

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised; and
Auditors View of Design Organisation Response.**



Proposed Roundabout and footway link Newgate Lane East Fareham

Client:
i-Transport

Client reference:
ITB10353

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Report Status 6

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Prepared by	JJF	Verified by	ZB	Approved by	JJF
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1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	July 2022
Document reference and revision:	RSA-21-110-6
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	Hampshire County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Miller Homes and Bargate Homes

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	JJF			22 nd November 2021
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	ZB	JJF	26 th November 2021
2	Stage 1 Road Safety Audit Report format amended to incorporate a row for inclusion of a Design Organisation Response in order to maintain a concise record of items raised	JJF			26 th November 2021
3	Design Organisation Response incorporated	Matthew Craddy on behalf of i-Transport			2 nd December 2021
4	Auditor's View of Design Organisation Response	JJF			6 th December 2021
5	Design Organisation Response to items A.1.1 and A.2.2 and Design revised	Matthew Craddy on behalf of i-Transport			25 th July 2022
6	Auditor's View of Design Organisation Response to items A.1.1 and A.2.2 updated	JJF	ZB	JJF	26 th July 2022

Contents:

1.0	Project Details	1
2.0	Introduction	2
3.0	Items Raised in any previous Road Safety Audits	4
4.0	Items Raised in this Stage 1 Road Safety Audit	4
	A.1 Alignment	
	A.2 General	
	A.3 Junctions	
	A.4 Walking, Cycling and Horse Riding	
	A.5 Traffic Signs, Carriageway Markings and Lighting	
5.0	Audit Team Statement	16

Appendices:

Stage 1	A1	Documents and Drawings provided for this Road Safety Audit
	A2	Item Location Plan
	A3	Drawings associated with the Design Organisation Response

2.0 INTRODUCTION

- 2.1 This report has been prepared by Fenley Road Safety Limited and results from a Stage 1 Road Safety Audit of a proposed roundabout and footway link along Newgate Lane East in Fareham. The works include the provision of a four arm 50 metre ICD roundabout at the existing priority junction of Newgate Lane with Newgate Lane East which allows access to development land to the east as well as a footway link to the existing bus stops both sides of the carriageway to the north. A shared footway / cycleway is proposed along the northern side of the development access road and Newgate Lane with an uncontrolled crossing at the splitter island of the northern Newgate Lane East arm of the junction. The scheme is to facilitate access to a residential development of circa 375 dwellings.
- 2.2 It is understood that as part of the application, the Design Organisation received comments from the County Highway Authority regarding the proposals which provided further iteration of the design. The revisions include; amended proposals for the pedestrian / cycle provision between Newgate Lane and B3385 Newgate Lane East on the northern side and an increased flare on the B3385 Newgate Lane East (southern arm) to allow for additional traffic. As part of this revised audit, these items have been reviewed.
- 2.3 The Audit Brief identifies that the proposals do not include any Departures from Standard, whether related to strategic decisions or otherwise.
- 2.4 The Road Safety Audit was undertaken during November 2021 in accordance with the Road Safety Audit Brief provided on the 3rd November 2021 by the Design Organisation, i-Transport, on behalf of the Project Sponsors, Miller Homes and Bargate Homes. The Road Safety Audit comprised of a site visit as well as an examination of the documents provided which are identified in **Appendix A1**. The Audit Team were satisfied that that the Audit Brief was sufficient for the purpose of the Audit instructed.
- 2.5 The Road Safety Audit has been undertaken by an Audit Team whose qualifications and experience accord with the requirements of GG119 and have been approved to undertake Road Safety Audits of all stages within Hampshire. The Audit Team consists of the following members:

Audit Team Leader

Jamie Fenning *BSc(Hons), MIHE, MCIHT, MSoRSA, Highways England RSA Certificate of Competency*
Road Safety / Highway Engineer

Audit Team Member

Zane Beswick *MCIHT, MSoRSA*
Road Safety / Highway Engineer

- 2.6 The site visit associated with this Road Safety Audit was undertaken during the afternoon of Friday 5th November 2021 between 1pm and 1:45pm. The site visit involved walking and

driving around the local highway network for a 45-minute period whilst observing the local infrastructure and current traffic conditions. The weather during the site visit was clear, the road surface was dry and visibility was good. A number of pedestrians were observed during the site visit walking along Newgate Lane and cyclists were observed travelling along both Newgate Lane and Newgate Lane East. Vehicular traffic was also observed to include motorcycles, cars, public service vehicle, light and heavy goods vehicles. The traffic flow was considerable with minimal gaps in traffic and free flowing. A maximum queue of 3 vehicles were observed at the give-way associated with the Newgate Lane priority junction.

- 2.7 The terms of reference of this Road Safety Audit are as described in GG119. The scheme has been examined and this report compiled, only with regard to the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. All comments and recommendations are referenced to the design drawings supplied with the Audit Brief and the location of road safety concerns raised have been illustrated beneath the items along with relevant photographs for clarity, where appropriate, as well as on the Location Plan attached at **Appendix A2**.

Design Organisation Response

- 2.8 In accordance with national standards, this Road Safety Audit was finalised and issued to the Design Organisation as per the Road Safety Audit Report Template within Appendix D of GG119, which can be provided upon request from either the Audit Team or Design Organisation. The format of the Audit Report was subsequently revised to incorporate these paragraphs under the sub-heading as well as sufficient space beneath the items and recommendation, within Section 4, for the inclusion of a Design Organisation Response. This is generally contained within a separate Design Organisation Response Report but is included within this document in order to maintain a single record of all problems, recommendations and responses for the benefit of a concise Road Safety Audit trail to be held on file for Quality Assurance purposes.
- 2.9 The Design Organisation Response has been prepared by:
- | | |
|--------------------------|----------------------------|
| Name: | Matthew Craddy |
| Position / Organisation: | Associate, i-Transport LLP |
- 2.10 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.
- 2.11 Upon the request of the Design Organisation and following receipt of the Design Organisation Response with any associated drawings, the Road Safety Audit Team Leader has provided a

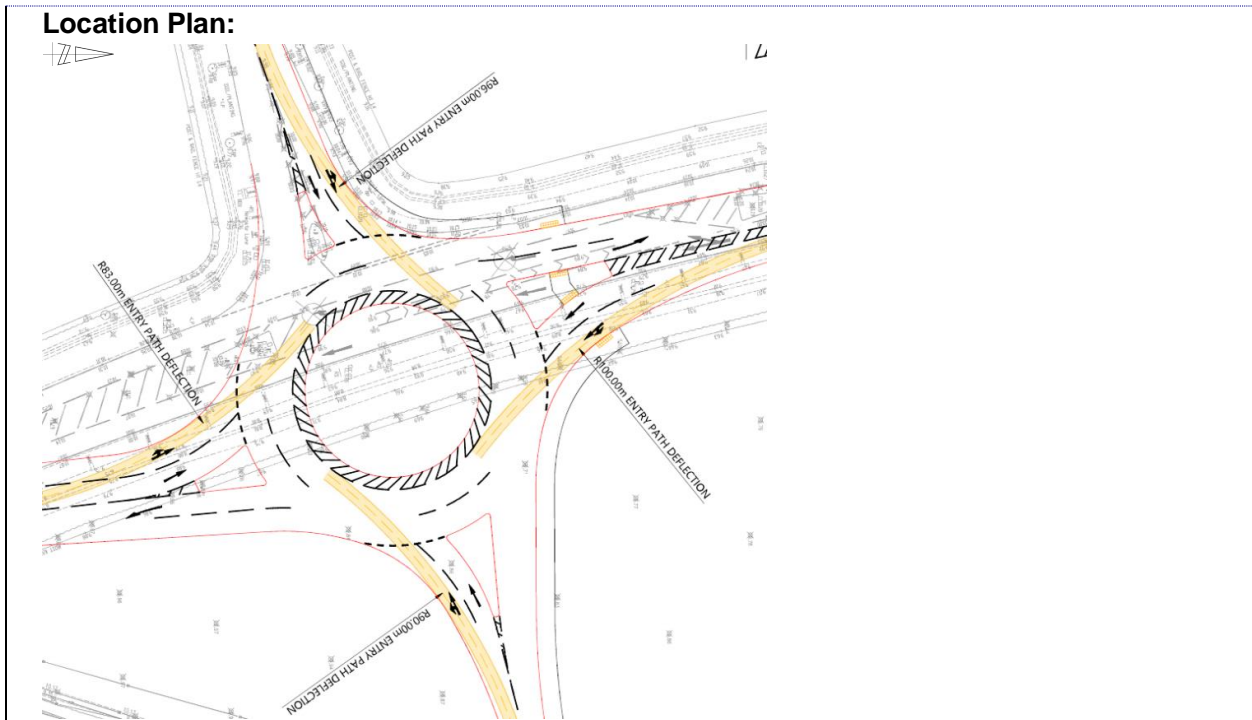
further comment on the item raised. The “Auditor’s View on the Design Organisation Response” is included within a row beneath each item, for clarity.

3.0 ITEMS RAISED IN ANY PREVIOUS ROAD SAFETY AUDITS

3.1 Fenley Road Safety Limited have not been made aware of any previous road safety audits associated with the proposals that are assessed within this document.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

A.1	LOCAL ALIGNMENT
A.1.1	PROBLEM
Location:	Newgate Lane East
Summary:	Traffic may approach the proposed roundabout at inappropriate speeds
Acc Type:	Junction overshoot, heavy braking and loss of control type collisions
<p>Newgate Lane East is a wide two-way single carriageway road that is subject to a 40mph speed limit and according to the Audit Brief observes 85th percentile speeds of 44.3mph and 45.2mph in a north and southbound directions. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a 50 metre ICD four-arm roundabout at the existing priority junction of Newgate Road with Newgate Road East. The roundabout is to accommodate a circulatory carriageway width of 9 metres with an area of hatching provided around the central island to allow for the swept path of articulated vehicles. The scheme drawings identify that entry deflection on each approach is below 100 metres, however, this is based upon vehicles not entering the hatched area around the central island. The Audit Team have concerns that the area of hatching will not be visible to the driver of a vehicle approaching the proposed roundabout particularly should the road markings fade as they have in proximity to the roundabout junction to the north. An insufficient level of deflection on approach to a roundabout could lead to inappropriate approach speeds and junction overshoot type collisions as well as loss of control as a result of heavy braking.</p>	
RECOMMENDATION:	
It is recommended that an adequate amount of deflection is provided on each approach.	



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021

Agreed – Following consultations with the County Highway Authority, the overrun area has been removed from the scheme in favour of a larger central island diameter which allows for all movements whilst retaining an adequate level of deflection. The revised scheme is shown on Drawing ITB10353-GA-102 Rev E

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

Confirmation that the overrun area formed with road markings, has been removed and a larger diameter central island provided whilst maintaining an adequate level of deflection, addresses the road safety concern raised at this stage.

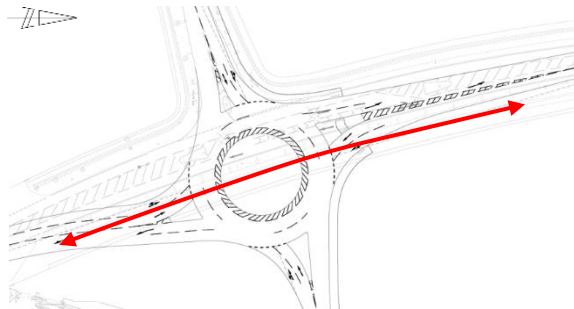
A.2	GENERAL
A.2.1	PROBLEM
Location:	Newgate Lane East
Summary:	No details of the proposed drainage have been provided at this stage
Acc Type:	Sideswipes and loss of control type collisions
<p>Newgate Lane East is a relief road and benefits from a drainage ditch beyond a grass verge either side. Surface water that falls on the carriageway is understood to flow through a number of existing channels that are cut into the adjacent verge. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a four-arm roundabout and the realignment of the Newgate Lane East approaches. The proposed highway is to be provided where the existing ditches are present. Whilst levels have been provided on the topographical survey and along the centreline of the proposed carriageway, no details associated with the proposed contours or</p>	

drainage have been provided at this stage. It can be assumed that the existing ditch is to be removed and that surface water will fall along the carriageway in accordance with the levels, however, an insufficient surface water drainage network could lead to ponding being observed which could result in loss of control type collisions especially during frosts.

RECOMMENDATION:

It is recommended that an adequate surface water drainage network is provided

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021

Agreed – diversion and culverting of the existing highway drain subject to OWC consent and to be discussed and agreed with HCC at detailed design stage to ensure adequate water drainage network is provided. Drawing ITB10353-GA-102 Rev A illustrates the likely ditch diversion and culverting that is expected to be required. *(It should be noted that the scheme has been revised to take account of items raised by HCC and the latest scheme Drawing is ITB10353-GA-102 Rev E. However, these changes do not affect this item raised)*

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021

Confirmation that the ditch is to be diverted and culverted, addresses the road safety concern raised at this stage provided sufficient clearance is provided between the carriageway and diverted ditch.

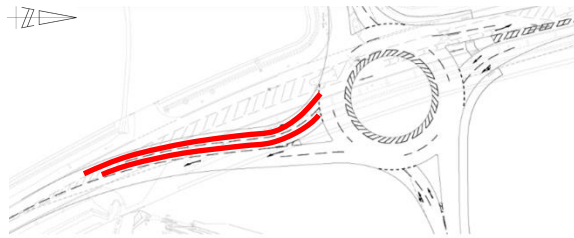
A.2.2	PROBLEM
Location:	Newgate Lane East
Summary:	Vehicles may accelerate and overtake on approach to the roundabout
Acc Type:	Junction overshoot, heavy braking and loss of control type collisions
<p>Newgate lane East is a wide single carriageway two-way road that is subject to a 40mph speed limit and observes a traffic flow of circa 2400 during the morning and afternoon peak hours. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a four-arm roundabout along Newgate Lane East at the existing Newgate Lane priority junction. The scheme drawings provided with the Audit Brief illustrate that the carriageway width of the northbound Newgate Lane East approach to the roundabout increases to two 3.5 metre lanes from a point 70</p>	

metres from the give-way line. Whilst the information included within the Audit Brief identifies that the layout allows for two HGV's to enter the proposed roundabout side by side, no swept path of the approach is included. It is noted that the traffic flow data within the Junctions 10 data also provided with the Audit Brief, shows that the HGV content of southern arm of Newgate Lane East makes up just 2% of vehicles and therefore the likelihood of two large vehicles travelling through the junction side by side is negligible. The Audit Team have concerns that the wide two-lane approach will lead to high-speed approaches and be utilised for overtaking manoeuvres leading to heavy braking and loss of control or overshoot type collisions.

RECOMMENDATION:

It is recommended that the width and length of the two-lane approach is reduced

Location Plan:




DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021

Following further consultation with the County Highway Authority and as requested, the background growth in traffic was increased. As a result, the junction was re-modelled utilising the Junctions 10 software to ensure that the geometry of the proposed roundabout was sufficient to ensure operational capacity during future years. As can be seen in the full results provided with this response, an 88 metre flare is required along the northbound approach to the roundabout which will allow the proposed roundabout to operate effectively and within capacity following all expected development within the area by the year 2037. The northbound exit from the roundabout accommodates two lanes that merge to the existing single lane with a taper in excess of 1 in 20 which as stated in the Design Manual for Roads and Bridges at paragraph 3.28.7 of CD116, 'can help merge the traffic where the density in each lane is high'.

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

The Audit Team understand that the proposed two-lane approach is required for capacity purposes which will allow the proposed roundabout to operate effectively in future years and that an adequate merge is provided on the northbound exit from the roundabout. Confirmation within the Design Organisation Response to item A.1.1; that the level of deflection on the northbound approach equates to 95 metres and to items A.2.3, A3.2 and A.5.2; that bollards, chevron signs and street lighting are to be provided, should ensure that all traffic even any vehicles attempting

<p><i>to overtake, does not approach or enter the proposed circulatory at inappropriate speeds and therefore addresses the road safety concern raised at this stage.</i></p>	
A.2.3	PROBLEM
Location:	Newgate Lane East
Summary:	Splitter islands may not be clearly visible
Acc Type:	Loss of control and head-on type collisions
<p>The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a four-arm roundabout along Newgate Lane East that accommodates two-lane approaches as well as two-lane exits that merge on Newgate Lane East and single lane exits on Newgate Lane as well as the proposed development access. The scheme drawings provided with the Audit Brief illustrate splitter islands on each arm of the proposed roundabout segregating traffic entering from traffic exiting, however, the islands may not be clearly visible to approaching drivers leading to kerb strikes and loss of control type collisions. Furthermore, foreign drivers may attempt to pass on the wrong side of the islands into the path of opposing traffic leading to head-on collisions.</p>	
RECOMMENDATION:	
It is recommended that the keep left bollards are provided facing approaching traffic.	
<p>Location Plan:</p> 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>	
<p>Agreed – Keep left bollards to be provided facing approaching traffic. Exact details to be discussed and agreed with HCC at detailed design stage.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021</p>	
<p>Confirmation that keep left bollards are to be provided, addresses the road safety concern raised at this stage.</p>	
A.3	JUNCTIONS
A.3.1	PROBLEM
Location:	Newgate Lane East
Summary:	Proposals will restrict access to existing field entrances
Acc Type:	Rear end impact collisions
<p>Newgate Lane East is a two-way single carriageway road that is bounded by grass verges and allows access to a number of gated field entrances. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a roundabout and realignment of Newgate Lane East.</p>	

The scheme drawings provided with the Audit Brief illustrate that the proposals have an impact on two field entrances with the area of hardstanding adjacent to the eastern access, reduced and the area adjacent to the western access increased. No kerbing details have been provided at this stage, however, the provision of full height kerbs will restrict access to the entrances which could lead to a loss of control type collision or a vehicle stopping to mount the full height kerbs and rear impact collisions. Furthermore, the Audit Team have concerns that the hard standing adjacent to the field access to the east, will be inadequate to accommodate a tractor and trailer whilst the gates are being opened or closed which could lead to part of the vehicle encroaching the carriageway and front / rear end collisions.

RECOMMENDATION:

It is recommended that dropped kerbs are provided to allow access to the field and the adjacent area of hard standing is adequate to accommodate the expected vehicles.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021

Agreed - The existing field access point on the western side of Newgate Lane East dropped kerb have been shown on revised Drawing ITB10353-GA-102 Rev A. On the eastern side, the existing field access is to be removed as part of the proposed development and therefore no provision has been made (the field benefits from a separate access some 50m south). This is reflected in the latest design drawing ITB10353-GA-102 Rev A. *(It should be noted that the scheme has been revised to take account of items raised by HCC and the latest scheme Drawing is ITB10353-GA-102 Rev E. However, these changes do not affect this item raised)*

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021

Confirmation that the field accesses are to removed / retained where appropriate, addresses the road safety concern raised at this stage.

A.3.2	PROBLEM
Location:	Newgate Lane East
Summary:	Drivers may attempt to circulate the roundabout into opposing traffic
Acc Type:	Sideswipes and loss of control type collisions
<p>The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a four-arm 50 metre Inscribed Circle Diameter (ICD) roundabout along Newgate Lane East that is formed with a 28 metre physical central island with a 2 metre area of hatching overrun area and 9 metre circulatory carriageway. The scheme drawings provided with the Audit Brief illustrate splitter</p>	

islands on each arm of the proposed roundabout which are aligned such that traffic is guided around the circulatory in a clockwise direction, however, no signage is provided to highlight that traffic must turn left onto the circulatory. Foreign drivers may attempt to turn right onto the circulatory and travel in an anti-clockwise direction into the path of opposing traffic leading to head-on collisions.

RECOMMENDATION:

It is recommended that chevron and one-way signs are provided on the central island

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021

Agreed – chevron and one-way signs to be provided at detailed design stage.

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021

Confirmation that chevron and one-way signs are to be provided, addresses the road safety concern raised at this stage.

A.4 WALKING CYCLING AND HORSE



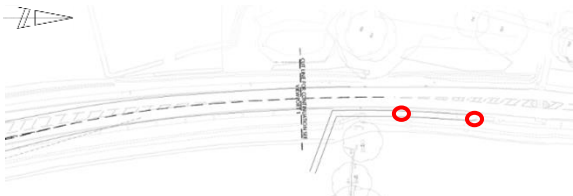

A.4.1 PROBLEM



Location: Newgate Lane

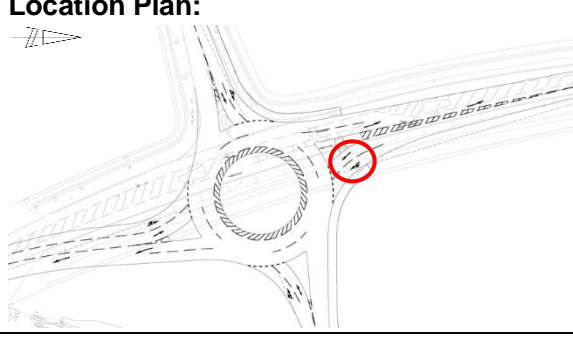

Summary: Pedestrians may enter the live carriageway when it is not safe to do so

Acc Type: Vehicle pedestrian collisions


Newgate Lane benefits from a footway along the western side of the carriageway that provides a link between Fareham to the north and Lee-on-the-Solent to the south. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a roundabout along Newgate Lane East that accommodates a shared footway cycleway between the eastern and western arms along the northern side of the carriageway and across the northern Newgate Lane East arm. The scheme drawings provided with the Audit Brief illustrate that an uncontrolled crossing is to be provided across the Newgate Lane cul-de-sac with a footway link to the west that approaches inline which will lead to pedestrians walking directly towards the crossing point. Tactile paving is provided to warn pedestrians of the live carriageway, however, just two rows are illustrated on the scheme drawing equating to a dept of 800mm. A pedestrian with a large stride or walking at a fast pace towards the proposed crossing point, could overstep the proposed tactile paving into the path of an approaching vehicle leading to a vehicle pedestrian collision.

RECOMMENDATION:	
It is recommended that the tactile paving extends for a minimum depth of 1200mm at crossing points that are inline	
Location Plan:	
	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2 nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22 nd November 2021	
Agreed – tactile paving has been revised to provide 1200mm depth at crossing points identified. Drawing ITB10353-GA-102 Rev A has been updated to reflect these design changes. <u>(It should be noted that the scheme has been revised to take account of items raised by HCC and the latest scheme Drawing is ITB10353-GA-102 Rev E. However, these changes do not affect this item raised)</u>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 6 th December 2021	
Confirmation that the depth of the tactile paving has been increased, addresses the road safety concern raised at this stage.	
A.4.2	PROBLEM
Location:	Newgate Lane East
Summary:	Existing street lighting column is situated within the proposed footway
Acc Type:	Pedestrian collision with column
Newgate lane East is a wide two-way single carriageway road that benefits from street lighting. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a footway link between the north-western boundary of the site and existing bus stop to the north that benefits from an uncontrolled pedestrian crossing and refuge island. As illustrated on the scheme drawing and observed during the site visit associated with this Audit, a street lighting column is situated in the centre of the proposed footway which will be an obstruction to pedestrians and could lead to one striking the column or a user of perambulators veering off the footway onto unstable ground resulting in a fall and personal injury.	
RECOMMENDATION:	
It is recommended that the existing street lighting column is relocated outside the proposed footway	
Location Plan:	
	

<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>	
<p>Agreed – existing street lighting column to be relocated outside of the proposed footway. Final details to be discussed and agreed with HCC at detailed design stage.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021</p>	
<p>Confirmation that the street lighting column is to be relocated, addresses the road safety concern raised at this stage.</p>	
A.4.3	PROBLEM
Location:	Newgate Lane East
Summary:	The sides of the bus shelter accommodate advertisements that will be an obstruction to pedestrians
Acc Type:	Sideswipes and loss of control type collisions
<p>Newgate Lane East is a wide two-way single carriageway road that is a bus route and accommodates bus stops both sides of the carriageway. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a footway link between the north-western boundary of the site and existing bus stops just to the north. The existing southbound bus stop benefits from a shelter, however, the sides of the shelter accommodate advertisements that will be an obstruction to pedestrians and could require one to step into the carriageway to pass which may lead to a vehicle pedestrian collision.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that the bus shelter is adjusted accordingly</p>	
<p>Location Plan:</p>	
 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>	
<p>Agreed – the existing bus stop (southbound) has been relocated to provide a minimum of 1.5m unobstructed footway between the bus stop and kerb edge. For the remainder of footway, there is a minimum of 2.0m. Drawing ITB10353-GA-103 Rev A has been updated to reflect these design changes. <i>(It should be noted that the scheme has been revised to take account of items raised by HCC and the latest scheme Drawing is ITB10353-GA-102 Rev E. However, these changes do not affect this item raised)</i></p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021</p>	
<p>Confirmation that the bus stop is to be relocated to allow for a 1.5 metre clear footway width ensures that pedestrians will be able to pass without the need to step into the carriageway and addresses the road safety concern raised at this stage.</p>	

A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Newgate Lane East
Summary:	The arrow road markings across the uncontrolled crossing point may be misinterpreted by visually impaired pedestrians
Acc Type:	Sideswipes and loss of control type collisions
<p>The proposals that are subject to this Stage 1 Road Safety Audit include the provision of a four-arm roundabout along Newgate Lane East that is to accommodate two-lane approaches as well as splitter islands on each arm to include across the northern arm that is to be utilised as a refuge for cyclists and pedestrians at an uncontrolled crossing point that benefits from tactile paving. The scheme drawings provided with the Audit Brief illustrates that arrow road markings are to be provided within each lane on approach to the roundabout give-way, however, the markings provided on the northern approach are situated on the carriageway where pedestrians and cyclists are likely to be crossing. The Audit Team have concerns that the arrow road markings across the uncontrolled crossing point may be misinterpreted by visually impaired pedestrians who may walk into the path of an approaching vehicle and slippery to walk on during frosts leading to a fall and personal injury.</p>	
RECOMMENDATION:	
It is recommended that the road markings are marginally relocated outside the uncontrolled pedestrian crossing.	
Location Plan:	
	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>	
<p>Agreed – the road markings have been removed outside of the uncontrolled crossing and updated design presented in Drawing ITB10353-GA-102 Rev A. <i>(It should be noted that the scheme has been revised to take account of items raised by HCC and the latest scheme Drawing is ITB10353-GA-102 Rev E. However, these changes do not affect this item raised)</i></p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 6 th December 2021	
<p>Confirmation that the road markings have been marginally relocated, addresses the road safety concern raised at this stage.</p>	

A.5.2	PROBLEM
Location:	Newgate Lane East
Summary:	No details of the proposed street lighting have been provided
Acc Type:	Vehicle overshoot and loss of control type collisions
<p>The local highway network in proximity of Newgate Lane East benefits from street lighting with columns situated within the verge both sides of the carriageway. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of 50 metre ICD roundabout along Newgate Lane East. The proposed works have an impact on the existing street lighting columns, however, no street lighting details have been provided at this stage. An insufficient level of street lighting in proximity to a roundabout could result in drivers not becoming aware of the junction at a safe distance and traffic approaching at in-appropriate speeds leading to heavy braking and resulting in overshoot and loss of control type collisions.</p>	
RECOMMENDATION:	
It is recommended that the proposed roundabout junction is illuminated sufficiently	
Location Plan:	
 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>	
<p>Agreed – a lighting strategy will be discussed and agreed with HCC at detailed design stage.</p>	
<p>AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021</p>	
<p>Confirmation that the proposed junction will be illuminated sufficiently with a street lighting strategy developed during the detail design stage, addresses the road safety concern raised at this stage.</p>	
A.5.3	PROBLEM
Location:	Newgate Lane East
Summary:	No details of the proposed signage have been provided
Acc Type:	Vehicle sideswipe and shunt type collisions
<p>Newgate Lane East is a link between Fareham and Lee-on-the-Solent and currently accommodates a priority junction with Newgate Lane that benefits from a right turn lane with appropriate signage. The proposals that are subject to this Stage 1 Road Safety Audit include the provision of 50 metre ICD four-arm roundabout along Newgate Lane East that provides access to development land to the east and Newgate Lane to the west. Whilst the scheme drawings illustrate the proposed junction, no details of the proposed signage have been provided at this stage. Insufficient signage of the roundabout ahead, could result in drivers not becoming aware</p>	

<p>of the junction or routes through at a safe distance and traffic undertaking late lane changes, leading to loss of control and sideswipe type collisions.</p>
<p>RECOMMENDATION:</p>
<p>It is recommended that the proposed roundabout and destinations are signed appropriately.</p>
<p>Location Plan:</p> 
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 2nd December 2021 following formal issue of this Stage 1 Road Safety Audit on the 22nd November 2021</p>
<p>Agreed – The proposed roundabout and destinations will be signed appropriately. Exact details to be discussed and agreed with HCC at detailed design stage.</p>
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 6th December 2021</p>
<p>Confirmation that the appropriate signage will be provided, addresses the road safety concern raised at this stage.</p>

5.0 STAGE 1 ROAD SAFETY AUDIT TEAM STATEMENT

5.1 We certify that this Road Safety Audit has been carried out in accordance with GG119.

Audit Team Leader

Name: **Jamie Fenning** *BSc (Hons), MIHE, MCIHT, MSoRSA, HE RSA Certificate of Competency*

Signed:



Position: Road Safety / Highway Engineer

Organisation: Fenley Road Safety Limited

Date: 26th July 2022

Audit Team Member

Name: **Zane Beswick** *MCIHT, MSoRSA*

Signed:



Position: Road Safety / Highway Engineer

Organisation: Fenley Road Safety Limited

Date: 26th July 2022

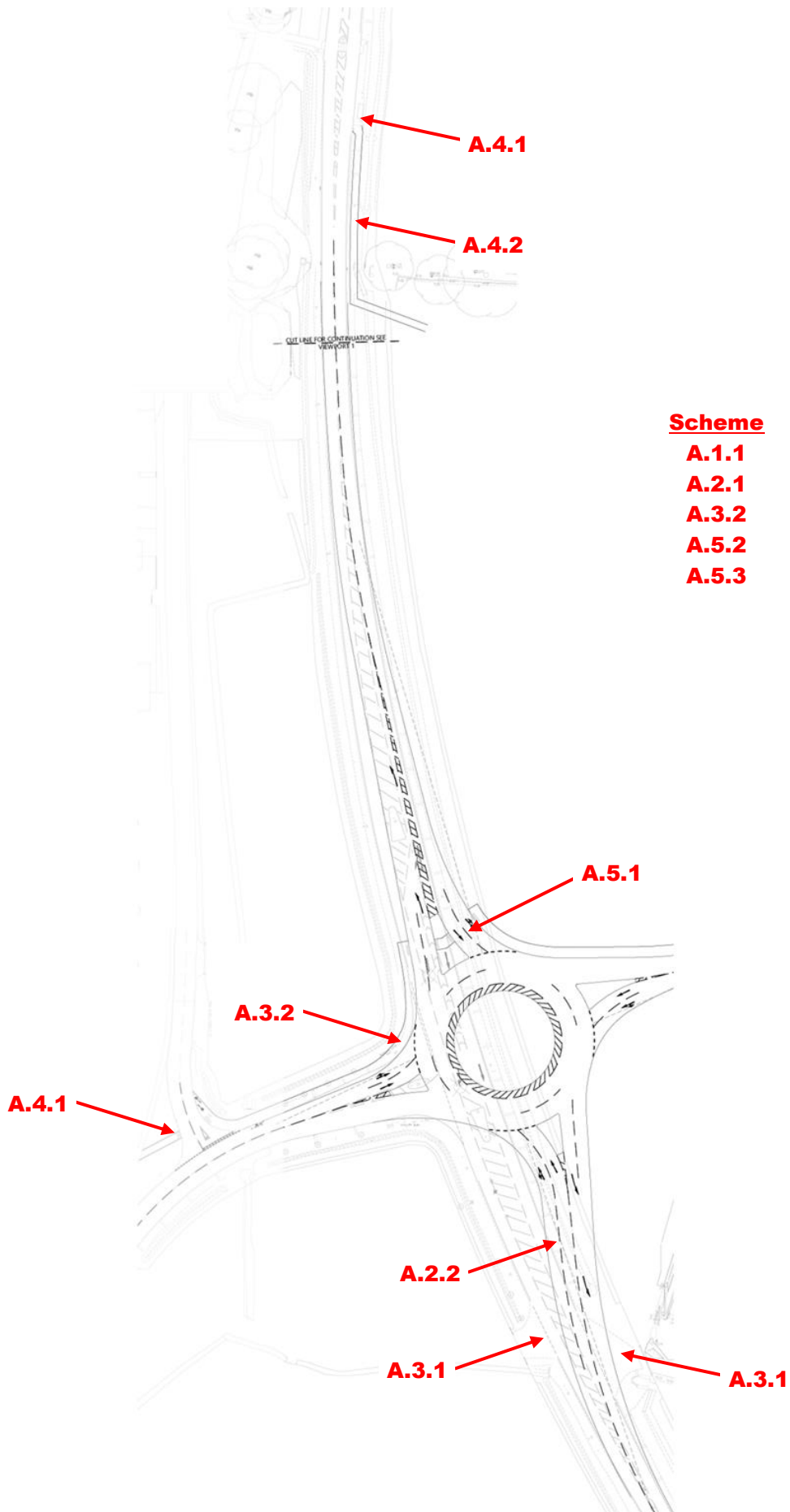
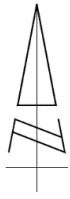
Appendix A1

Documents and Drawings provided for this Stage 1 Road Safety Audit

<u>Audit Stage</u>	<u>Doc. No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB10353-013		GG119 Stage 1 Road Safety Audit Brief
	Site Access Roundabout		Junctions 10 ARCADY 10 Roundabout Module 2026 and 2036 assessments
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB10353-GA-100	-	Site Location Plan
	ITB10353-GA-101	-	Existing detail
	ITB10353-GA-102	-	Proposed site access arrangements
	ITB10353-GA-103	-	Proposed pedestrian connection to existing bus stops
	ITB10353-GA-104	-	Entry path deflection
	ITB10353-GA-105	-	Proposed Geometry
	ITB10353-GA-106	-	1.5 x Stopping Sight Distance (Entry)
	ITB10353-GA-107	-	1.5 x SSD long section sheet 1 of 4
	ITB10353-GA-108	-	1.5 x SSD long section sheet 2 of 4
	ITB10353-GA-109	-	1.5 x SSD long section sheet 3 of 4
	ITB10353-GA-110	-	1.5 x SSD long section sheet 4 of 4
	ITB10353-GA-111	-	Stopping Sight Distance (Exit)
	ITB10353-GA-112	-	Circulatory exit visibility
	ITB10353-GA-113	-	Forward visibility at roundabout
ITB10353-GA-114	-	Vehicle swept path analysis – 16.5m articulated vehicle	
ITB10353-GA-115	-	Vehicle swept path analysis – Pantehnicon	
ITB10353-GA-117	-	Vehicle swept path analysis – Single Decker Bus	
ITB10353-GA-116	-	Vehicle swept path analysis – Large Refuse Vehicle	

Appendix A2

Item Location Plan



Appendix A3

Drawings associated with the Design Organisation Response

<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB10353-GA-100	A	Site Location Plan
	ITB10353-GA-101	A	Existing detail
	ITB10353-GA-102	E	Proposed site access arrangements
	ITB10353-GA-103	C	Proposed pedestrian connection to existing bus stops
	ITB10353-GA-104	D	Entry path deflection
	ITB10353-GA-105	D	Proposed Geometry
	ITB10353-GA-106	C	1.5 x Stopping Sight Distance (Entry)
	ITB10353-GA-107	C	1.5 x SSD long section sheet 1 of 4
	ITB10353-GA-108	C	1.5 x SSD long section sheet 2 of 4
	ITB10353-GA-109	C	1.5 x SSD long section sheet 3 of 4
	ITB10353-GA-110	C	1.5 x SSD long section sheet 4 of 4
	ITB10353-GA-111	C	Stopping Sight Distance (Exit)
	ITB10353-GA-112	C	Circulatory exit visibility
	ITB10353-GA-113	C	Forward visibility at roundabout
	ITB10353-GA-114	E	Vehicle swept path analysis – 16.5m articulated vehicle
	ITB10353-GA-115	C	Vehicle swept path analysis – Pantehnicon
	ITB10353-GA-116	C	Vehicle swept path analysis – Single Decker Bus
	ITB10353-GA-117	D	Vehicle swept path analysis – Large Refuse Vehicle
	ITB10353-GA-119	A	Proposed roundabout to Newgate Lane East – 16.5m articulated vehicle northbound approach

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