHBY ROAD**

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.06-RSA1



PROPOSED JUNCTION WIDENING

A47 NORMANDY WAY JUNCTION WITH ASHBY ROAD

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.06-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES	
A.	DRAWINGS AND DOCUMENTS REVIEWED
B.	SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed widening of each approach to the signalised crossroads junction of the A47 Normandy Way and Ashby Road in Hinckley, Leicestershire. The works include the provision of indicative right turns and two-lanes through the junction in a westbound direction as well as the provision of formal signal-controlled pedestrian crossing points. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.

1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 11:55 and 12:20. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with occasional pedestrians and no cycle movements being observed.

1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.

1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.

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- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

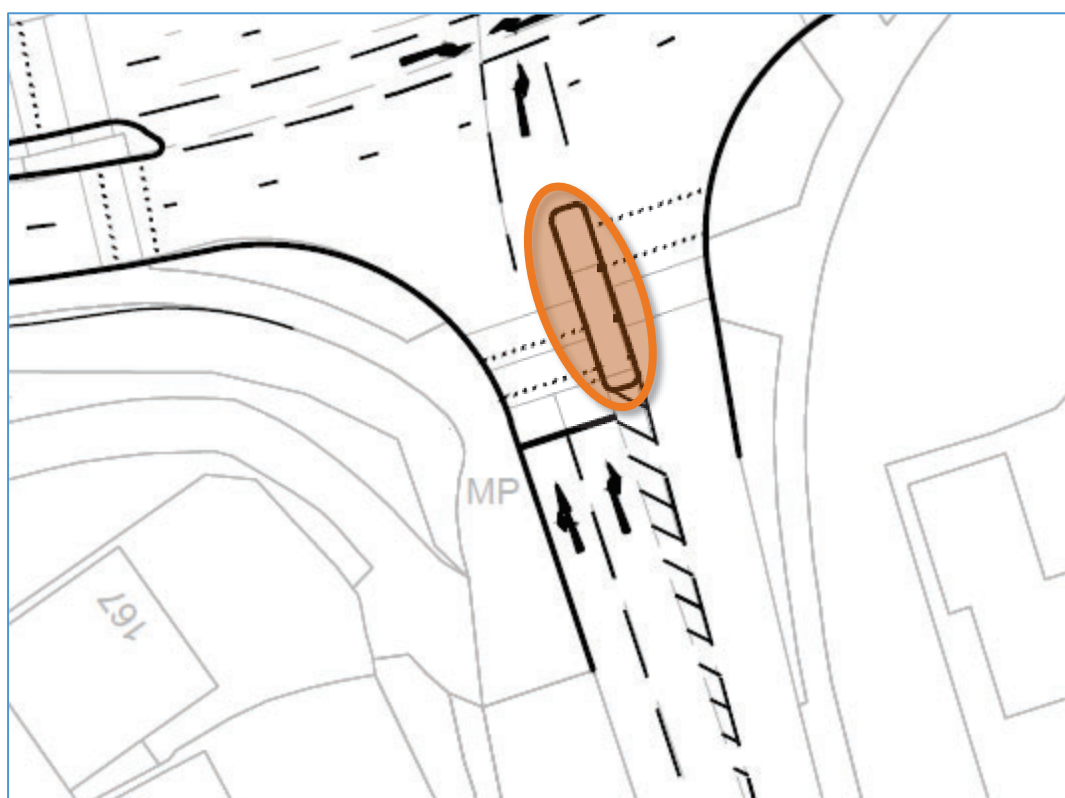
3.1. The Audit Team has identified one safety problem to be addressed.

3.2. Problem 1

Location: Ashby Road – southern arm o the junction.

Summary: Narrow refuge for shared use risks cyclist to pedestrian collisions.

It was observed on site that a shared footway / cycleway is present along the southern side of the A47 through the junction. There is a concern that the proposed central island that segregates the two opposing traffic flows on this arm is not wide enough to safely accommodate shared use and there is therefore a risk of cycle to pedestrian collisions here.



Recommendation:

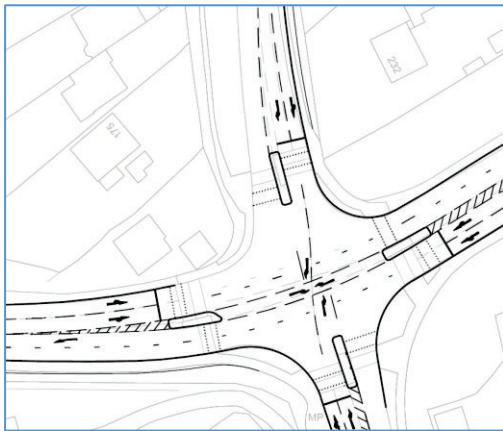
It is recommended that the facility is amended to accommodate safe shared use.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. Additional Consideration 1

The intervisibility between the eastern and western A47 arms of the junction and the northern Ashby Road arm are currently restricted by the adjacent building lines. Whilst it is appreciated that this is an existing problem, the amendments to the stop line positioning will increase the length for which visibility is not provided, although visibility at the entry to the junction is good. As part of the detailed design, it is recommended that the inter-green times are checked and amended as necessary to accommodate the changes.



4.2. Additional Consideration 2

The western side of the existing pedestrian crossing on the northern arm of the Ashby Road approach currently has a significant gradient. As part of the detailed design, it is recommended that the gradient at the realigned side of the crossing is amended so as to mitigate the impact of on mobility impaired pedestrians.



4.3. **Additional Consideration 3**

As with AC 1 above, it was observed that at present visibility of approaching vehicles for pedestrians crossing the A47 eastern arm and Ashby Road northern arm is restricted by vegetation as well as the adjacent property boundaries. As part of the detailed design, it is recommended that the site clearance includes maximising inter-visibility for and of pedestrians at the crossing points.



5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd


Sign 

Date: 30.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd


Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-108	J13 Proposed Mitigation	P1
HRF-BWB-GEN-XX-DR-TR-128	J13 Proposed Mitigation (Swept Paths)	P1

Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

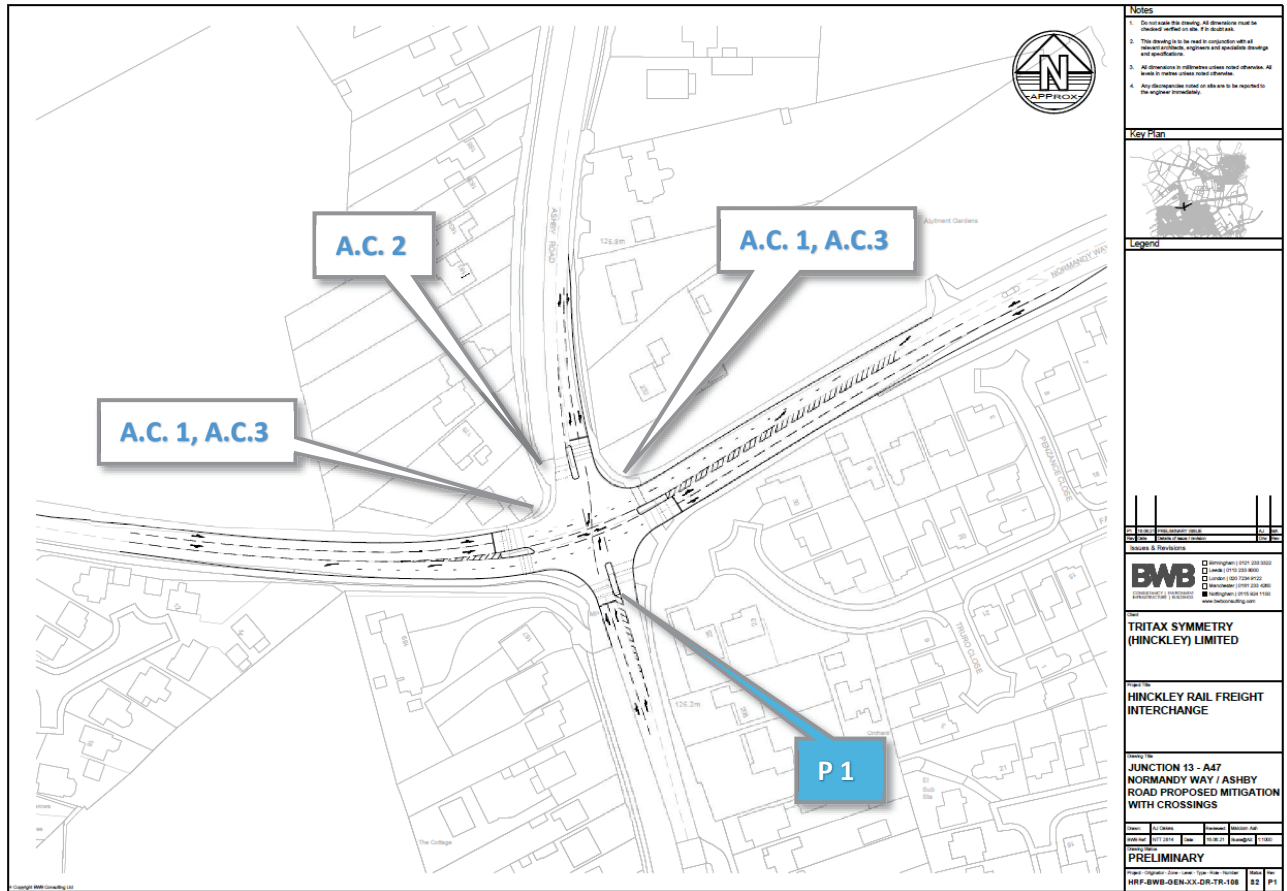
APPENDIX B

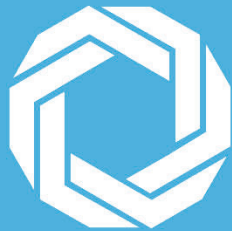
The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

Figure 1 – Site Location

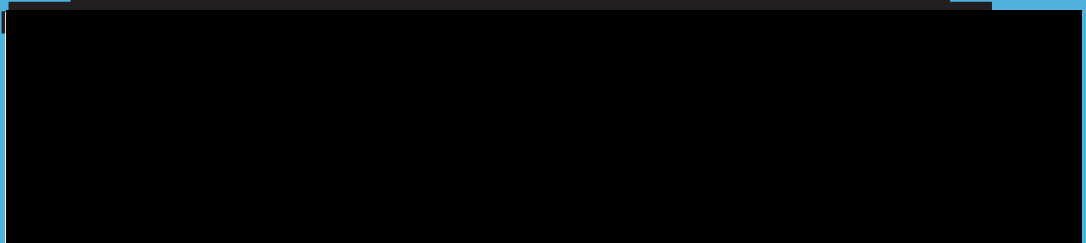


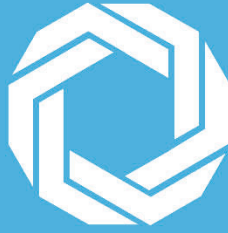
Figure 2 – Problem Location Plan





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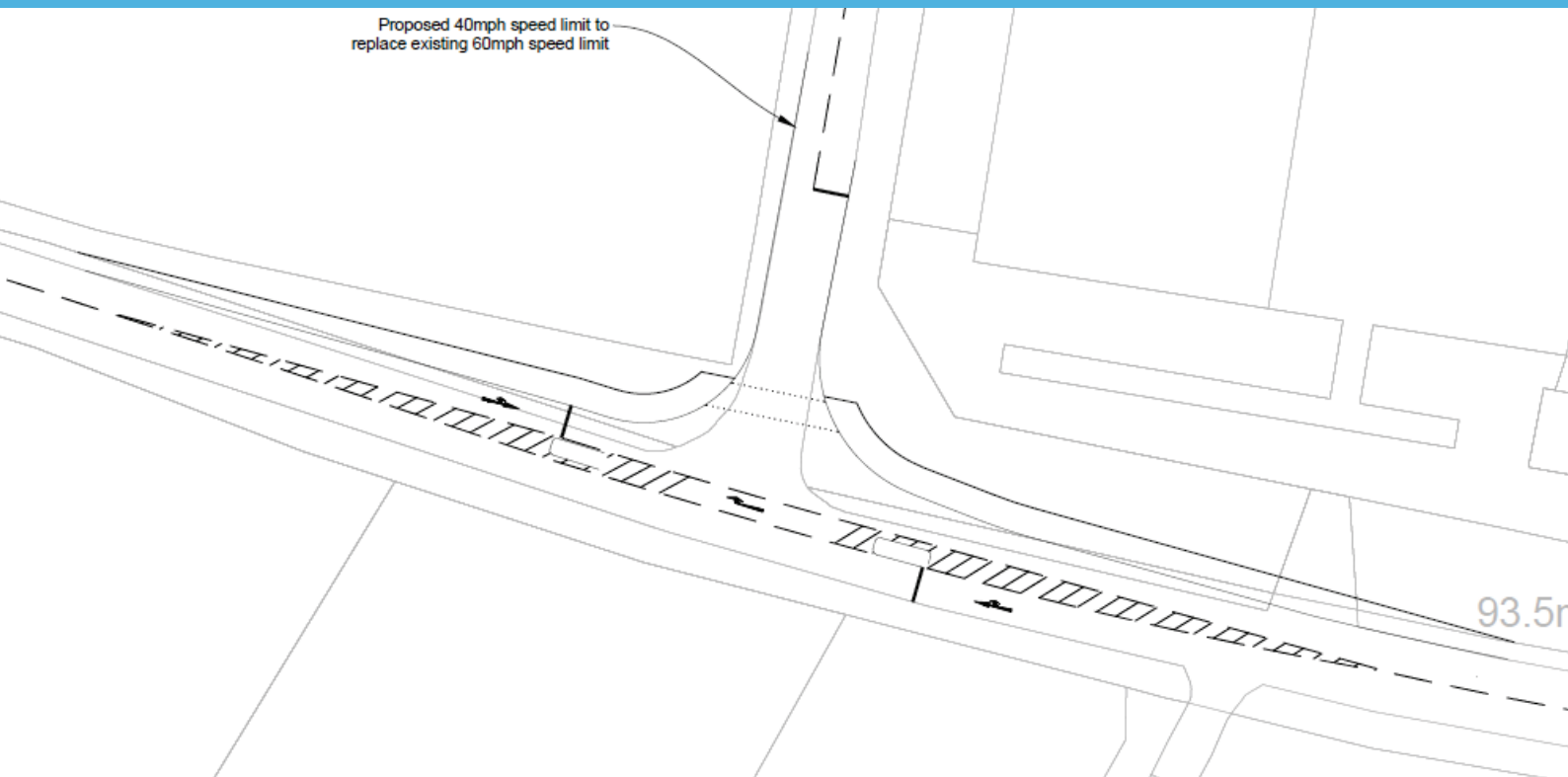
PROPOSED JUNCTION SIGNALISATION

B4669 JUNCTION WITH STANTON LANE, SAPCOTE

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.07-RSA1



PROPOSED JUNCTION SIGNALISATION

B4669 JUNCTION WITH STANTON LANE, SAPCOTE

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.07-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

- 1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed signalisation of the three-arm junction between the B4669 Hinckley Road and Stanton Lane in Sapcote, Leicestershire. The proposals include the signalisation of the junction alongside the incorporation of an uncontrolled pedestrian crossing phase and are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.
- 1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.
- 1.3 The Audit Team Membership was as follows:
- Audit Team Leader
Chris Berry, MSc Transport Planning, MSORSA, NH RSA Certificate of Competency
- Audit Team Member
Simon Prescott, MIHE NH RSA Certificate of Competency
- 1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 13:00 and 13:20. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with occasional pedestrians and no cycle movements being observed.
- 1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.
- 1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.
- 1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.

- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

- 3.1. The Audit Team has identified no safety problems to be addressed.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. Additional Consideration 1

Whilst on site it was observed that a level difference was present between the base of the hedgerow to the west of the Stanton Lane junction and the existing verge and footway. As part of the proposals this approach will be widened to accommodate the central hatched area and traffic signals infrastructure. As part of the detailed design, it is recommended that the finished levels of the footway and embankment here are reviewed and amended so that there is not an immediate drop to the back of the footway that would pose a risk of injury to pedestrians.



4.2. **Additional Consideration 2**

The proposals include a significant set-back for the signals and stop line on the Stanton Lane arm of the junction. As part of the detailed design, it is recommended that suitable inter-greens and vehicle detection are provided so as to ensure that vehicles are able to clear the junction before opposing phases in the signals are ‘released’.



5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd



Date: 30.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-109	Junction 19 Proposed Mitigation	P1
HRF-BWB-GEN-XX-DR-TR-129	Junction 19 Proposed Mitigation (Swept Paths)	

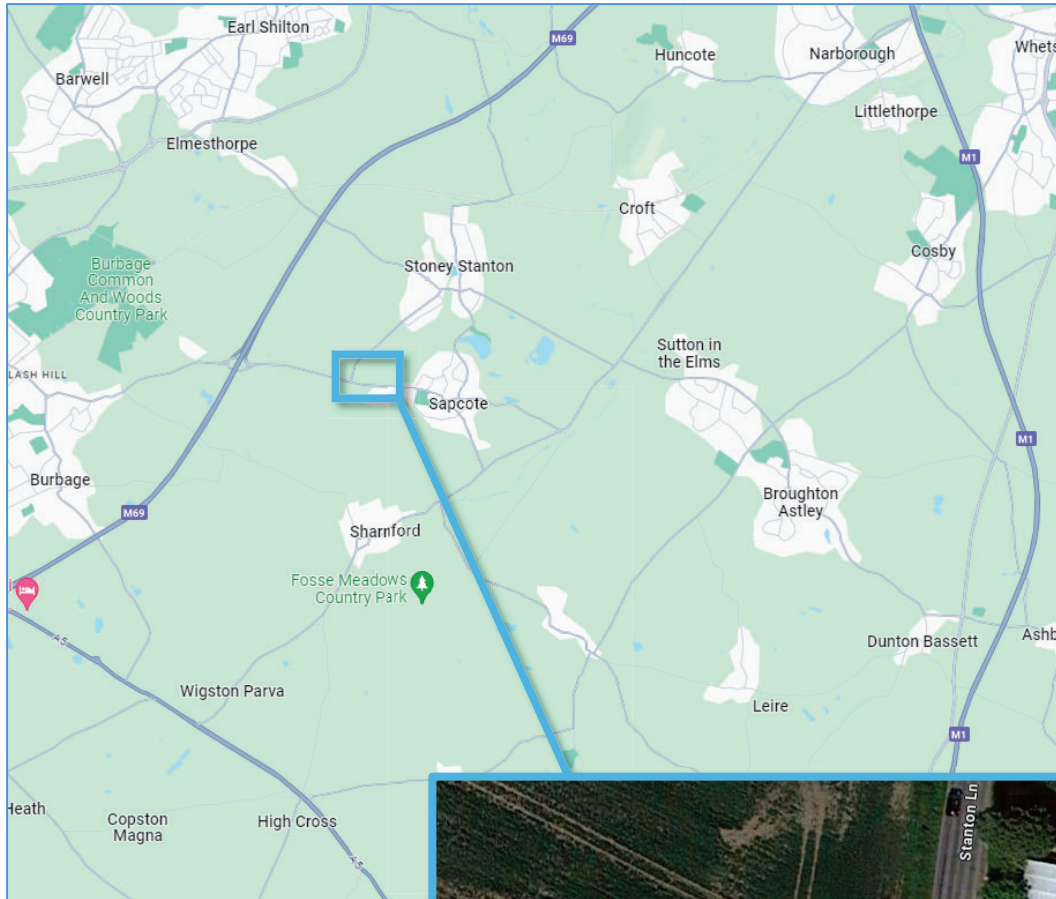
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

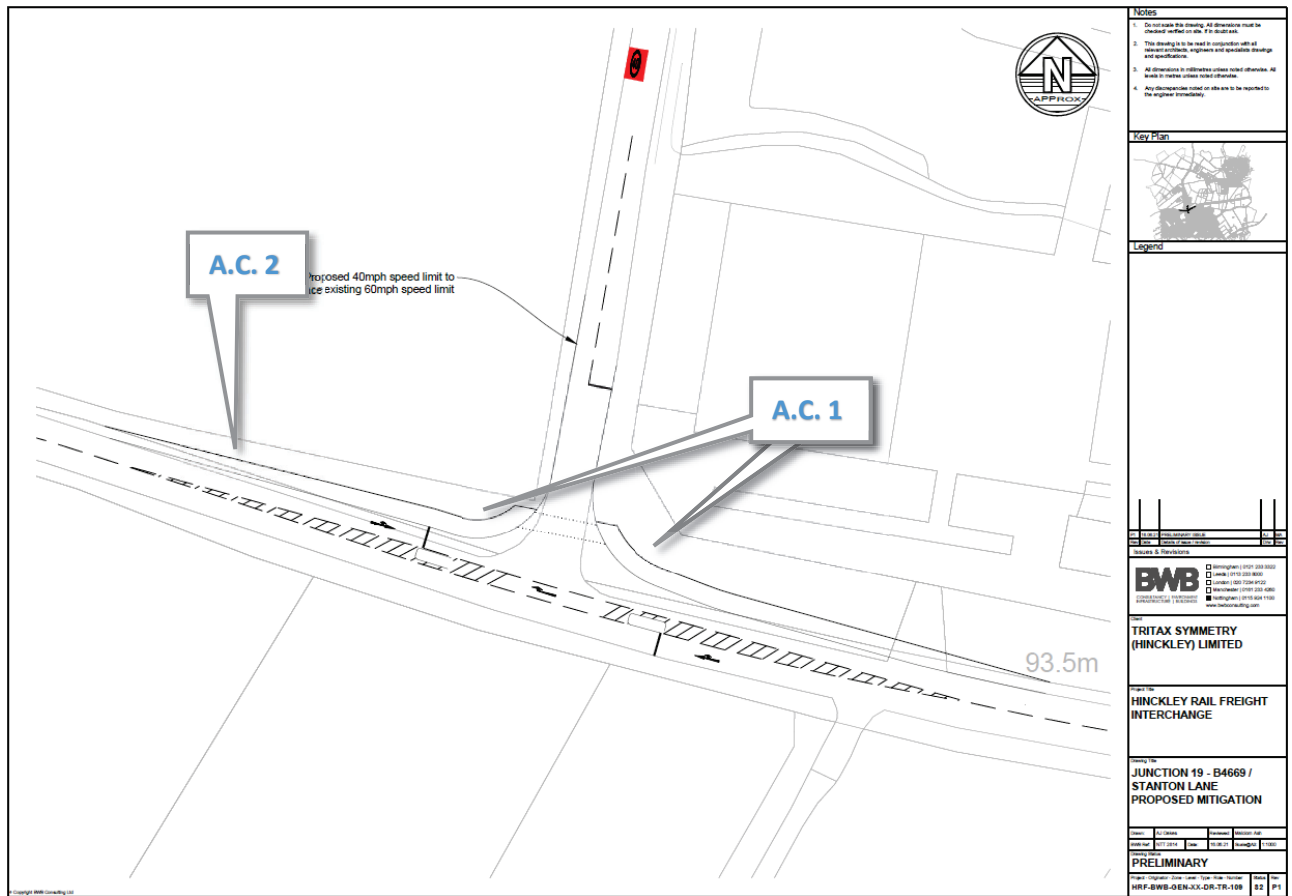
Figure 1 – Site Location

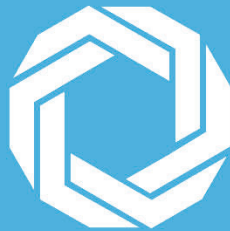


[Mapping source; Google Maps]

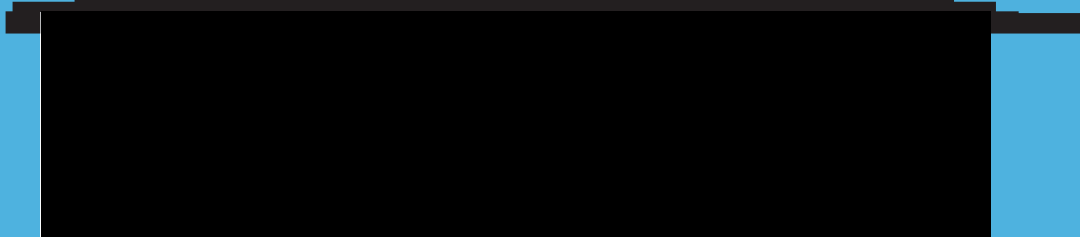


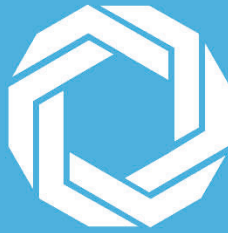
Figure 2 – Problem Location Plan





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PROPOSED SPEED LIMIT REDUCTION AND GATEWAY FEATURE

STANTON LANE / HINCKLEY ROAD, STONEY STANTON

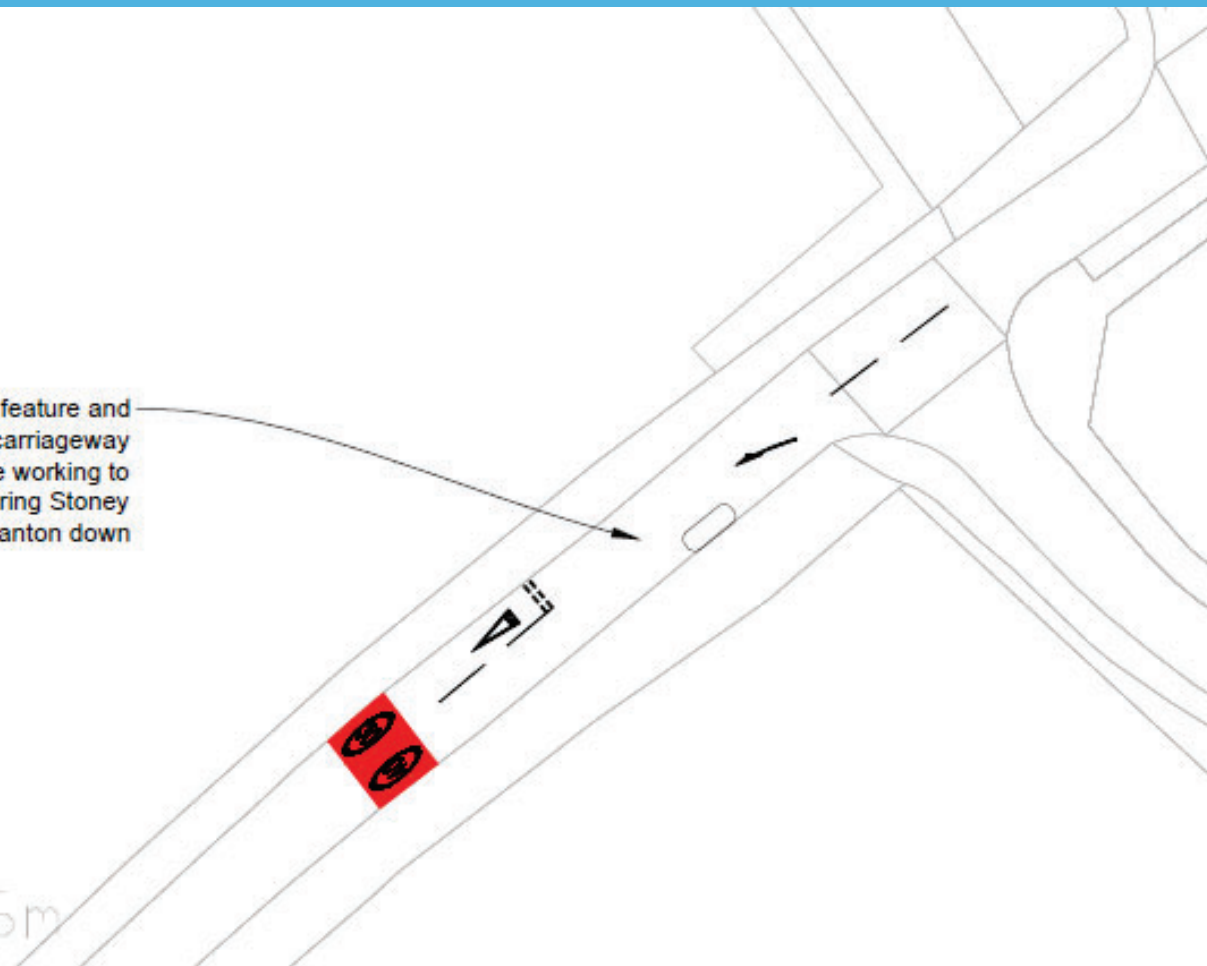
INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.08-RSA1

Proposed gateway feature and speed limit change with carriageway narrowing and shuttle working to slow vehicles entering Stoney Stanton down

94.6m



PROPOSED SPEED LIMIT REDUCTION AND GATEWAY FEATURE

STANTON LANE / HINCKLEY ROAD, STONEY STANTON

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.08-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed reduction in speed limit, from the National Speed Limit (60 mph for most traffic) to 40mph on Stanton Lane, Stoney Stanton alongside the provision of a new gateway priority give way with narrowing traffic calming feature. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.

1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

Chris Berry, MSc Transport Planning, MSORSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 12:45 and 13:00. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with occasional pedestrians and no cycle movements being observed.

1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.

1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.

1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.

- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

3.1. The Audit Team has identified three safety problems to be addressed.

3.2. **Problem 1**

Location: Stanton Lane / Hinckley Road – general.

Summary: Significant discrepancies in vehicle speeds may lead to shunts and overtaking collisions.

It is proposed to reduce the speed on Stanton Lane and Hinckley Road to 40mph from the existing national speed limit. This represents a significant reduction with no changes to the surrounding environment that would indicate why a 40mph speed would be viewed as ‘appropriate’ by drivers. As such, there is a risk of significant disparities between vehicle speeds should some drivers continue at higher speeds whilst others comply to the proposed lower limit, resulting in shunts and overtaking collisions.



Recommendation:

It is recommended that a speed survey is undertaken to determine likely compliance with the lower limit. Should speeds be significantly higher than the proposed limit and compliance therefore unrealistic, given a sign only reduction is likely to result in a small reduction in measured speeds, it is recommended that additional measures to support the lower limit are provided, or that the proposed limit is amended in accordance with the results returned from the speed survey.

3.3. **Problem 2**

Location: Hinckley Road - proposed build out to the south of the junction with Underwood Drive.

Summary: Proposed feature may be struck by vehicles exiting from the adjacent field access.

Whilst on site it was observed that there is a field access opposite the proposed feature on the northern side of Hinckley Road. It is unclear whether a farm vehicle (potentially with a trailer) would be able to turn in/out of the access without overrunning the feature, leading to it being damaged and potentially rendering it inconspicuous to other road users, risking kerb strikes and loss of control collisions.



Recommendation:

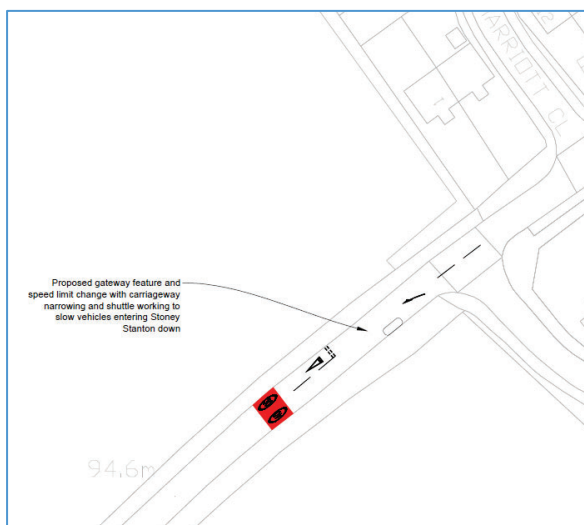
It is recommended that a swept path analysis is undertaken using appropriate farm vehicles to assess whether they can access/egress the field access without overrunning the feature. If not, it is recommended that the arrangement is amended to accommodate the required movements.

3.4. Problem 3

Location: Proposed traffic calming feature – Stanton Lane.

Summary: High speed approach and low opposing flow risks late braking and kerb strikes / loss of control / head on collisions.

Traffic flows on Stanton Lane were observed to be low, with little two-way traffic observed at the same time. There is a concern that drivers will seldom be required to give way to oncoming vehicles and, as such, will not be prepared to slow or stop when approaching the give way. This is exacerbated by the location of the proposed feature – within the outbound lane on Stanton Lane – meaning that vehicles required to give way will not have a feature to negotiate or be informed of such. This, along with the potential high-speed approach as detailed in Problem 2 above means that there is a risk of vehicles striking the kerbed build out, as well as failures to give way and late braking, resulting in loss of control or head-on collisions. In the experience of the Audit Team, these types of features in this scenario and as a first response to reducing speed on entry to a village can result in collisions when used in isolation.



Recommendation:

It is recommended that the gateway feature type is amended and / or that additional supportive measures are provided to ensure slow approach speeds at the feature. It is also recommended that should this feature type be provided, that the build-out is located within the in-bound lane, on the side that drivers will be required to give way.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

- 4.1. No Additional Considerations have been identified as part of this report.

5. AUDIT STATEMENT

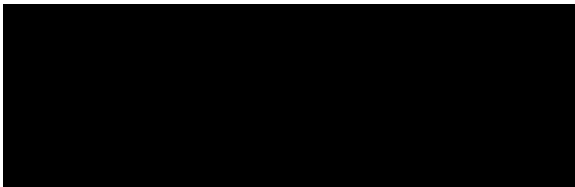
- 5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. **AUDIT TEAM LEADER:**

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

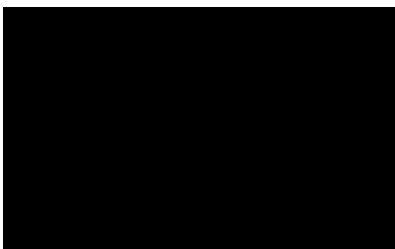
Midlands Road Safety Ltd



5.3. **AUDIT TEAM MEMBER:**

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-110	Traffic Calming Scheme	P4

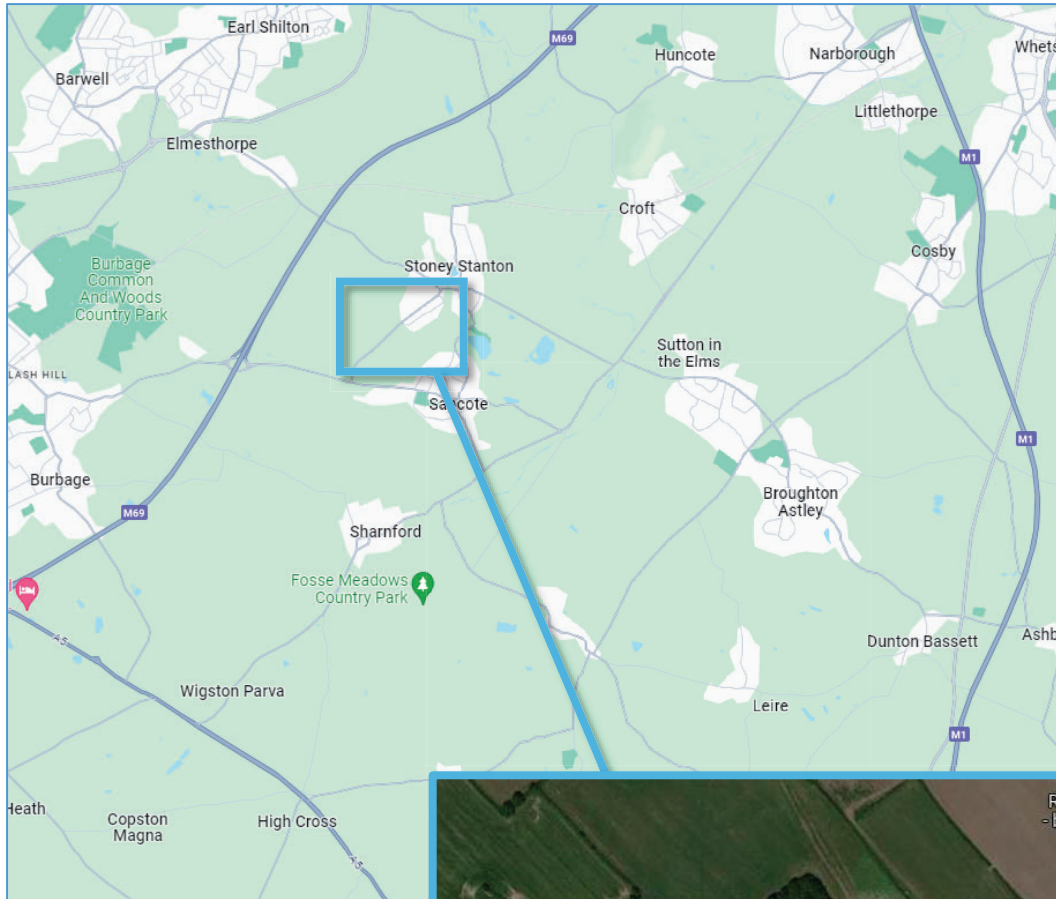
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

Figure 1 – Site Location



[Mapping source; Google Maps]

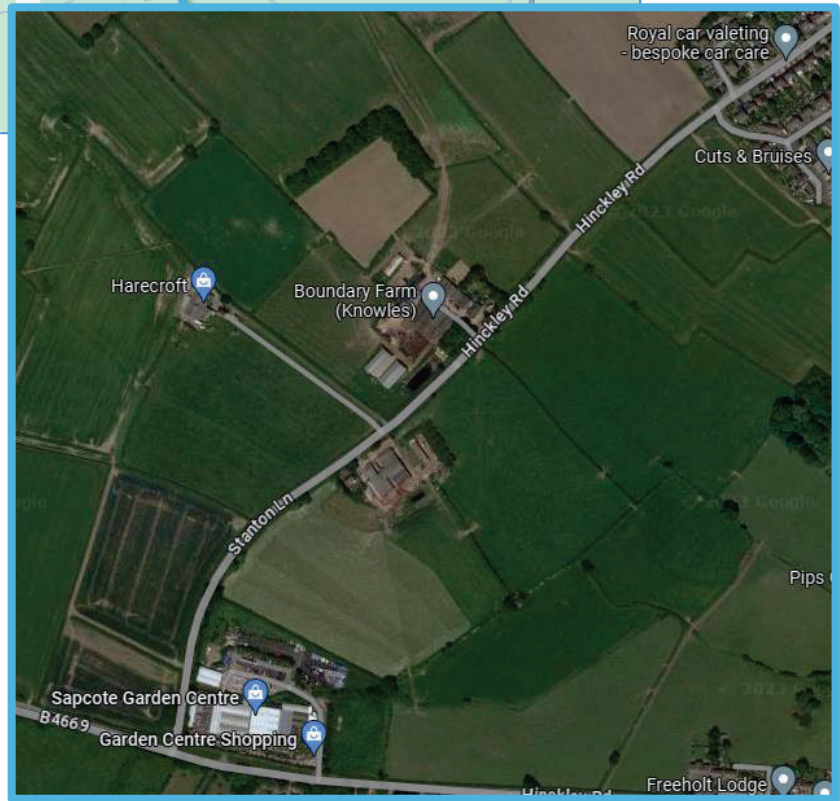
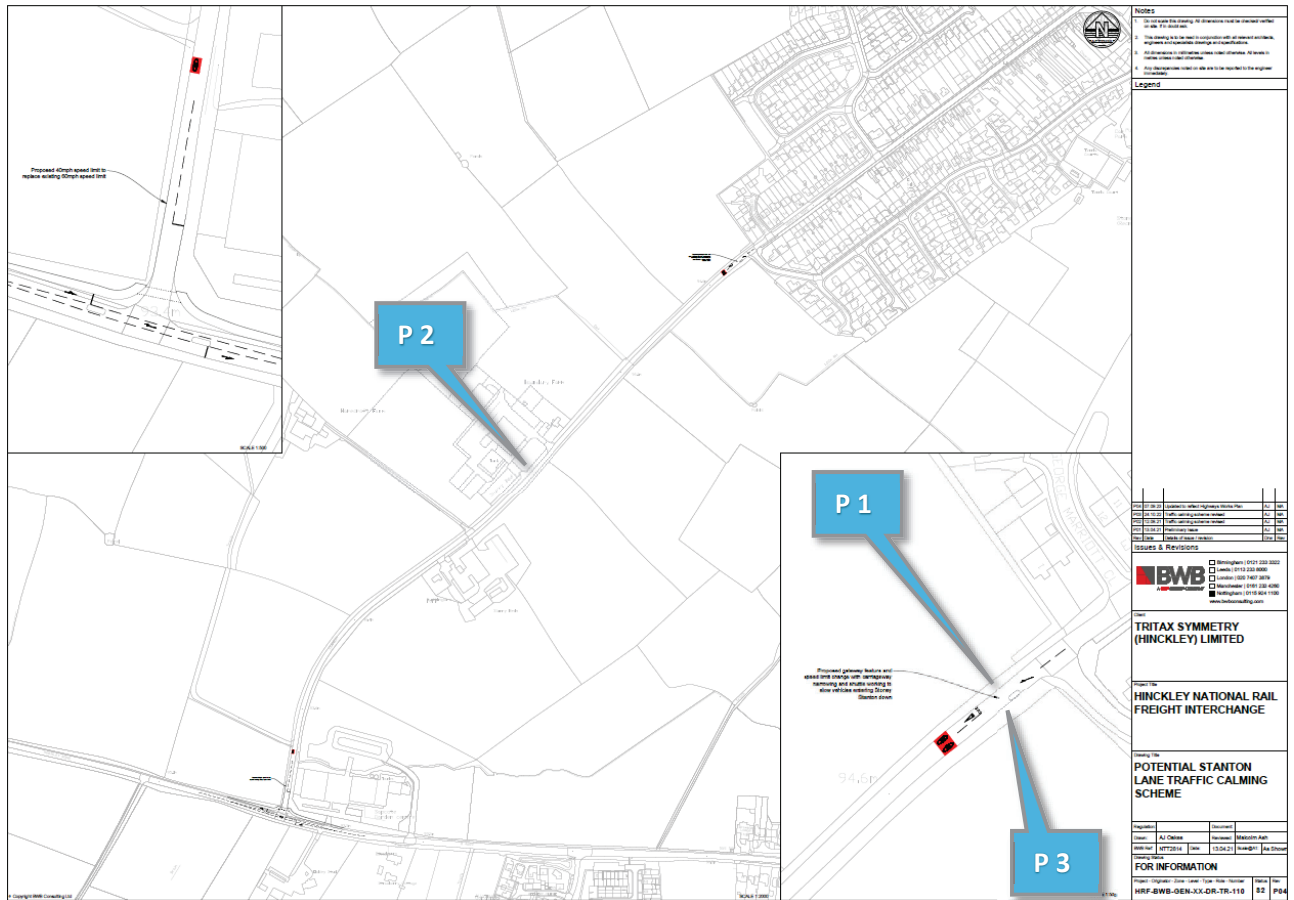
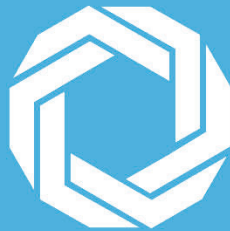
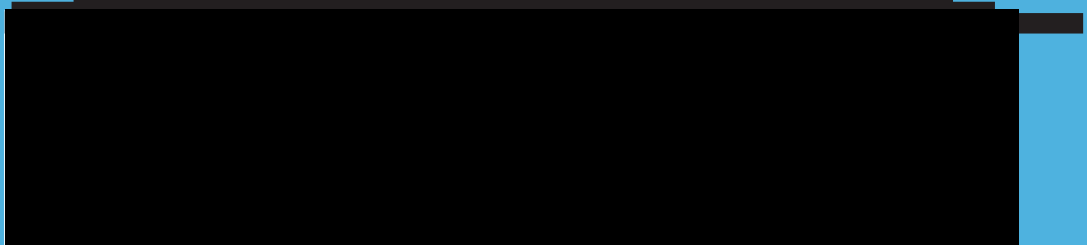


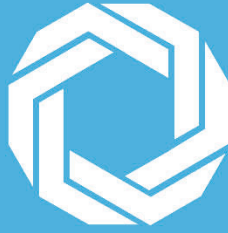
Figure 2 – Problem Location Plan





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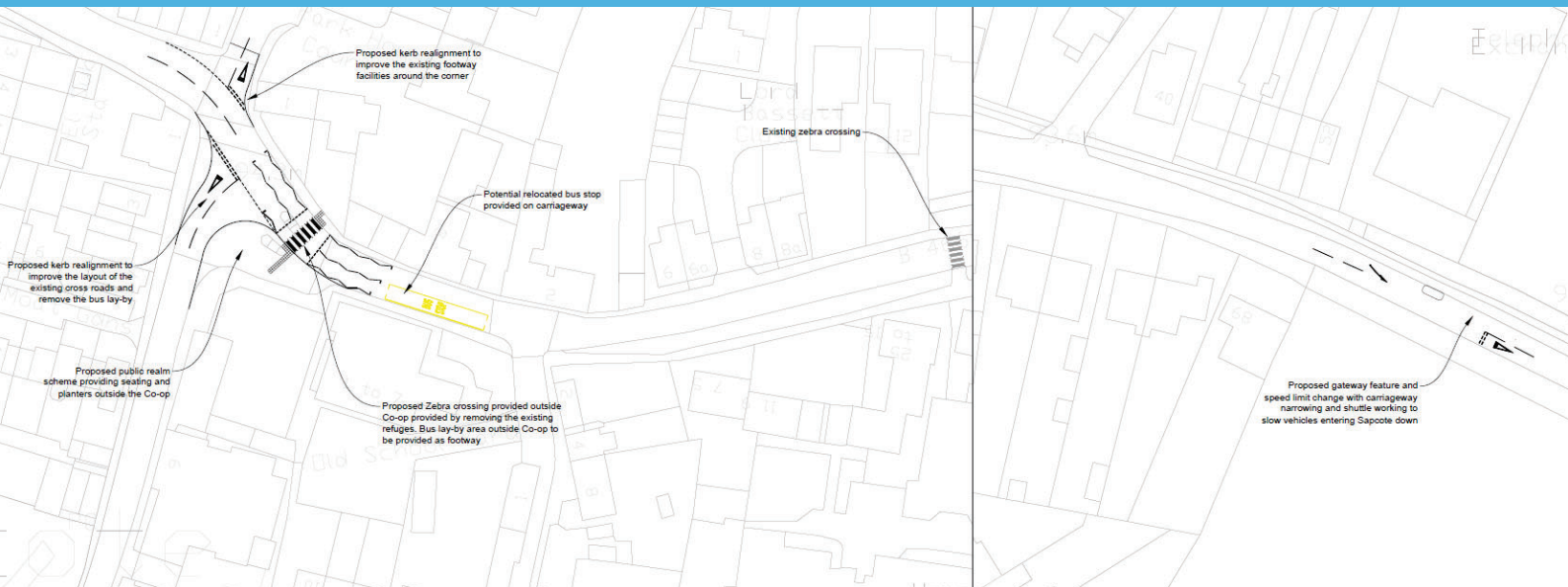
PROPOSED TRAFFIC CALMING AND ZEBRA CROSSING RELOCATION

B4669 LEICESTER ROAD, SAPCOTE

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.09-RSA1



PROPOSED TRAFFIC CALMING AND ZEBRA CROSSING RELOCATION

B4669 LEICESTER ROAD, SAPCOTE

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.09-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED] [midlandsroadsafety.co.uk](mailto:[REDACTED]@midlandsroadsafety.co.uk)

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

- 1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed traffic calming, public realm works and zebra crossing relocation on Leicester Road in Sapcote, Leicestershire. The works include the kerb realignment of the existing junctions with Church Street to the south and Stanton Road to the north, with a build out of the southern footway to create a public realm scheme outside of the Co-Op food store on Leicester Road. A new Zebra crossing will be located adjacent to the Co-op, replacing the existing two-stage crossing, and a bus stop will also be relocated here from its current location directly outside the Co-Op store. To the eastern extents of the village a proposed gateway feature is to be provided including carriageway narrowing. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.
- 1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.
- 1.3 The Audit Team Membership was as follows:
- Audit Team Leader
Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency
- Audit Team Member
Simon Prescott, MIHE NH RSA Certificate of Competency
- 1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 13:15 and 13:40. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being light, with occasional pedestrians and no cycle movements being observed.
- 1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.
- 1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

- 1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of “Additional Considerations” will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

3.1. The Audit Team has identified five safety problems to be addressed.

3.2. Problem 1

Location: Proposed bus stop – adjacent to the Sapcote Church School.

Summary: Lack of forward visibility risks head on collisions involving overtaking vehicles.

The bus stop is to be relocated from a lay-by arrangement outside of the Co-Op to an on-carriageway location adjacent to the Sapcote Church School. This is close to a right-hand bend in Leicester Road where the building line obstructs forward visibility of eastbound vehicles. Should a driver or rider decide to overtake a stationary bus here there is a risk that they will not see or be seen by an eastbound vehicle, risking a head-on/side swipe type collision.



Recommendation:

It is recommended that the bus stop is relocated such that a westbound overtaking vehicle will be able to complete their manoeuvre safely and with adequate forward visibility based on the speed of approaching, eastbound vehicles.

3.3. **Problem 2**

Location: Leicester Road - proposed Zebra crossing.

Summary: Restricted visibility risks vehicle to pedestrian collisions.

When crossing north to south, visibility for and of pedestrians crossing or waiting to cross is restricted to the east by the building line and boundary wall of the adjacent properties. This would be especially the case for wheelchair and pushchair users. Should they enter the carriageway when unsafe to do so there is a risk of vehicle to pedestrian collisions.



Recommendation:

It is recommended that unobstructed pedestrian visibility commensurate with measured vehicle speeds is provided at the crossing point.

3.4. **Problem 3**

Location: Leicester Road – footway to the east of the proposed Zebra crossing.

Summary: Narrow footway risks vehicle to pedestrian collisions.

The footway immediately to the east of the proposed Zebra crossing is very narrow (<1m), with insufficient width for two-way pedestrian movements meaning pedestrians have to enter the carriageway in order to pass one another at a point where visibility of eastbound traffic is obscured by the adjacent property (refer to Problem 2). The location of the crossing will encourage an increase pedestrian movements along this narrow footway, risking vehicle to pedestrian collisions.



Recommendation:

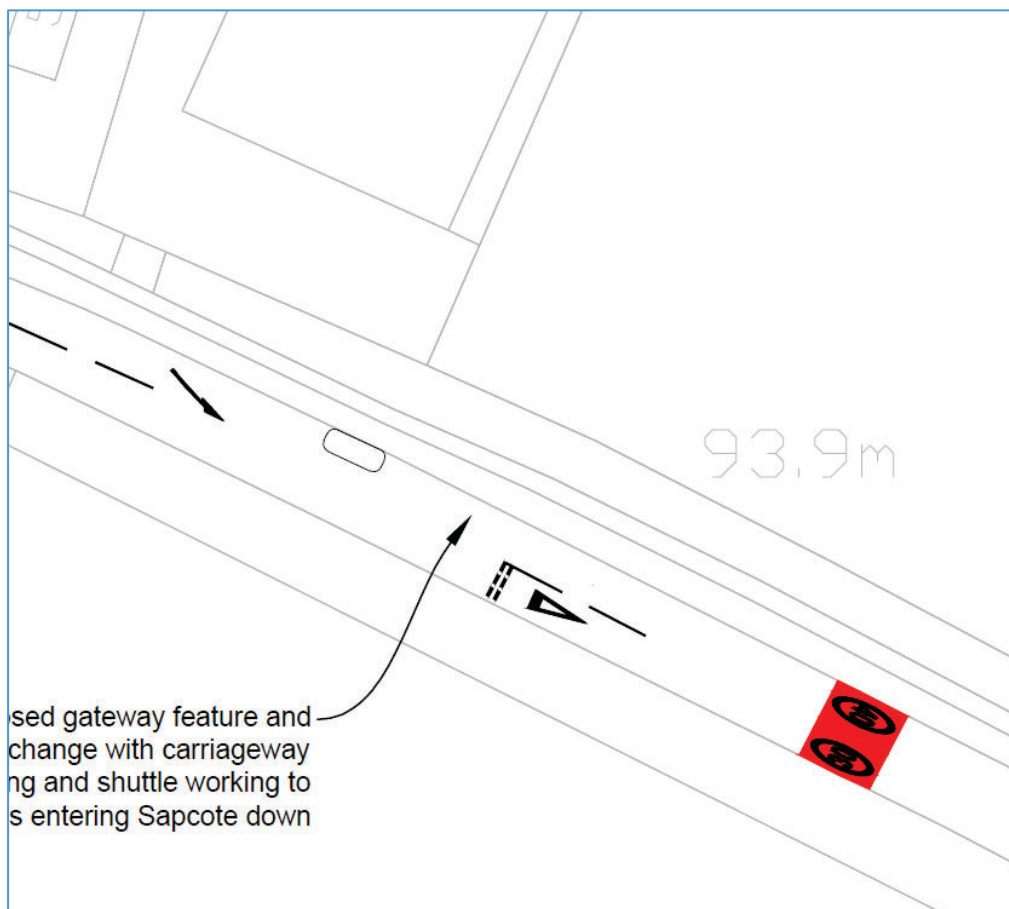
It is recommended that the crossing is relocated to a location where sufficient footway widths on the approaches are available.

3.5. **Problem 4**

Location: Leicester Road - proposed traffic calming build-out.

Summary: Lack of illumination risks collisions with the feature during the hours of darkness.

There are no street lights close to the proposed traffic calming feature location and there are several mature trees in close proximity. This means that the feature may be inconspicuous during the hours of darkness, risking it being struck by eastbound vehicles resulting in loss of control incidents.



Recommendation:

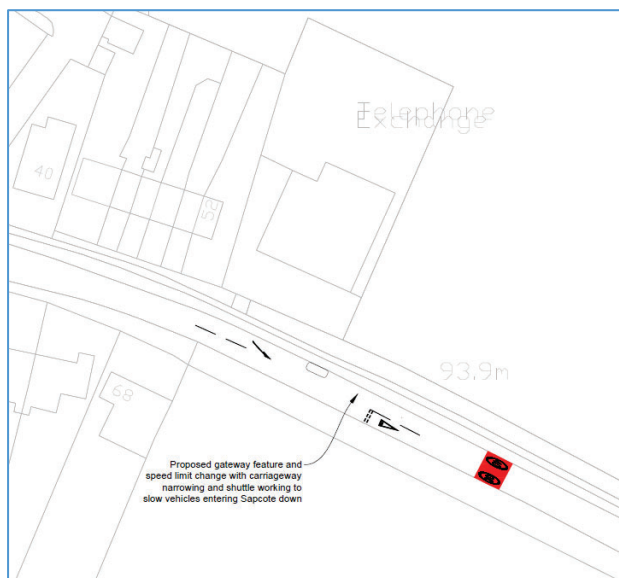
It is recommended that the feature is sufficiently illuminated during the hours of darkness.

3.6. Problem 5

Location: Proposed traffic calming feature – Leicester Road.

Summary: Low opposing flow risks late breaking and kerb strikes / loss of control / head on collisions.

Traffic flows on Leicester Road were observed to be low, with little opposing two-way traffic observed. There is a concern that drivers will seldom be required to give way to oncoming vehicles and, as such, will not be prepared to slow or stop when approaching the give way. This is exacerbated by the location of the proposed feature – within the outbound lane on Leicester Road – meaning that vehicles required to give way will not have a feature to negotiate and therefore slow down in anticipation. This means that there is a risk of vehicles striking the kerbed build out, as well as failures to give way and late braking, resulting in loss of control or head-on collisions. In the experience of the Audit Team, these types of features in this scenario and as a first response to reducing speed on entry to a village, can result in collisions when used in isolation.



Recommendation:

It is recommended that the gateway feature type is amended and / or that additional supportive measures are provided to ensure slow approach speeds at the feature. It is also recommended that should this feature type be provided, that the build-out is located within the in-bound lane, on the side that drivers will be required to give way.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. Additional Consideration 1

Whilst on site it was observed that several vehicles were parked along the western side of Church Street. With the proposed amendments to the kerblines here, vehicles parking here will potentially cause an obstruction to turning large vehicles and to visibility for and of emerging vehicles. It is therefore recommended that, as part of the detailed design, waiting restrictions are provided at the junction.



5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd

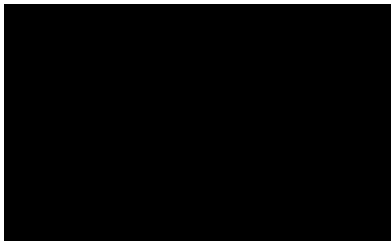


Date: 30.10.2023

5.3. AUDIT TEAM MEMBER:

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-111	Potential B4669 Leicester Road Traffic Calming Scheme	P3

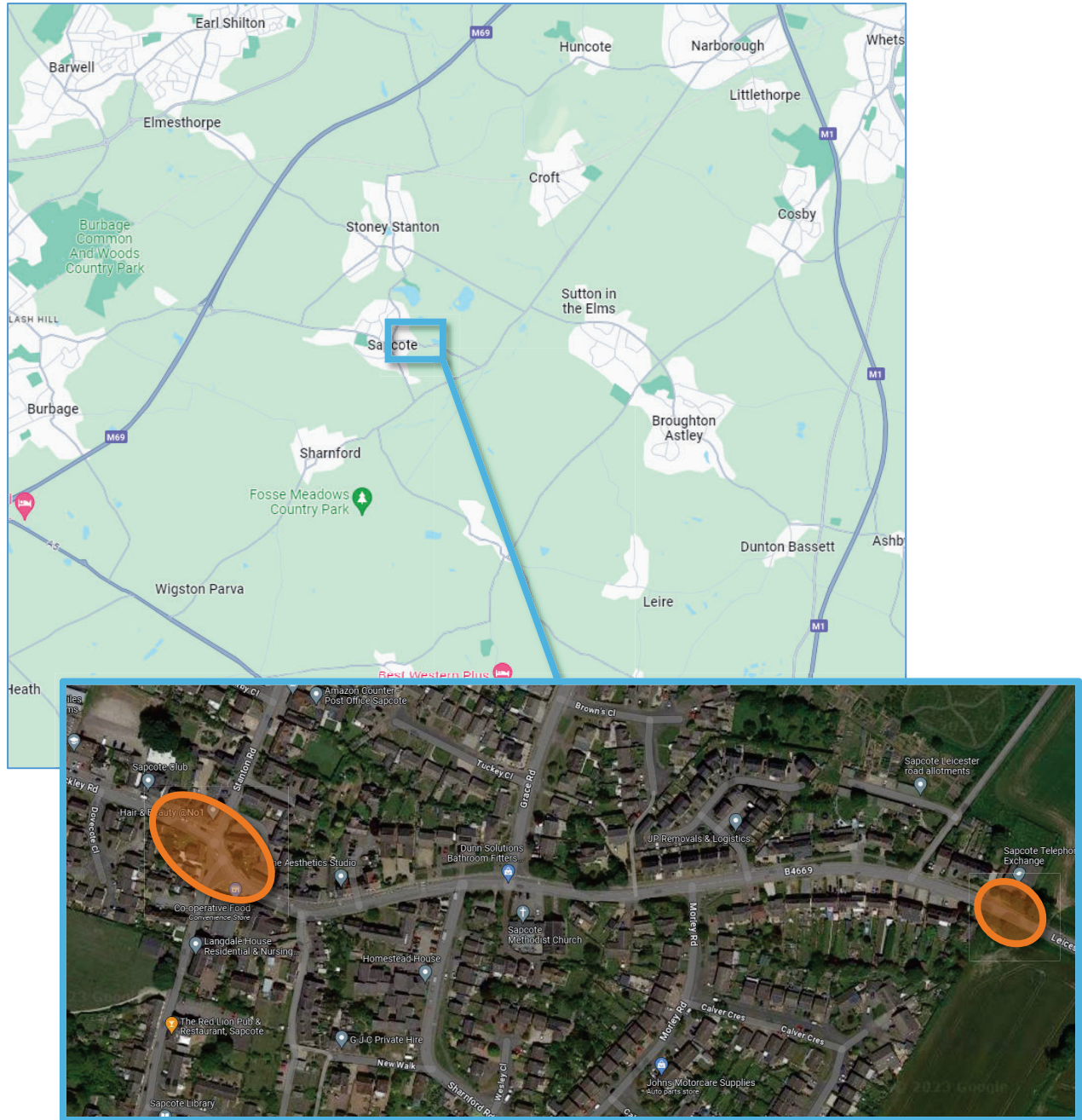
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

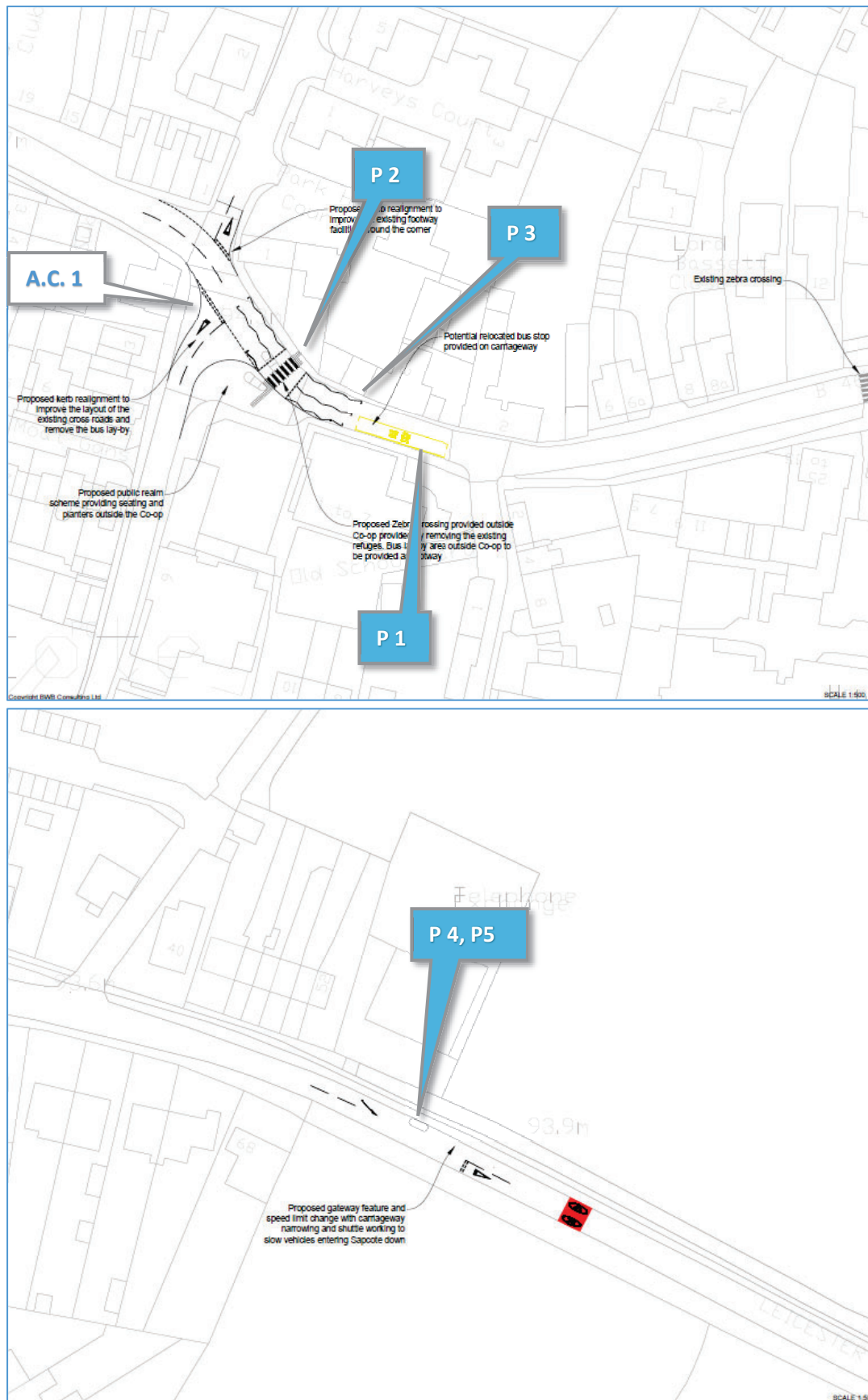
The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

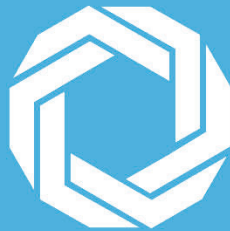
Figure 1 – Site Location



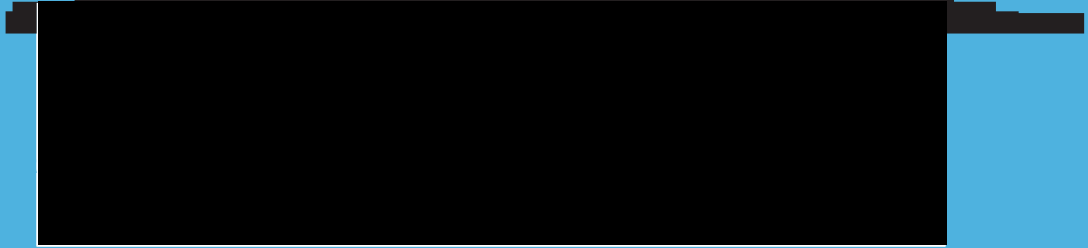
[Mapping source; Google Maps]

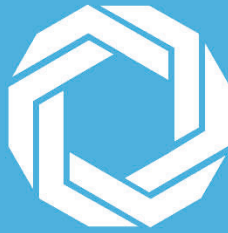
Figure 2 – Problem Location Plan





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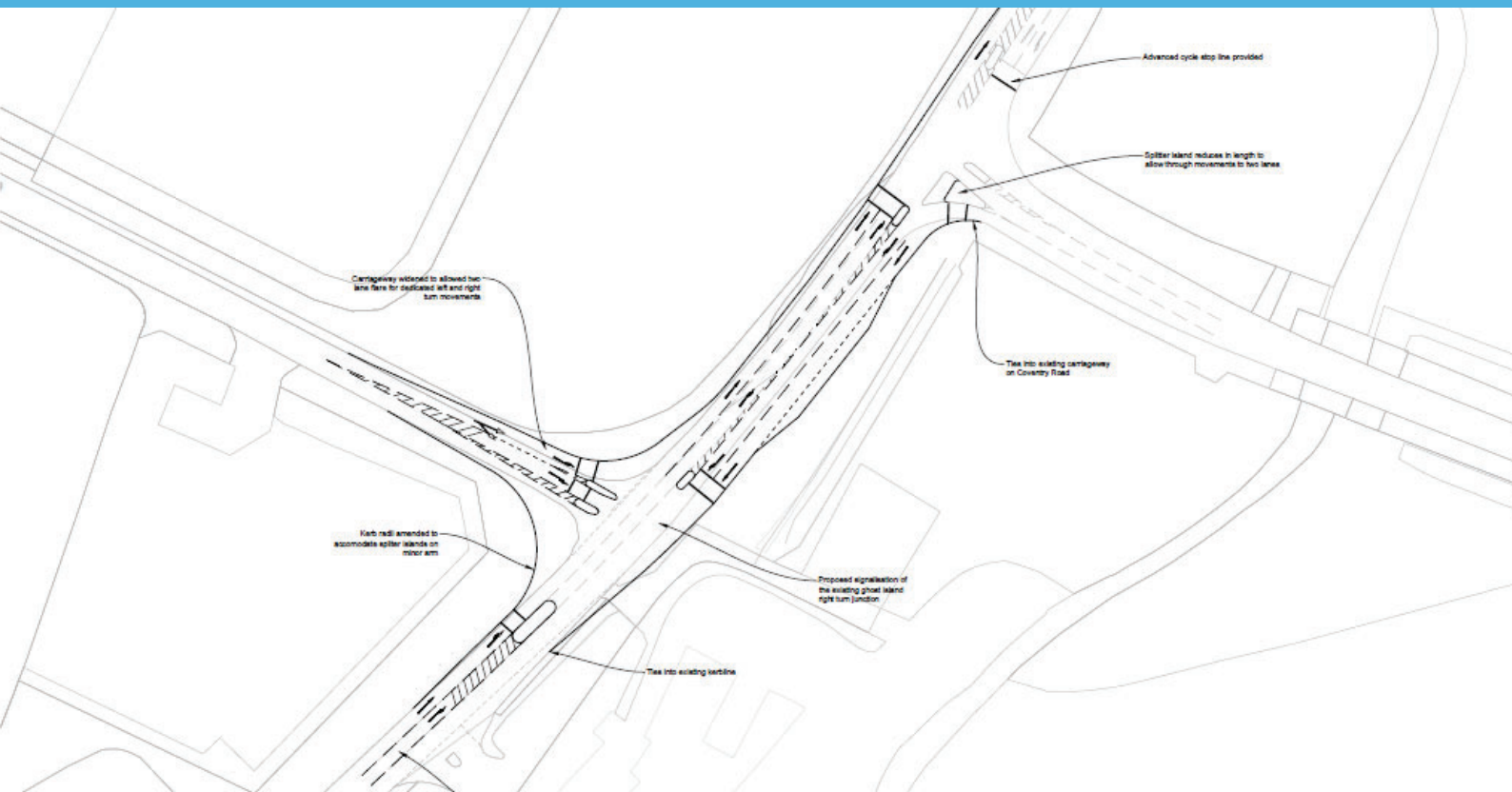
PROPOSED JUNCTION SIGNALISATION

B581 BROUGHTON ROAD JUNCTION WITH B4114 COVENTRY ROAD, CROFT

INTERIM STAGE 1 – ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.10-RSA1



PROPOSED JUNCTION SIGNALISATION

B581 BROUGHTON ROAD JUNCTION WITH B4114 COVENTRY ROAD, CROFT

INTERIM STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2023

REPORT REF: 23-1363.10-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	30.10.2023	CB	SP
Draft (Internal)	24.10.2023	CB	SP

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

- 1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed junction signalisation and localised widening of the junction of the B581 Broughton Road / Coventry Road and the B4114 Coventry Road. The works include the signalisation of the ghost island junction with the B581 Broughton Road, with separate right and left turn lanes and connecting to the existing signalled junction at Coventry Road on the B4114. They also include localised widening and amendments to the splitter island within the existing signalised junction to provide two lanes between the two junctions and advanced stop lines. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.
- 1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.
- 1.3 The Audit Team Membership was as follows:
- Audit Team Leader
Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency
- Audit Team Member
Simon Prescott, MIHE NH RSA Certificate of Competency
- 1.4 A site inspection was carried out by the Audit Team together on Monday 23rd October 2023 between the hours of 13:40 and 14:10. During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being moderate, with no pedestrians and no cycle movements being observed.
- 1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.
- 1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

- 1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of “Additional Considerations” will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

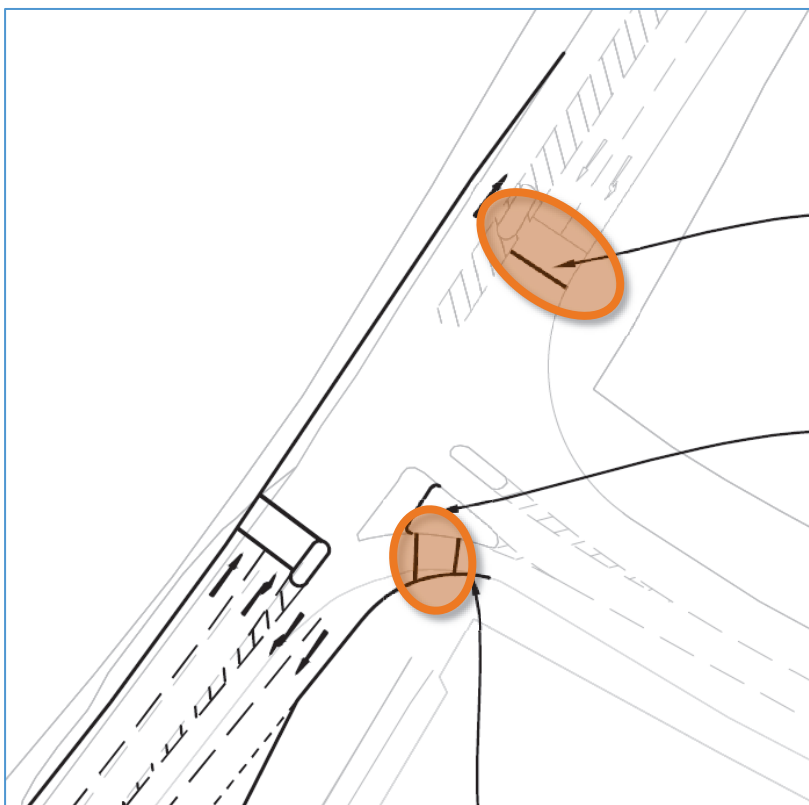
3.1. The Audit Team has identified two safety problems to be addressed.

3.2. Problem 1

Location: Existing signalised junction of the B4114 and B581 Coventry Road.

Summary: Location of new advanced stop lines limits traffic signal visibility and risks vehicle to cycle shunts / collisions.

The proposed advanced stop line waiting areas on the northern and eastern arms of the junction are in advance of the majority of the traffic signals within the junction. Should signal visibility be restricted there is a risk that following motorists will move off prior to cyclists getting underway, risking collisions between the two .



Recommendation:

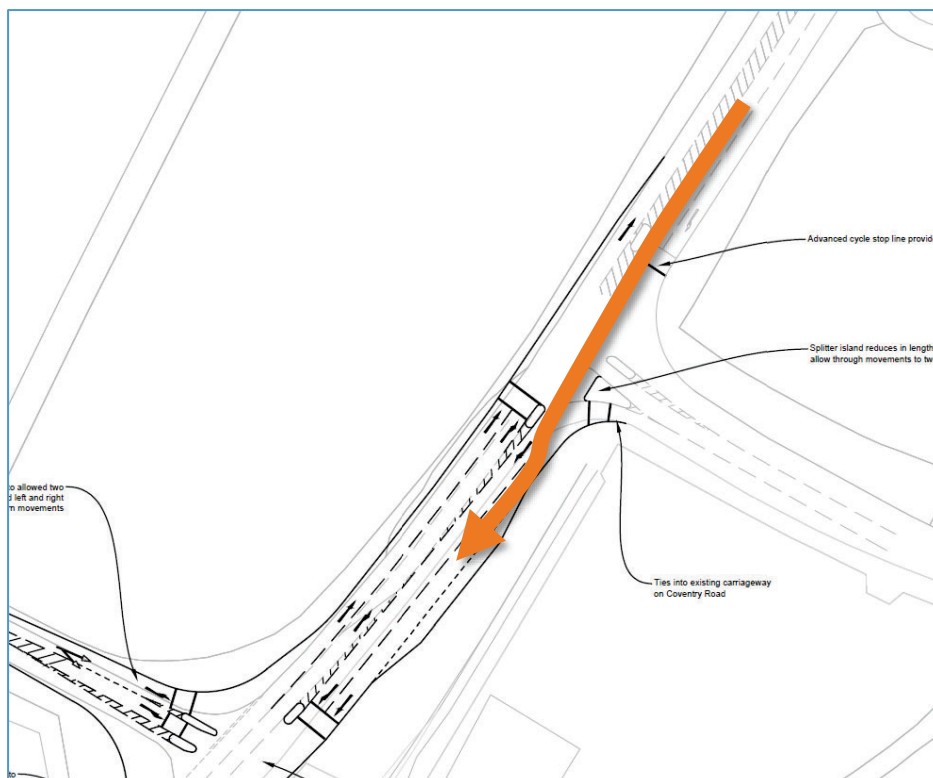
It is recommended that the signal and stop line arrangements are such that cyclists have a clear view of the traffic signals when waiting within the advanced stop line area.

3.3. Problem 2

Location: B4114 Coventry Road – on the exit from the junction with the B581 Coventry Road.

Summary: Alignment for straight ahead southbound vehicle movements risks late lane changes and side-swipe type collisions.

The alignment of the ahead movement, when travelling southbound, means that drivers are naturally directed to continue into the right turn lane inadvertently, risking late lane changes and potential side-swipe or shunt type collisions.



Recommendation:

It is recommended that the two-lane arrangement on the exit from the junction is started further south and the road markings amended so as to encourage drivers to make a conscious decision to enter the right turn lane.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

- 4.1. No Additional Considerations were observed as part of this Audit.

5. AUDIT STATEMENT

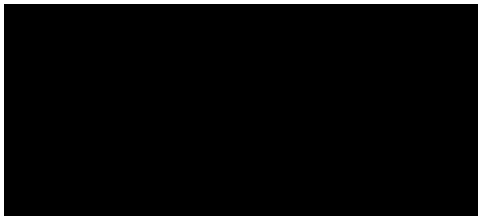
- 5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. **AUDIT TEAM LEADER:**

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd



Date: 30.10.2023

5.3. **AUDIT TEAM MEMBER:**

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 30.10.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-DR-TR-113	Junction 21 – B4114 / B581 Proposed Mitigation	P2
HRF-BWB-GEN-XX-DR-TR-133	B4114 / B581 Proposed Mitigation (Swept Paths)	P1

Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	13.10.2023

APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

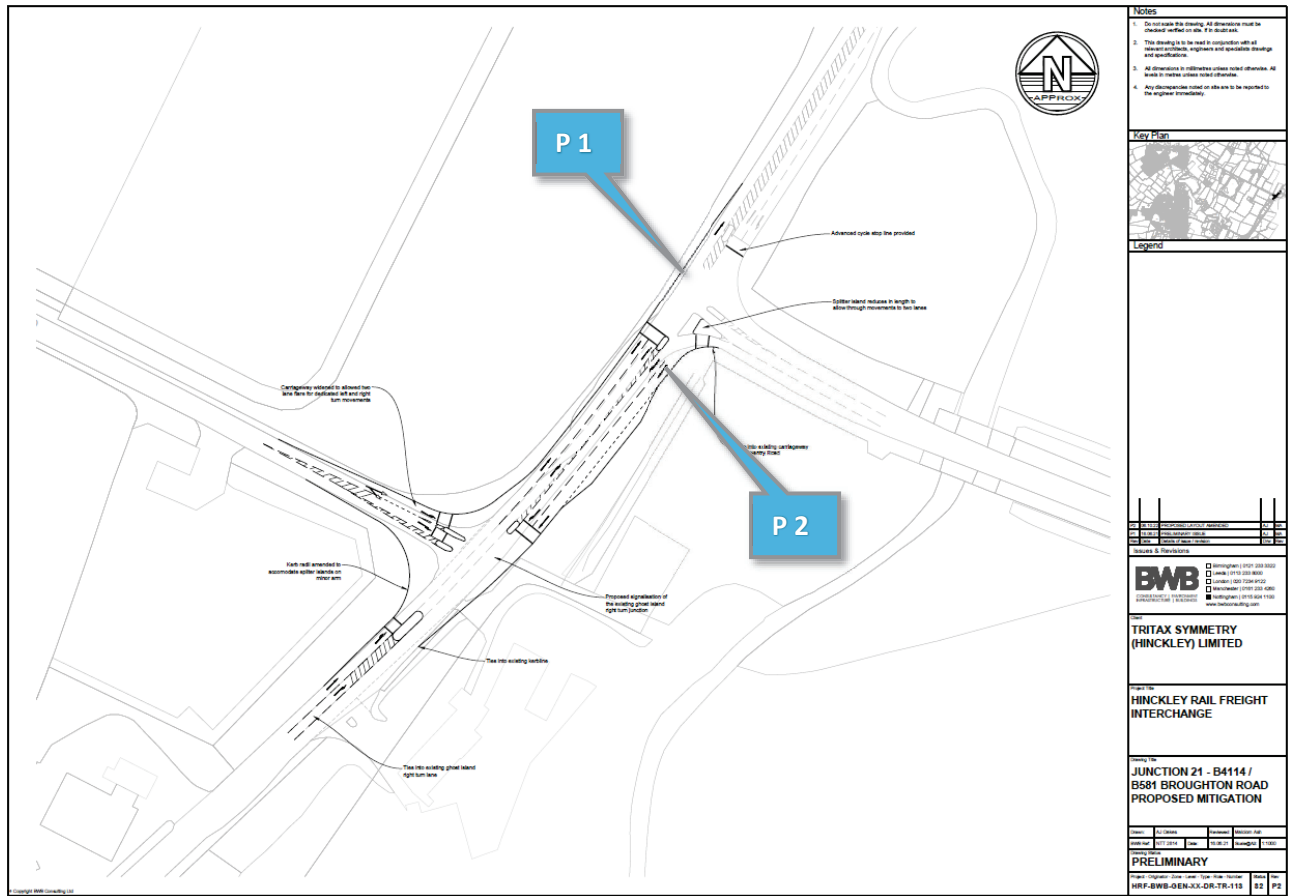
Figure 1 – Site Location

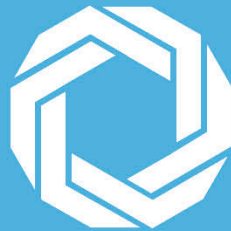


[Mapping source; Google Maps]

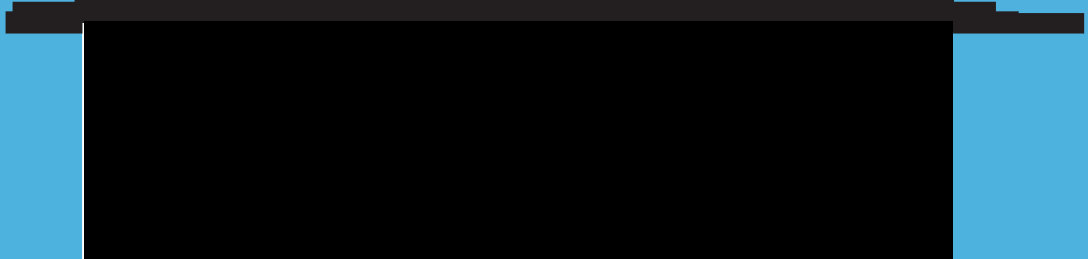


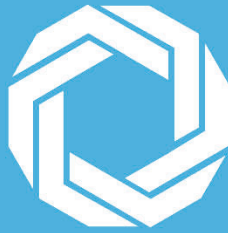
Figure 2 – Problem Location Plan





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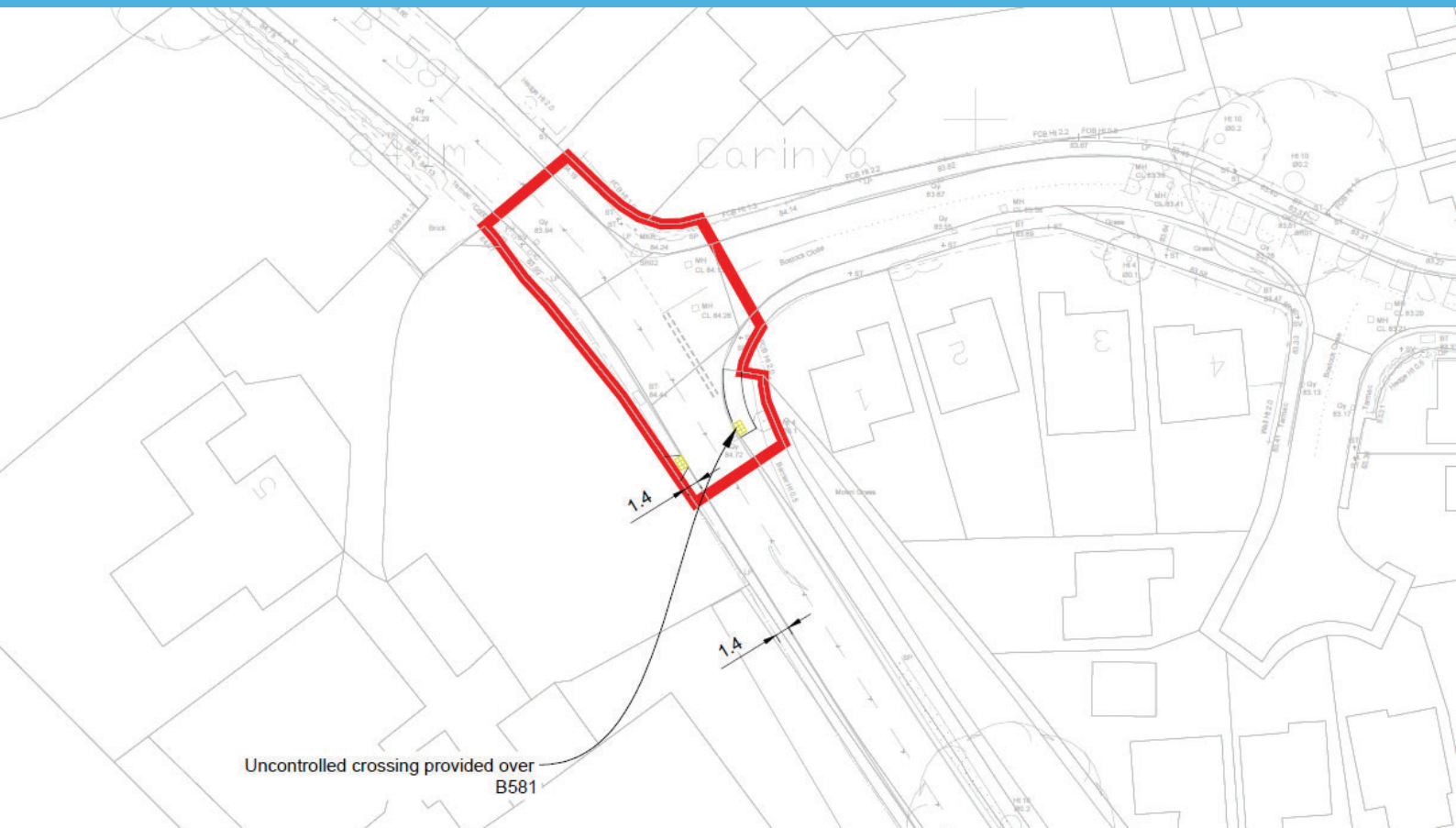
PROPOSED PEDESTRIAN DROPPED CROSSING

B581 STATION ROAD, ELMSTHORPE

INTERIM STAGE 1 – ROAD SAFETY AUDIT

NOVEMBER 2023

REPORT REF: 23-1363.11-RSA1



PROPOSED PEDESTRIAN DROPPED CROSSING

B581 STATION ROAD, ELMSTHORPE

INTERIM STAGE 1 ROAD SAFETY AUDIT

NOVEMBER 2023

REPORT REF: 23-1363.11-RSA1

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
First Issue	30.11.2023	CB	SC
Draft (Internal)	28.11.2023	CB	SC

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APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

1. INTRODUCTION

- 1.1 This report comprises an Interim Stage 1 Road Safety Audit (RSA) on the proposed junction provision of a pedestrian dropped crossing across the B581 Station Road, to the south of the junction with Bostock Close, in Elmsthorpe. The works include the creation of the crossing point and the closure of the existing pedestrian route to the east of Bostock Close, over the level crossing to the south and via the steps and stile to the north of the existing railway bridge. At the time of the site visit, the existing pedestrian steps, stile and route to the north of the bridge were impassable whilst the route via the level crossing was boggy in places, narrow and poorly maintained. The works are arising as part of the off-site mitigation for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley.
- 1.2 The report was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisation is Leicestershire County Council.
- 1.3 The Audit Team Membership was as follows:
- Audit Team Leader
Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency
- Audit Team Member
Sarah Cooke, BA (Hons)
- 1.4 A site inspection was carried out by the Audit Team together on Monday 27th November 2023 between the hours of 10:45 and 11:10. During the site visit the weather conditions were raining and the road surface was wet. Traffic flows were observed as being light, with no pedestrians and no cycle movements being observed.
- 1.5 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have not been made aware of any departures from design standards.
- 1.6 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.7 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.

- 1.8 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of “Additional Considerations” will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.9 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. It is understood that no previous Road Safety Audits have been undertaken for the proposals subject to this report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

3.1. The Audit Team has identified two safety problems to be addressed.

3.2. **Problem 1**

Location: Station Road – western side of the proposed pedestrian crossing to the south of Bostock Close.

Summary: Restricted visibility risks vehicle to pedestrian collisions.

When crossing west to east, visibility of approaching vehicles is restricted by the horizontal alignment of the carriageway and by the adjacent vegetation. This restricts visibility for and of pedestrians crossing at the proposed located and may result in them entering the carriageway when it is unsafe to do so, risking vehicle to pedestrian collisions.



Recommendation:

It is recommended that the crossing is relocated such that visibility of approaching vehicles is provided for pedestrians. For example, this could be to the northern side of the junction with Bostock Close on the apex of the bend.

3.3. **Problem 2**

Location: Station Road – eastern side of the proposed pedestrian crossing to the south of Bostock Close.

Summary: Restricted visibility risks vehicle to pedestrian collisions.

When crossing east to west, visibility of approaching northbound vehicles is restricted by the vertical alignment of the carriageway and by the adjacent vegetation. This restricts visibility for and of pedestrians crossing at the proposed located and may result in them entering the carriageway when it is unsafe to do so, risking vehicle to pedestrian collisions.



Recommendation:

It is recommended that the crossing is relocated such that visibility of approaching vehicles is provided for pedestrians. For example, this could be to the northern side of the junction with Bostock Close on the apex of the bend.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. Additional Consideration 1

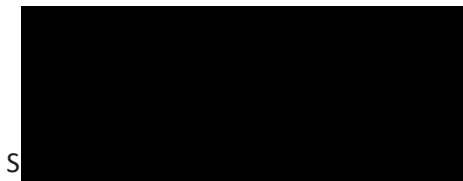
Whilst the footway to the south of the proposed crossing is shown as being 1.4m in width on the drawing, on site the footway is significantly narrowed by overgrown vegetation and leaf litter. As part of the detailed design, it is recommended that consideration is given to edging up the footway to ensure that the maximum width available is provided to pedestrians.

5. AUDIT STATEMENT

5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. AUDIT TEAM LEADER:

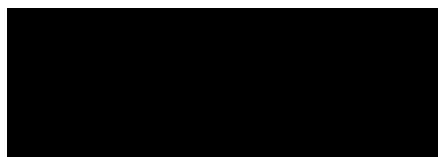
Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency
Director
Midlands Road Safety Ltd



Date: 30.11.2023

5.3. AUDIT TEAM MEMBER:

Sarah Cooke, BA (Hons)
Road Safety Consultant working on behalf of Midlands Road Safety Ltd



Date: 30.11.2023

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-HGN-HW23-DR-CH-0100	General Arrangement Sheet 23	P01

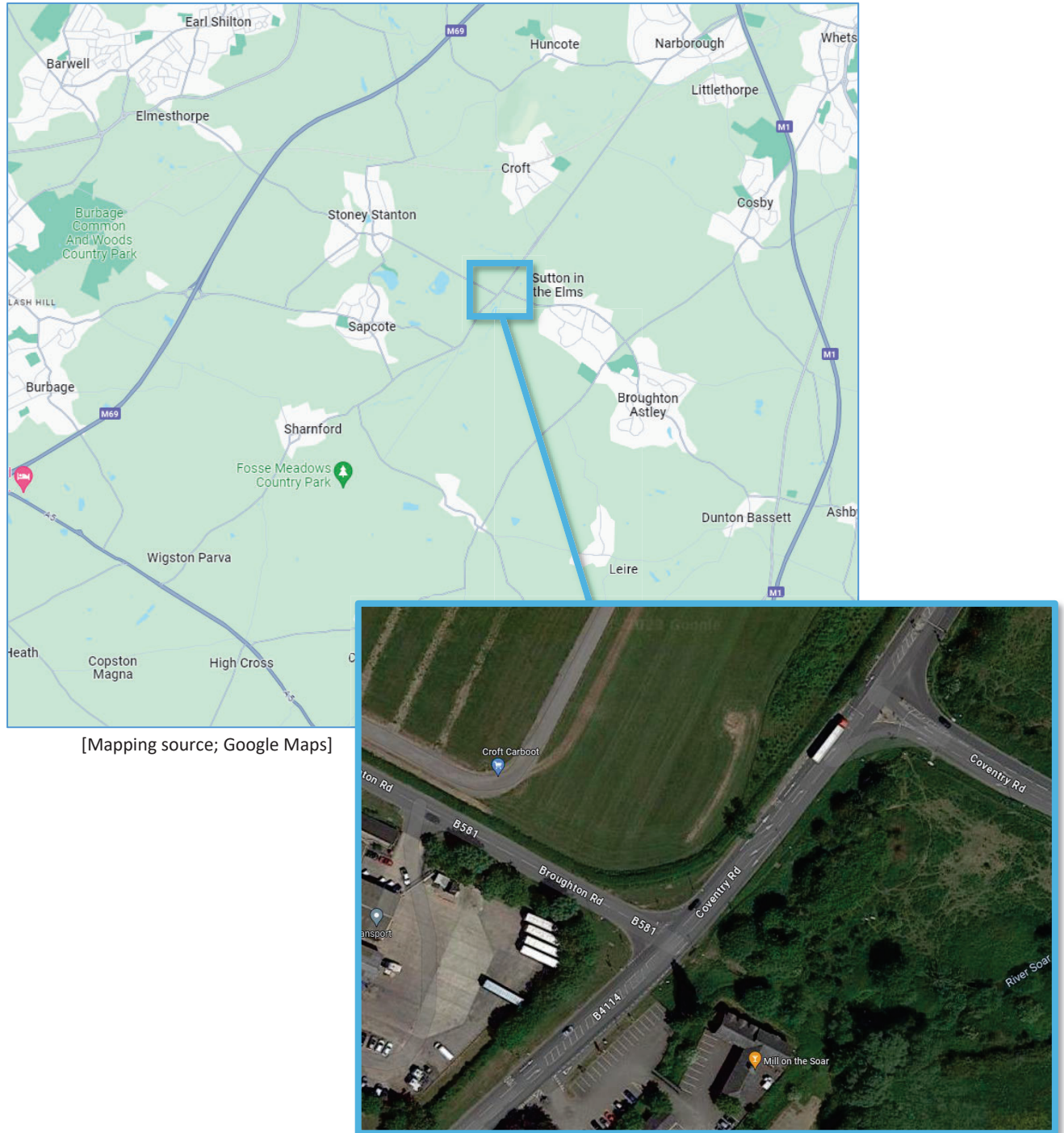
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief (by email)	-	21.11.2023

APPENDIX B

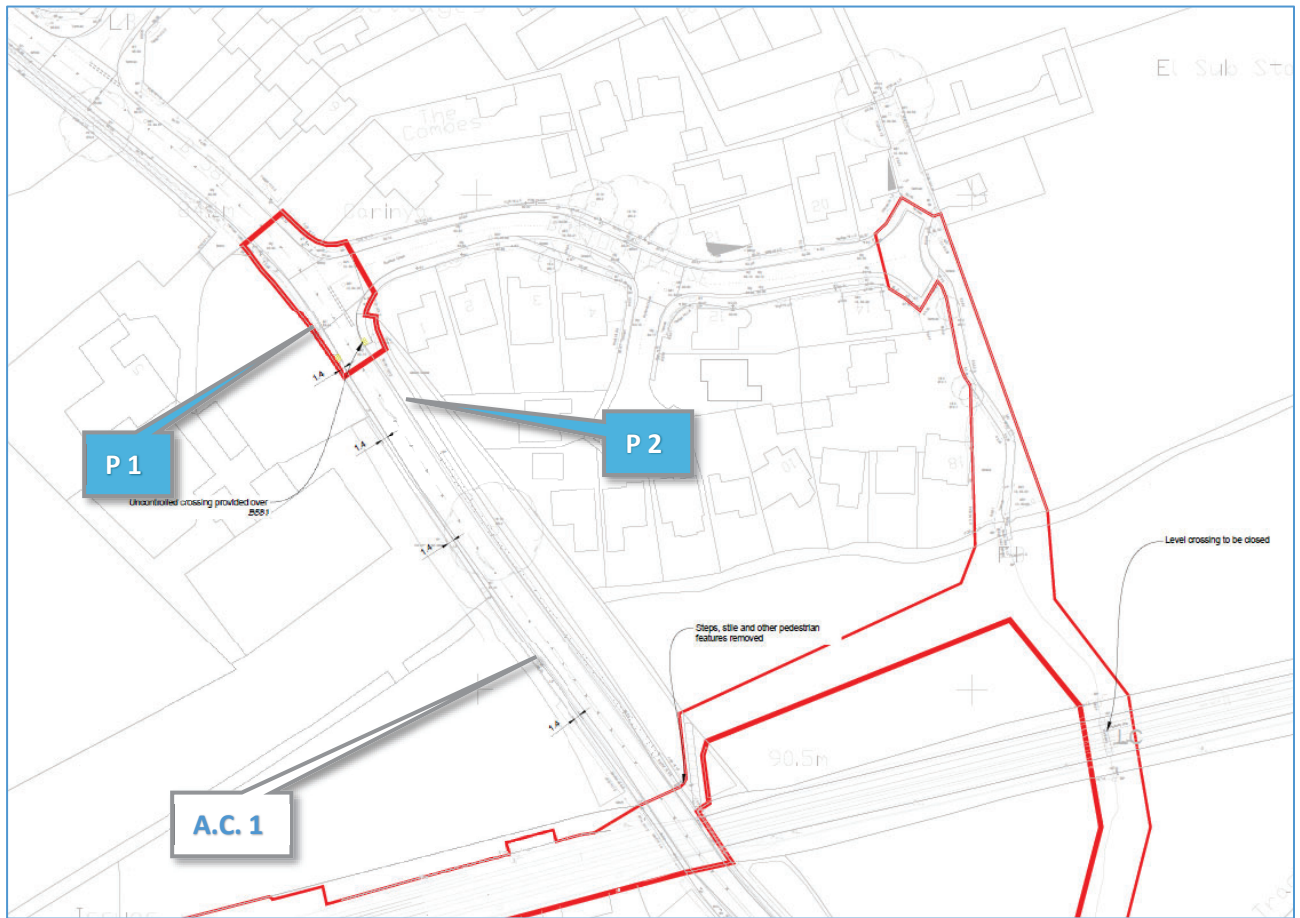
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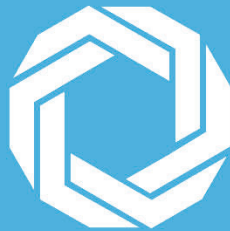
Figure 1 – Site Location



[Mapping source; Google Maps]

Figure 2 – Problem Location Plan





Midlands Road Safety Ltd

