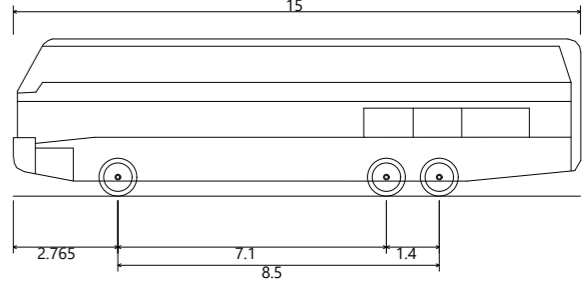
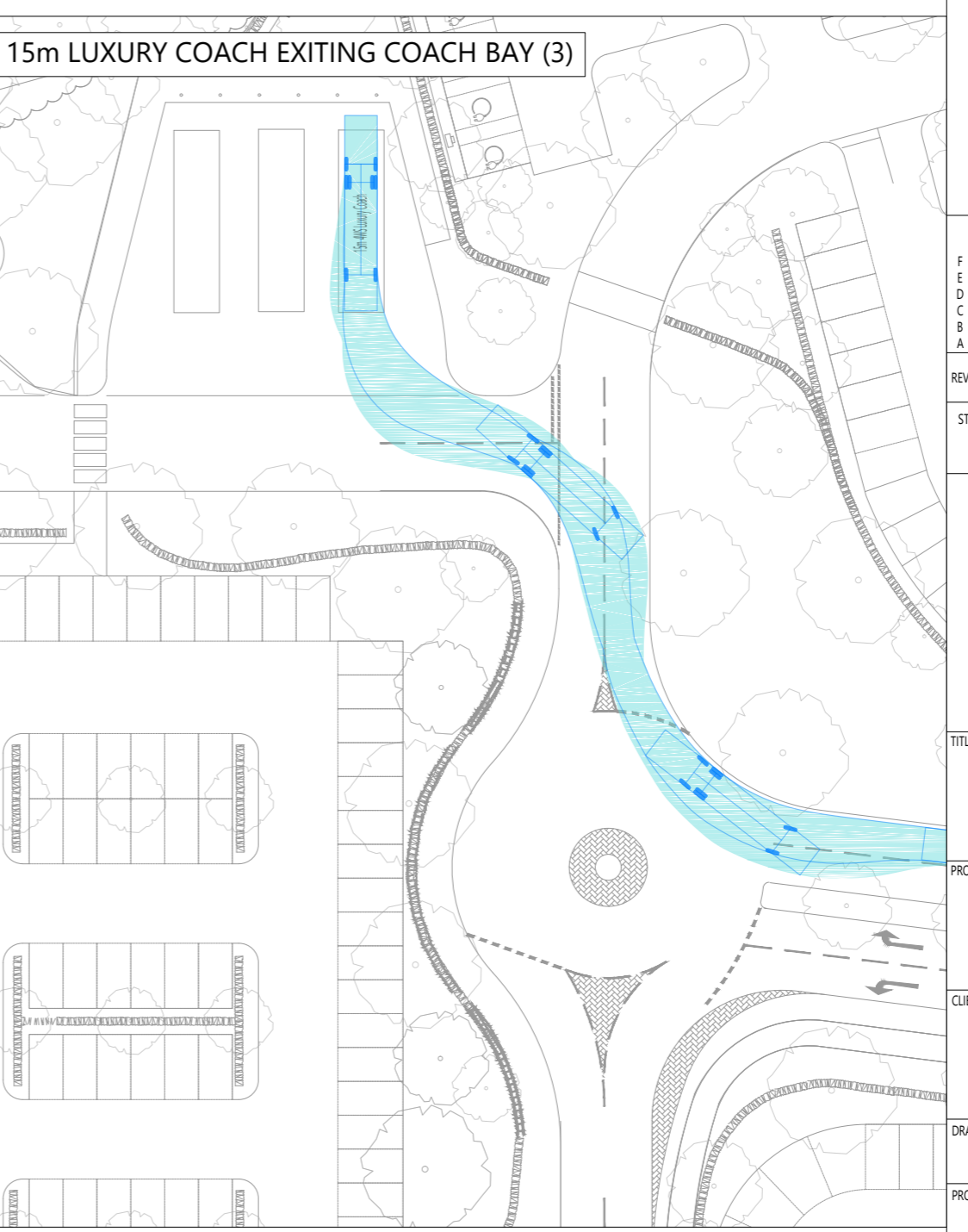
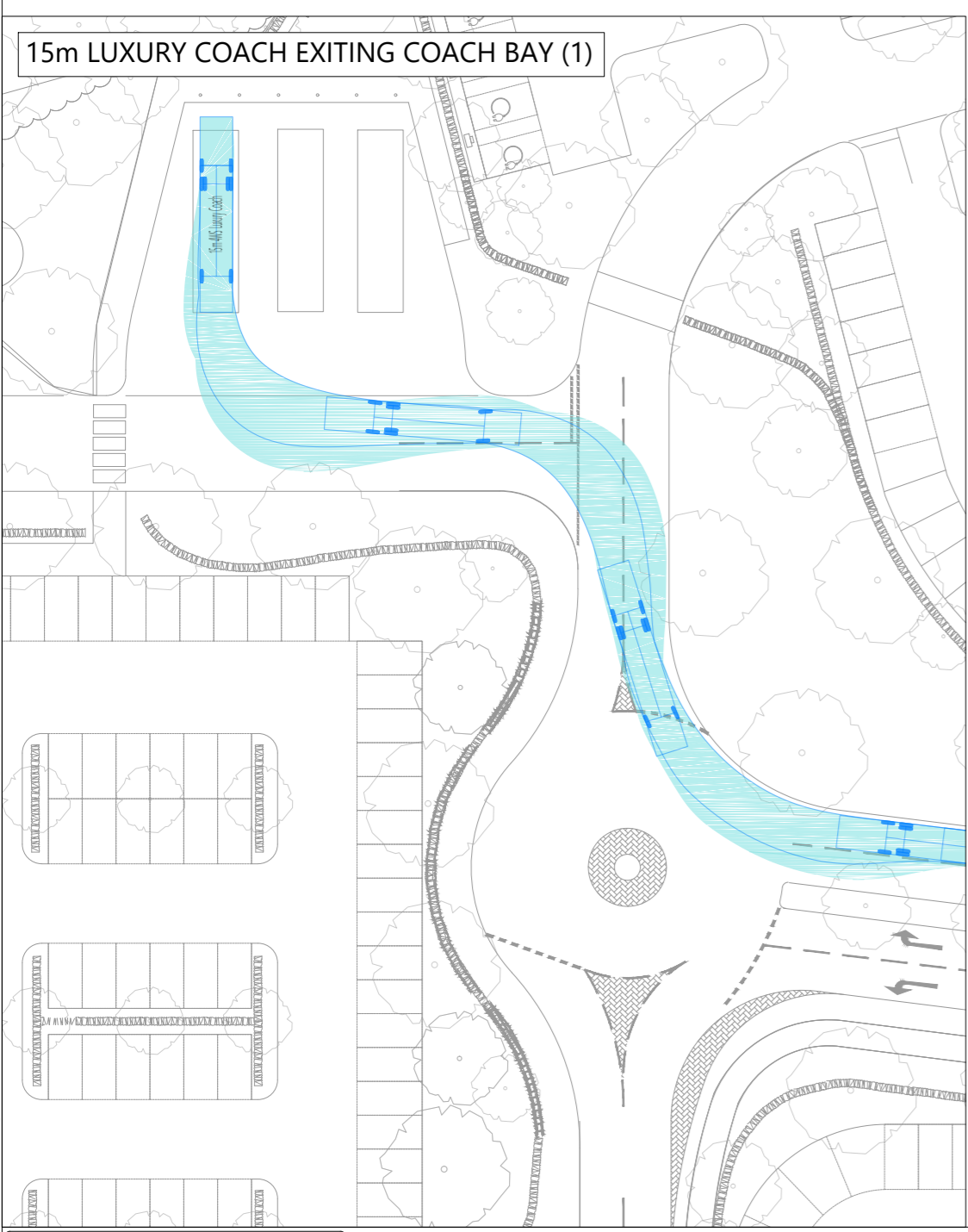
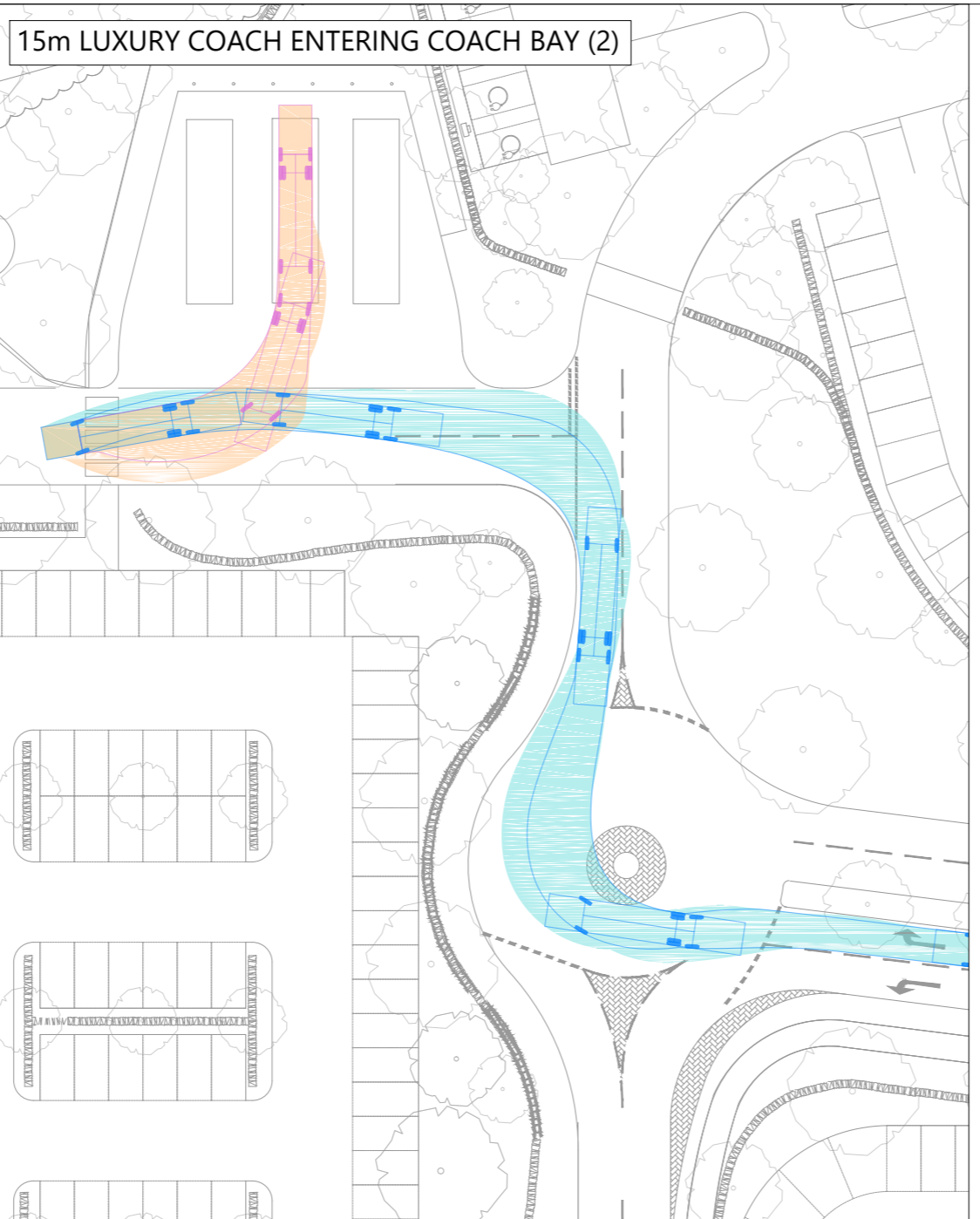
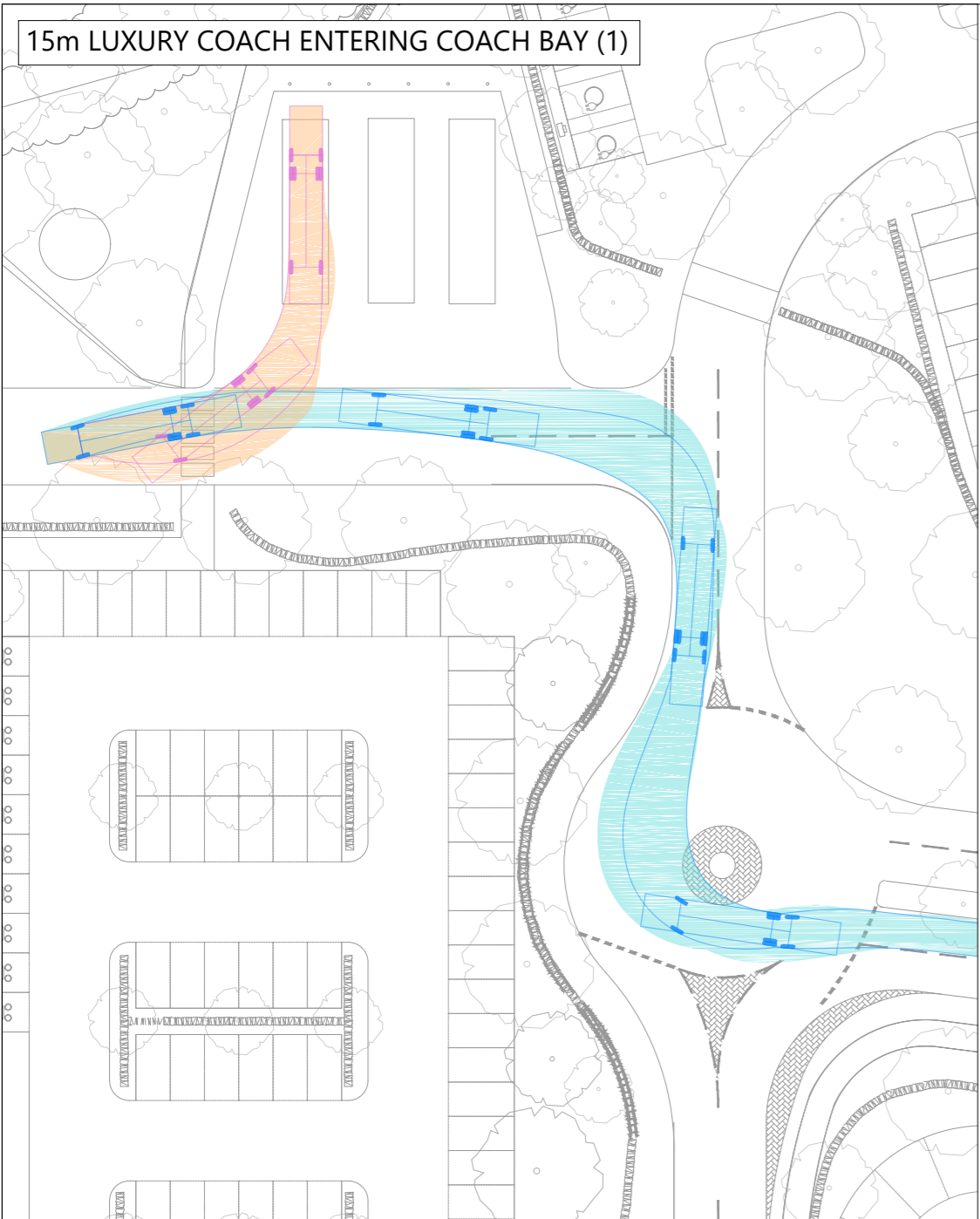


APPENDIX G. Swept Path Analysis



15m 4WS Luxury Coach
 Overall Length 15.000m
 Overall Width 2.500m
 Overall Body Height 4.157m
 Min Body Ground Clearance 0.397m
 Track Width 2.500m
 Lock to lock time 5.00s
 Wall to Wall Turning Radius 12.500m

F	23.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
E	11.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
D	28.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
C	02.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
B	23.10.23	JD	SITE LAYOUT UPDATED	DF	SAW
A	06.10.23	JD	SITE LAYOUT UPDATED	DF	SAW

REV	DATE	BY	DESCRIPTION	CHK	APD
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STATUS: FOR INFORMATION



The Square, Basing View,
 Basingstoke, Hampshire, RG21 4EB
 www.i-transport.co.uk
 Tel: 01256 898366

TITLE: SWEEP PATH ANALYSIS - 15m LUXURY COACH

PROJECT: BIRDWORLD AND HASKINS FOREST LODGE GARDEN CENTRE

CLIENT: BIRDWORLD LTD AND HASKINS GARDEN CENTRE LTD

DRAWN:	JD	CHECKED:	DF	APPROVED:	SAW
PROJECT No:	ITB16329	SCALE @ A2:	1:500	DATE:	18.08.23

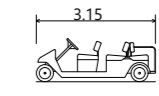
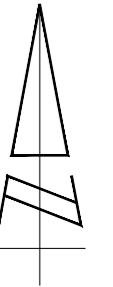
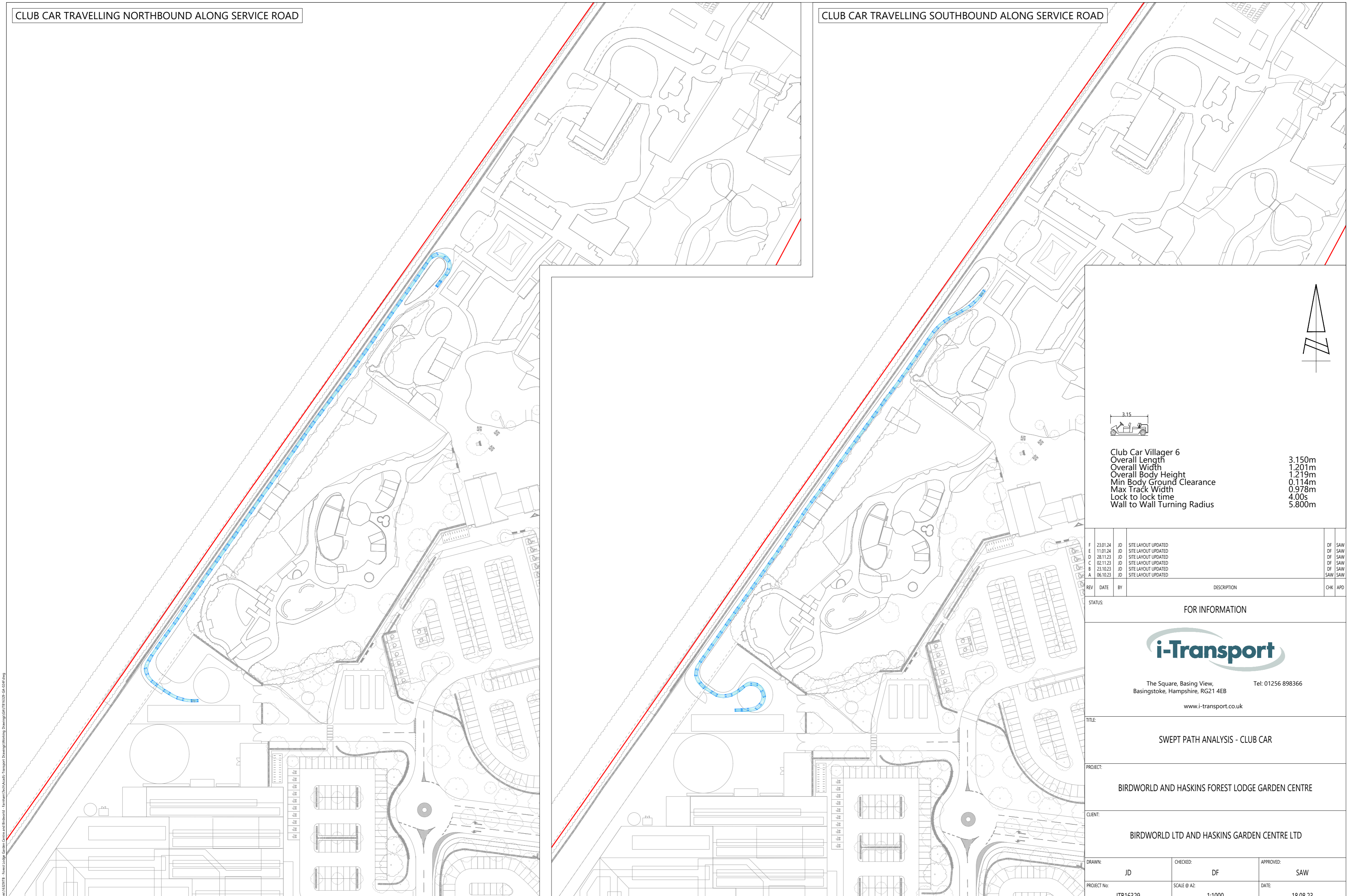
DRAWING No: ITB16329-GA-022 REV: F

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CLUB CAR TRAVELLING NORTHBOUND ALONG SERVICE ROAD

CLUB CAR TRAVELLING SOUTHBOUND ALONG SERVICE ROAD



Club Car Villager 6
 Overall Length 3.150m
 Overall Width 1.201m
 Overall Body Height 1.219m
 Min Body Ground Clearance 0.114m
 Max Track Width 0.978m
 Lock to lock time 4.00s
 Wall to Wall Turning Radius 5.800m

REV	DATE	BY	DESCRIPTION	CHK	APP
F	23.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
E	11.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
D	28.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
C	02.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
B	23.10.23	JD	SITE LAYOUT UPDATED	DF	SAW
A	06.10.23	JD	SITE LAYOUT UPDATED	DF	SAW

STATUS: FOR INFORMATION



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 Basingstoke, Hampshire, RG21 4EB
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TITLE: SWEPT PATH ANALYSIS - CLUB CAR

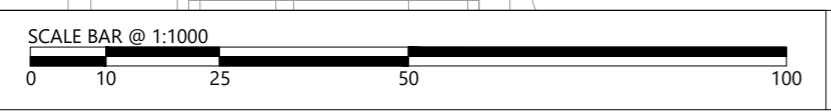
PROJECT: BIRDWORLD AND HASKINS FOREST LODGE GARDEN CENTRE

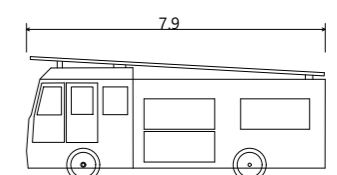
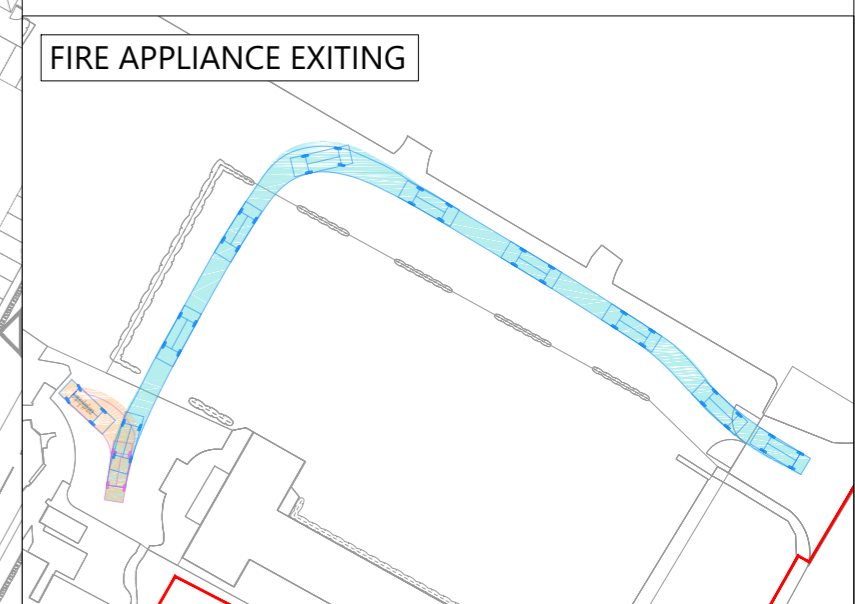
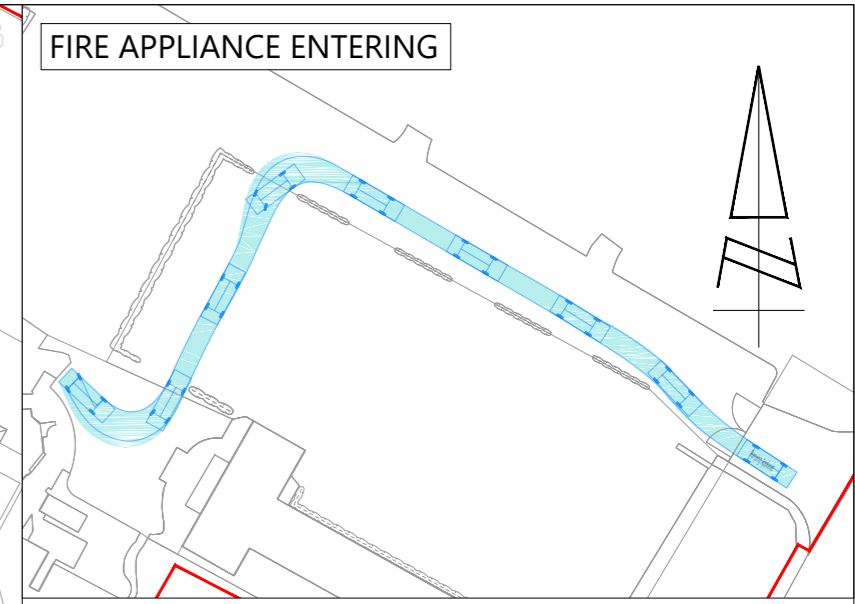
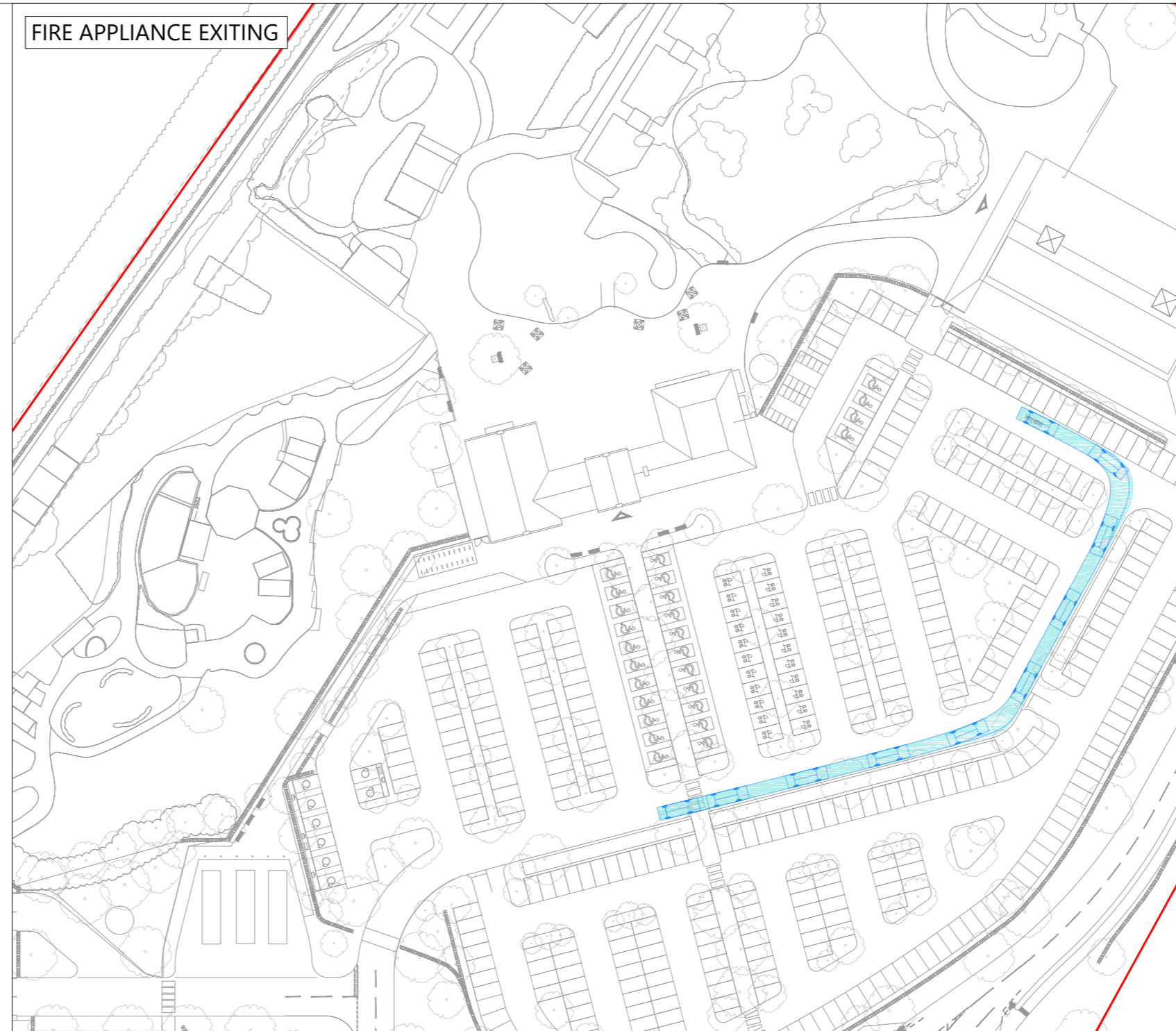
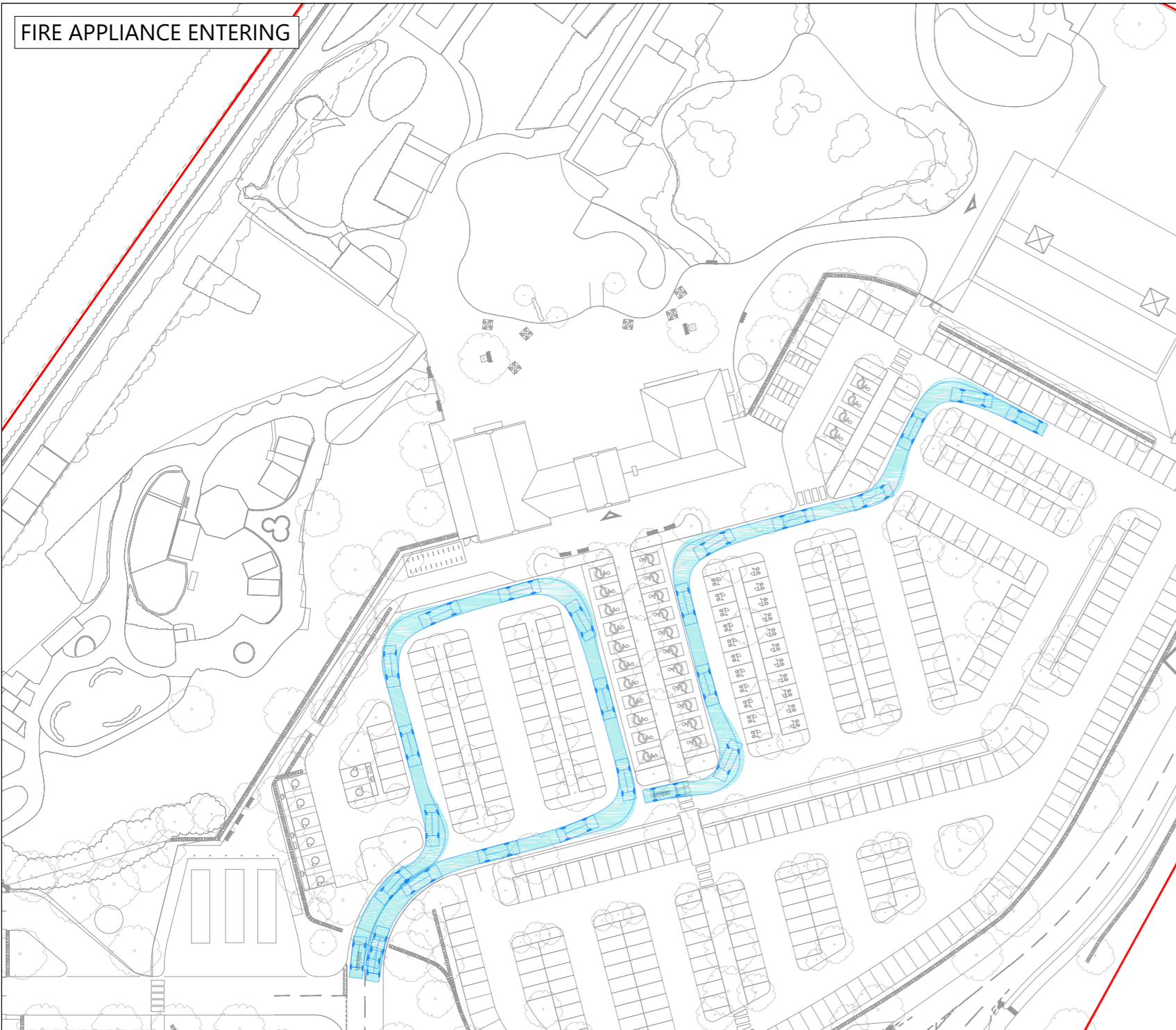
CLIENT: BIRDWORLD LTD AND HASKINS GARDEN CENTRE LTD

DRAWN: JD	CHECKED: DF	APPROVED: SAW
PROJECT No: ITB16329	SCALE @ A2: 1:1000	DATE: 18.08.23

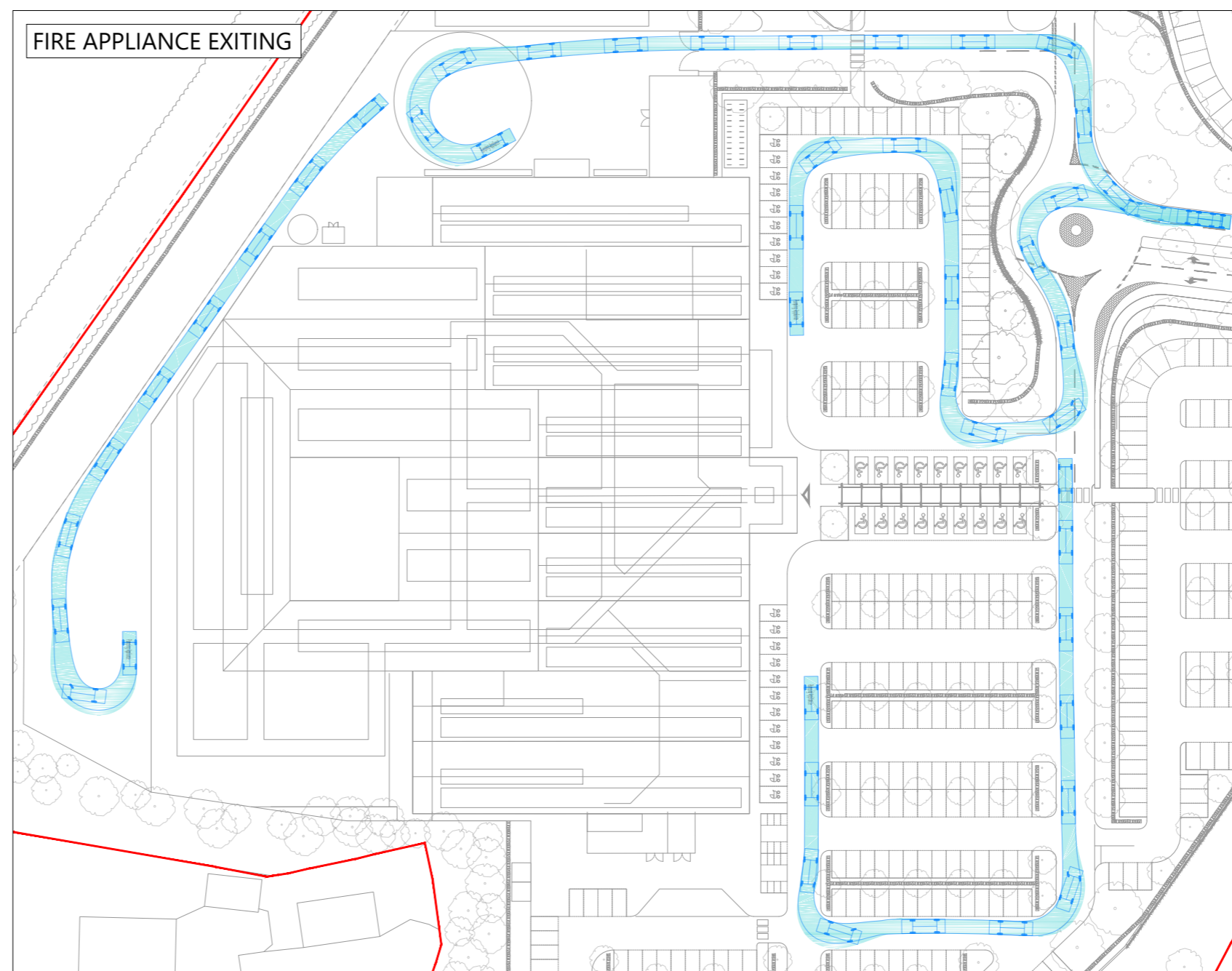
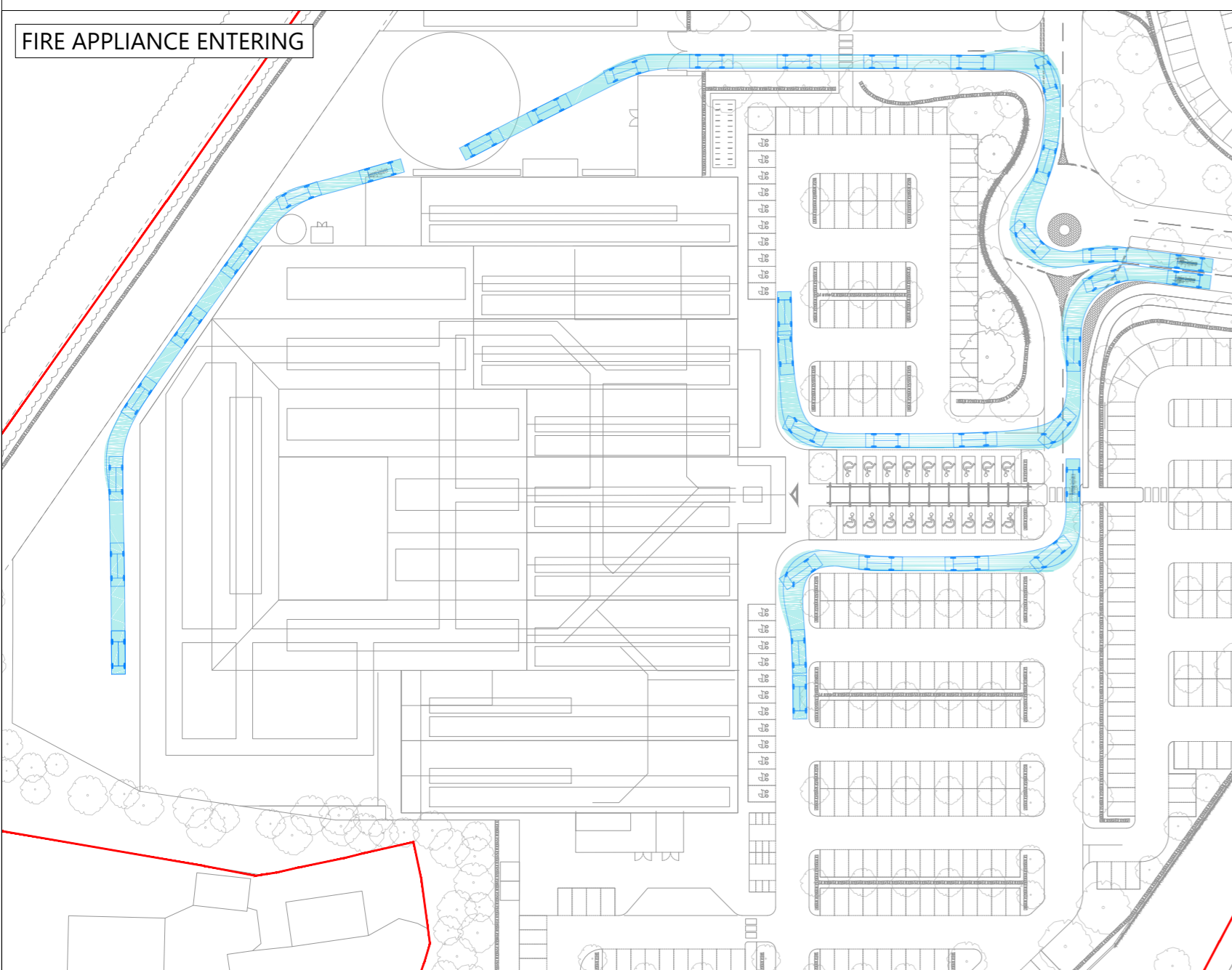
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Pumping Appliance
 Overall Length 7.900m
 Overall Width 2.500m
 Overall Body Height 3.300m
 Min Body Ground Clearance 0.350m
 Track Width 2.500m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 7.750m



REV	DATE	BY	DESCRIPTION	CHK	APP
E	23.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
D	11.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
C	28.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
B	02.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
A	23.10.23	JD	SITE LAYOUT UPDATED	DF	SAW

STATUS: FOR INFORMATION



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TITLE: SWEPT PATH ANALYSIS - FIRE APPLIANCE

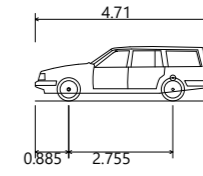
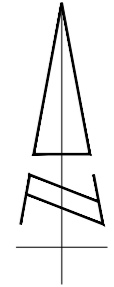
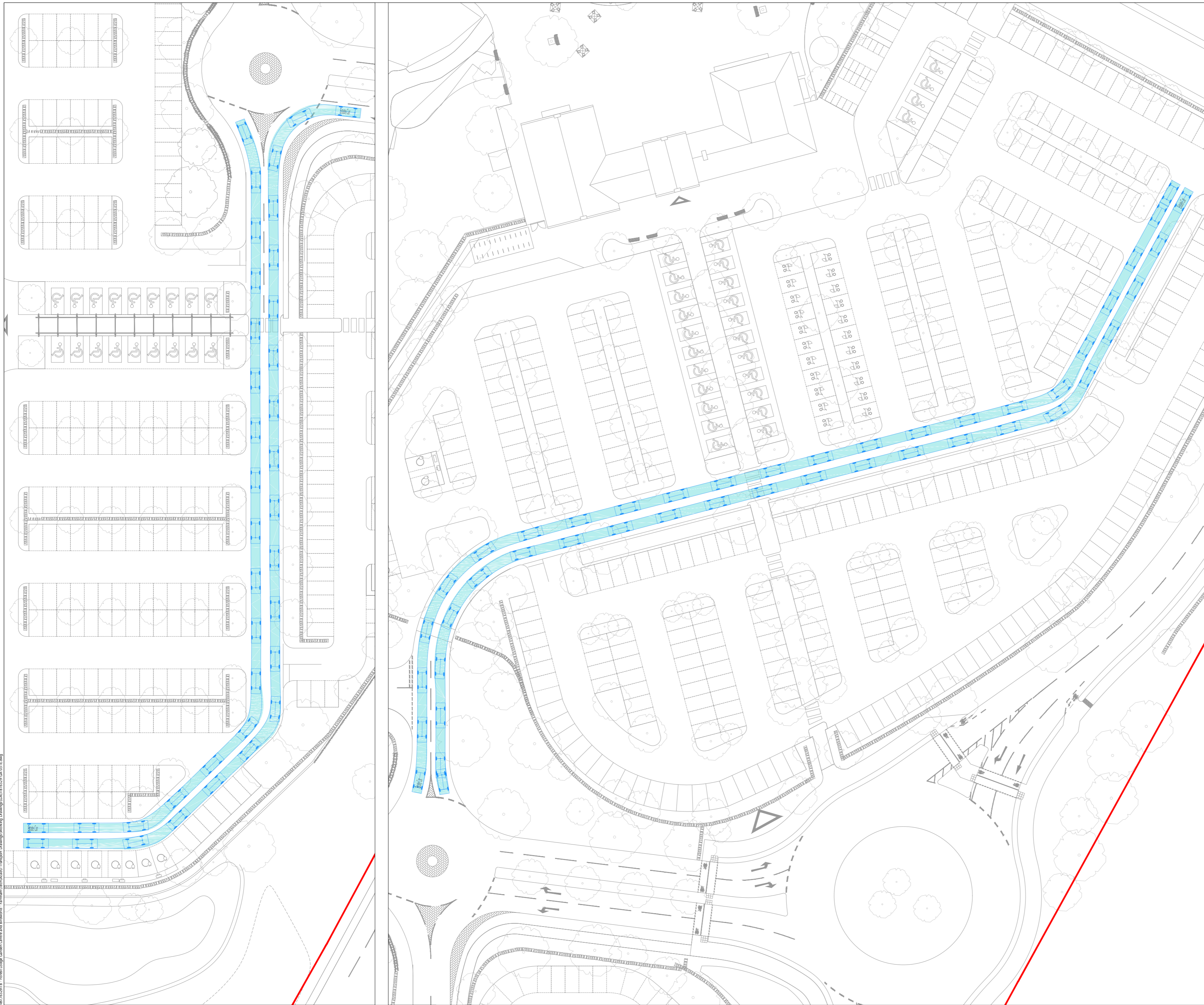
PROJECT: BIRDWORLD AND HASKINS FOREST LODGE GARDEN CENTRE

CLIENT: BIRDWORLD LTD AND HASKINS GARDEN CENTRE LTD

DRAWN:	CHECKED:	APPROVED:
JD	DF	SAW
PROJECT No: ITB16329	SCALE @ A2: 1:1000	DATE: 06.10.23
DRAWING No: ITB16329-GA-030		REV: E

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SCALE BAR @ 1:1000



Estate Car
 Overall Length 4.710m
 Overall Width 2.755m
 Overall Body Height 0.885m
 Min Body Ground Clearance 0.207m
 Max Track Width 1.756m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 5.950m

REV	DATE	BY	DESCRIPTION	CHK	APP
E	23.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
D	11.01.24	JD	SITE LAYOUT UPDATED	DF	SAW
C	28.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
B	02.11.23	JD	SITE LAYOUT UPDATED	DF	SAW
A	23.10.23	JD	SITE LAYOUT UPDATED	DF	SAW

STATUS: FOR INFORMATION



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 Basingstoke, Hampshire, RG21 4EB
 www.i-transport.co.uk
 Tel: 01256 898366

TITLE: SWEEP PATH ANALYSIS - ESTATE CAR

PROJECT: BIRDWORLD AND HASKINS FOREST LODGE GARDEN CENTRE

CLIENT: BIRDWORLD LTD AND HASKINS GARDEN CENTRE LTD

DRAWN:	JD	CHECKED:	DF	APPROVED:	SAW
PROJECT No:	ITB16329	SCALE @ A2:	1:500	DATE:	06.10.23

DRAWING No: ITB16329-GA-031 REV: E

Project: 16329 - Birdworld Garden - Centre and Buildings - Furniture (Architectural) - Transport Drawings (Working Drawings) GA-031.dwg
 7/1/2024 10:00:00 AM
 Drawing issued for feasibility consideration and planning purposes only. This drawing is not to be used for construction. I-Transport LLP accepts no responsibility for errors made by others in scaling from this drawing. Measurements should be taken from figured dimensions only. COM requirements considered at feasibility stage only. Further consideration required by detailed design team.
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APPENDIX H. Road Safety Audit and Designer's Response

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised; and
Auditor's View on the Design Organisation Response.**



Proposed Roundabout along the A325
Holt Pond

Client:
i-Transport

Client reference:
ITB16329

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

E: office@fenley.co.uk
www.fenley.co.uk

Report Status 4

Job no	RSA-23-140	Issue no	4	Date	November 2023
Prepared by	JJF	Verified by	ZB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-23/RSA-23-140-4				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	December 2023
Document reference and revision:	RSA-23-140-4
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	Hampshire County Council
Design Organisation:	i-Transport
Project Sponsor:	Haskins Garden Centre

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	JJF			3 rd November 2023
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	ZB	JJF	7 th November 2023
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			7 th November 2023
3	Design Organisation Response incorporated	Harry Cherrill on behalf of i-Transport			5 th December 2023
4	Audit's road safety view of response in respect of design change	JJF			20 th December 2023

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 proposal to form a three-arm roundabout along the A325 at Holt Farm as well as a development access which consists of a short section of two-lane dual carriageway and a mini-roundabout. The proposed roundabout is formed with a 44 metre inscribed circle diameter that accommodates a 9 metre wide circulatory to facilitate the two lane entries on each arm. The development arm of the roundabout is to consist of a short section of dual carriageway that links to a mini roundabout that serves a proposed garden centre to the south and attraction to the north as well as the service area associated with the garden centre. The scheme drawings identify that visibilities are achievable accord with observed 85th percentile speeds. As part of the works, a footway is to be provided to allow access to bus stops to the south as well as the public right of way through Alice Holt Forest to the north. Two options that relate to the southbound bus stop have been presented, which are both assessed; one where the existing southbound bus layby is retained and another where the bus stop is relocated to the southbound exit from the proposed roundabout. The scheme is to facilitate access to the proposed Haskins Garden Centre and Birdworld redevelopment.
- 2.2 The Audit Brief identifies the proposals do not include any Departures from Standard, whether related to strategic decisions or otherwise.
- 2.3 This Road Safety Audit was undertaken during November 2023 in accordance with the Road Safety Audit Brief and scheme drawings provided on the 17th October 2023 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Haskins Garden Centres. 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 the Audit Brief was sufficient for the purpose of the Audit instructed.
- 2.4 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 by Hampshire County Council to undertake Road Safety Audits of all stages within the County. The Audit Team consists of the following:
- Audit Team Leader**
Jamie Fenning *BSc(Hons), MIHE, MCIHT, MSoRSA, National Highways RSA Certificate of Competency*
Road Safety / Highway Engineer
- Audit Team Member**
Zane Beswick *MCIHT, MSoRSA*
Road Safety / Highway Engineer
- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the late morning of Friday 3rd November 2023

between the hours of 12:00 and 13:00. The site visit involved walking and driving around the local highway network for a 60-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was cloudy with clear patches, the road surface was damp and visibility was good. Both pedestrians and cyclists were observed during the site visit. Vehicular traffic was observed to include motorcycles, cars, passenger service vehicles, emergency response vehicles and light as well as goods vehicles. Vehicular speeds were not recorded by the Audit Team.

- 2.6 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



- 2.7 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.
- 2.8 The Design Organisation Response has been prepared by:
Name: Harry Cherrill
Position / Organisation: Senior Consultant, i-Transport
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.
- 2.10 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 current proposals that are subject to this document.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

A.1	LOCAL ALIGNMENT
	<i>No Road Safety Concerns regarding LOCAL ALIGNMENT have been raised at this stage</i>
A.2	GENERAL
A.2.1	PROBLEM
Location:	Scheme
Summary:	Introduction of proposals impact on the surface water drainage network
Acc Type:	Loss of control
<p>The A325 within the vicinity of the proposed works rises from south to north and is set with a camber, encouraging surface water to flow towards both sides of the carriageway where it drains within the soft verges. The proposals provide a three-arm roundabout and realign the existing carriageway on approach where kerbs are likely to be provided. The proposed kerbing will prevent surface water from draining to the soft verges. At this stage, no details have been provided to identify that a surface water drainage network is to be provided. Inadequate surface water drainage could result in ponding during inclement conditions which may lead to loss of control type incidents particularly during freezing conditions.</p>	
RECOMMENDATION:	
It is recommended that an adequate surface water drainage system is provided.	
<p>Location Plan:</p>  	

<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023</p>	
<p>Agreed - A surface water drainage network will be provided. This will be addressed through the detail design of the scheme.</p>	
<p>AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023</p>	
<p>Confirmation that a surface water drainage network will be provided, addresses the road safety concern raised at this stage.</p>	
A.2.2	PROBLEM
Location:	Proposed Roundabout
Summary:	Drivers approaching a splitter island may not become aware of the features at a safe distance
Acc Type:	Vehicle loss of control
<p>The A325 is an unlit two-way single carriageway road that is subject to a 50mph speed limit and allows access to Haskins Garden Centre and Birdworld via separate simple priority junctions off the northern side of the carriageway. The proposals include the provision of a 44 metre ICD three-arm roundabout that is to serve both facilities. The proposals include a kerbed central island as well as splitter islands on each arm; however, the scheme drawing does not illustrate any measures to highlight the presence of the proposed infrastructure. As such, there is a risk that drivers will not become aware of the kerbed features at a safe distance which could result in a vehicle striking the physical island and loss of control type incidents.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that appropriate bollards and chevrons are provided to increase the presence of the junction.</p>	
<p>Location Plan:</p>	
 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023</p>	
<p>Agreed - Keep left and plain faced bollards will be provided on the splitter islands and chevrons on the central island where appropriate. In addition, street lighting will be provided in accordance with HCC requirements. This will be addressed through the detail design of the scheme.</p>	

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023	
<i>Confirmation that a bollards and chevrons are to be provided, addresses the road safety concern raised at this stage.</i>	
A.2.3	PROBLEM
Location:	Proposed Circulatory
Summary:	Utility covers are present within the proposed circulatory
Acc Type:	Vehicle loss of control
<p>A number of utility covers are present within the verges alongside the A325. The proposals include the provision of a 44 metre ICD three-arm roundabout that accommodates a 9 metre circulatory. As illustrated on the scheme drawing, a number of covers are present within the existing verge that will form the circulatory. Whilst covers within a carriageway generally do not raise any road safety concerns, provided they are level with the surrounding surface and benefit from suitable frictional properties, the Audit Team have concerns that covers within a circulatory where traffic is turning, could lead to loss of control type collisions, particularly for two-wheeled vehicles.</p>	
RECOMMENDATION:	
It is recommended that the existing covers are relocated outside the circulatory.	
Location Plan:	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023	
Agreed – All inspection chambers will be relocated appropriately to ensure that no utility covers are present within the circulatory. This will be addressed through the detail design of the scheme.	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023	
<i>Confirmation that all covers will be relocated appropriately, addresses the road safety concern raised at this stage.</i>	
A.2.4	PROBLEM
Location:	Proposed mini-roundabout
Summary:	Heavy goods vehicles (HGV) may not be able to access the service yard
Acc Type:	Sideswipe type collision
<p>The proposals include the on-site highway associated with a proposed redevelopment of Haskins Garden Centre as well as Birdworld, which consists of a small section of dualled carriageway</p>	

between the A325 and a mini-roundabout serving two separate parking facilities. The scheme drawings illustrate that the proposed garden centre is to be serviced via a simple priority access off the northern arm, however, no swept path analyses have been provided. The Audit Team have concerns that the HGV's will not be able to negotiate the infrastructure which could lead to sideswipe type collisions as well as the vehicles encroaching the footway increasing the risk to pedestrians.

RECOMMENDATION:

It is recommended that the infrastructure is adequate for the expected vehicles.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023

Agreed – Vehicle swept path analysis of typical service delivery vehicles likely to be associated with the development has been undertaken and shown on Drawing No. ITB16329-GA-021 and ITB16329-GA-022. This demonstrates that vehicles can enter, turn and exit the internal arrangement including the service areas. Whilst it is noted that some movements result in the overrun of the opposite lane, these movements will be infrequent, in a low traffic speed environment and with good intervisibility in all directions.

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023

Confirmation that the infrastructure is adequate, addresses the road safety concern raised at this stage.

A.3 JUNCTIONS

A.3.1 PROBLEM

Location: Northbound approach

Summary: Straight ahead traffic is required to utilise Lane 2 on approach to the roundabout

Acc Type: Sideswipe type collisions

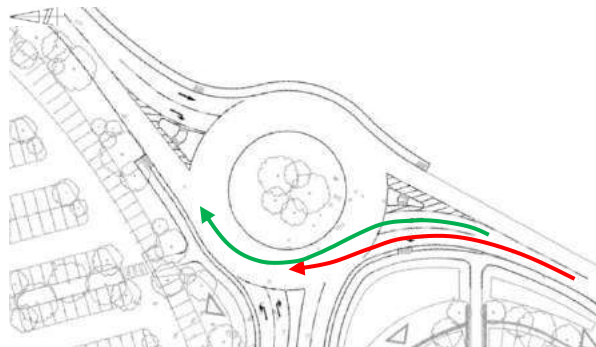
The proposals include the provision of a three-arm roundabout along the A325 which is to allow access to a redeveloped garden centre and wildlife attraction. The proposed roundabout junction consists of a 44 metre inscribed circle diameter with a 26 metre diameter central island generating a 9 metre circulatory carriageway. Whilst a two-lane exit is to be provided along the proposed

access arm, the A325 exits are to consist of single lane merges with a bus stop provided on the southbound exit where traffic should not be travelling at high speed and an area of central hatching is provided which optimises forward visibility should a vehicle wish to overtake. Two-lane approaches are provided on each arm which are designated via arrow road markings just in advance of the give-way lines. At roundabouts with two lane entries, the nearside lane (Lanes 1) is generally utilised by straight ahead traffic as well as left turning traffic while the offside lane (Lane 2) is utilised by vehicles continuing straight. Whilst the circulatory carriageway is adequate for two lanes of traffic and the physical width of the exits should allow for merges, the Audit Team is concerned that northbound traffic continuing straight ahead, is likely to utilise the nearside left turn lane which could lead to sideswipe type collisions on the circulatory.

RECOMMENDATION:

It is recommended that measures are provided to encourage the use of the offside lane (Lane 2) for straight ahead eastbound traffic

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023

Agreed - Road markings could be introduced on approach to the roundabout to direct drivers toward the offside lane unless turning left. This would position drivers travelling ahead in the offside lane by default. The road markings will be considered further at detailed design stage. Furthermore, signing will be provided in line with TSRGD providing directional and lane signage.

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023

Confirmation that road markings will be considered during the detail design stage to encourage traffic to approach in Lane 2, addresses the road safety concern raised at this stage.

A.3.2 PROBLEM

Location: A325

Summary: The proposed junction may not be clearly visible to approaching traffic

Acc Type: Vehicle loss of control and overshoot type collisions

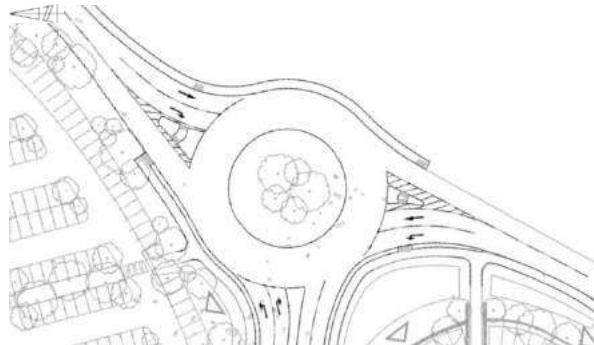
The A325 is a single carriageway two-way road that is subject to a 50mph speed limit and rises from south to north before levelling out in proximity to the existing Haskins Garden Centre with a

crest present just to the south of the existing access. The proposals include the provision of a 44 metre ICD roundabout along the A325 in the vicinity of the crest. The scheme drawings provided with the Audit Brief, detail that forward visibility is achievable in accordance with the 85th percentile speeds observed, which comply with the speed limit of the road, over a distance of 1.5x the SSD. This level of visibility will allow the majority of road users to become aware of the proposed roundabout, however, the Audit Team have concerns that not all road users will become aware of the junction ahead at a safe distance which could lead to loss of control and overshoot type collisions.

RECOMMENDATION:

It is recommended that measures are provided to ensure adequate warning of the junction ahead is achievable.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023

Agreed – Street lighting and advanced directional signage will be provided in accordance with HCC requirements along with reflective bollards and appropriate signage, which will be clearly visible from far in excess of the 160 metre forward visibility envelopes illustrated. Therefore, all road users will become aware of the junction at a safe distance

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023

Confirmation that measures will be provided to ensure that all approaching users become aware of the junction at a safe distance, addresses the road safety concern raised at this stage.

A.3.3 PROBLEM

Location:	Proposed mini-roundabout
Summary:	No lane designation signage is provided
Acc Type:	Sideswipe type collision

The proposals include the on-site highway associated with a proposed redevelopment of Haskins Garden Centre as well as Birdworld and consists of a small section of two-lane dualled carriageway between the A325 and a mini-roundabout serving two separate parking facilities. The scheme drawing illustrates that the lanes on approach to the mini-roundabout are to be designated

and that the ghost splitter island on the southern arm is to extend into the circulatory to force traffic in the nearside lane, to enter the proposed garden centre parking facility. The Audit Team have concerns that approaching drivers / riders won't become aware of the lane designation at a safe distance which could result in late lane changes and sideswipe type collisions.

RECOMMENDATION:

It is recommended that measures are provided to ensure that road users become aware of their route ahead.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023

Agreed – Directional signage will be provided and assessed through the detailed design of the scheme.

AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023

Confirmation that the signage will be provided, addresses the road safety concern raised at this stage.

A.4 WALKING, CYCLING AND HORSE RIDING

A.4.1 PROBLEM

Location: Proposed footways

Summary: Forces generated by large vehicles could destabilise a pedestrian

Acc Type: Pedestrian fall and vehicle to pedestrian type collisions

The A325 is straight in alignment, subject to a 50mph speed limit and passes the existing priority junctions associated with the Haskins Garden Centre and Birdworld attraction that are both accommodated within the application site. The proposals include the provision of a three-arm roundabout along the A325 which is to serve a redeveloped Garden Centre and Birdworld. The scheme drawings provided with the Audit Brief identify that a footway is to be accommodated both sides of the development access in proximity of the roundabout. The proposed footway is to extend to bus stops to the south and continue along the eastern side of the carriageway to a public right of way, to the north with uncontrolled crossings provided which benefit from refuges accommodated at the splitter islands on each arm. Whilst the general provision of a footway is

acceptable, the Audit Team has concerns that wind forces generated by large vehicles passing at high-speed, could destabilise a pedestrian leading to a fall and personal injury or vehicle to pedestrian type collisions.

RECOMMENDATION:

It is recommended that the proposed footway is offset from the carriageway by an appropriate margin.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023

Agree – The design has been revised to provide a minimum margin of 500mm between the edge of carriageway and footway edge (see Drawing ITB16329-GA-106 revision C).

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023

Confirmation that a margin is to be provided, addresses the road safety concern raised at this stage.

A.4.2 PROBLEM

Location: East of the A325

Summary: Land to the east of the carriageway is set at a lower level


Acc Type: Pedestrian fall and personal injury

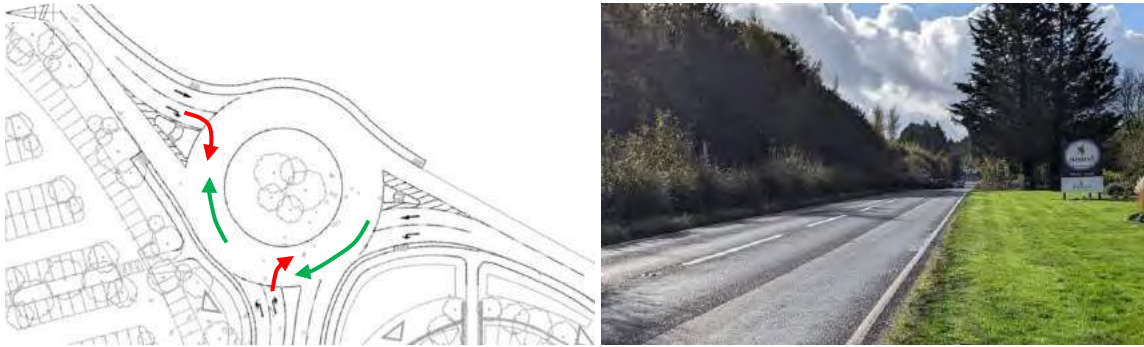
In the vicinity of the proposals, the A325 is set at a higher level than the land to the east which consists of the Alice Holt Forest. Observations indicate that although dense vegetation is present, the verge immediately adjacent to the carriageway appears to be set as an embankment and falls away abruptly. The proposals include the provision of a footway alongside the A325 which is to allow pedestrian access between a proposed redeveloped Haskins Garden Centre / Birdworld and a public right of way through the Alice Holt Forest. The Audit Team have concerns that insufficient space is present between the proposed footway and Alice Holt Forest to provide an adequate embankment which could result in rutting and failure of the footway as well as pedestrian falls and personal injuries.

RECOMMENDATION:

It is recommended that an adequate embankment is provided.

<p>Location Plan:</p>	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023</p>	
<p>Agree – The boundary of Alice Holt Forest is offset from the A325 carriageway by circa 7 metres and therefore ample space is present to provide a margin besides the carriageway, the illustrated footway and footway cycleway and a sufficient embankment which accords with guidelines.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023</p>	
<p>Confirmation that an adequate embankment will be provided, addresses the road safety concern raised at this stage.</p>	
A.4.3	PROBLEM
Location:	Proposed roundabout
Summary:	Cyclists accessing the site, would be required to negotiate the roundabout
Acc Type:	Vehicle to cyclist and pedestrian collisions
<p>The A325 allows access to the Haskins Garden Centre and Birdworld attraction via simple priority junctions off the western side of the carriageway. The proposals include the stopping up of the access to the Garden Centre and provision of a three-arm roundabout which is to serve both the redeveloped Garden Centre and Birdworld. The documents provided with the Audit Brief detail that a ‘greater provision of cycle parking is to be included within the proposals’ and therefore it can be assumed that cyclist trips are likely to increase which could include the young and those with less experience. Whilst cyclists can safely manoeuvre at a roundabout which accommodates two lane approaches, the Audit Team have concerns that young and less experienced cyclists may not confidently navigate the junction which could lead to vehicle to cyclist type collisions.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that the proposed footway and crossing facilities are upgraded to accommodate cyclists to allow for the junction to be bypassed.</p>	

<p>Location Plan:</p> 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023</p>	
<p>Agree – The design has been revised to provide cycle on / off-slips pedestrian and cycle crossing facilities to allow the junction to be bypassed with the 2 metre footway graded to provide a 3.0 metre shared footway cycleway. Appropriate corduroy paving has been provided to denote the end/start of shared surface. This is shown on Drawing ITB16329-GA-106 revision C and has resulted in the minor relocation of the junction, circa 0.5 metres further northwest.</p>	
<p>AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023</p>	
<p><i>Confirmation that the proposed footway has been widened and upgraded will provide a safe route for cyclists and addresses the road safety concern raised at this stage. The minor relocation of the junction raises no further road safety concerns.</i></p>	
A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Proposed roundabout
Summary:	Traffic may attempt to turn right onto the circulatory
Acc Type:	Head-on type collisions
<p>The proposals include the provision of a 44 metre ICD roundabout along the A325 which accommodates two lane entries and is to allow access to a redeveloped Haskins Garden Centre as well as Birdworld attraction. The scheme drawing provided with the Audit Brief, illustrates that directional arrow road markings are to be provided on the approach to the give-way lines. Whilst the provision of arrow road markings provide guidance as to the route ahead, the Audit Team have concerns that right turn arrow markings on the approach to a roundabout, could encourage traffic to turn right onto the circulatory which could lead to head-on type collisions. This is of particular concern due to the likelihood of the redevelopment attracting foreign road users.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that chevron signs are provided.</p>	

<p>Location Plan:</p> 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7th November 2023</p>	
<p>Agreed – Chevron signs will be provided on the central island to highlight the clockwise nature of the circulatory and to deter traffic turning right onto the circulatory. The road markings will be further assessed in consultation with Engineers from Hampshire County Council through the detailed design approval process.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 20th December 2023</p>	
<p>Confirmation that chevron signs will be provided on the central island should deter approaching vehicles from attempting to turn right and therefore, addresses the road safety concerns at this stage.</p>	
A.5.2	PROBLEM
Location:	Proposed roundabout
Summary:	The proposed junction may not be clearly visible to approaching traffic
Acc Type:	Vehicle loss of control and overshoot type collisions
<p>The A325 is a single carriageway two-way road that does not benefit from street lighting. The proposals include the provision of a 44 metre ICD roundabout which is to allow access to a redeveloped Haskins Garden Centre and Birdworld. At this stage, the scheme drawings do not illustrate that street lighting is to be provided. The Audit Team have concerns that approaching drivers may not become aware of the proposed roundabout at a safe distance which could lead to loss of control type and overshoot type collisions.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that street lighting is provided at the proposed junction.</p>	

Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 5 th December 2023 following formal issue of this Stage 1 Road Safety Audit on the 7 th November 2023	
Agreed - Street lighting will be provided in accordance with HCC requirements. This will be addressed as part of the detailed design process.	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 20 th December 2023	
Confirmation that street lighting is to be provided, addresses the road safety concern raised at this stage.	

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: 20th December 2023

Audit Team Member

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

Signed: 

Position: Road Safety / Highway Engineer

Organisation: Fenley Road Safety Limited

Date: 7th November 2023