

Road Safety Audit Report

Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.



Proposed Priority Access off Chalcraft Lane Bersted

Client:
i-Transport

Client reference:
ITB14224

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-068	Issue no	3	Date	September 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-068-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	September 2020
Document reference and revision:	RSA-20-068-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Landform Bersted Limited

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			31 st August 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	7 th September 2020
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 September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			8 th September 2020

Contents:

1.0	Project Details	1
2.0	Introduction	2
3.0	Items Raised in any previous Road Safety Audits	3
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 Road Signs, Carriageway Markings and Lighting	
5.0	Audit Team Statement	11

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 priority access off the northern side of Chalcraft Lane in Bersted. The works include the stopping up of a lay-by in order to provide the proposed junction that allows access to a 6.3 metre wide access road that accommodates a 3.0-metre footway / cycleway along the northern side as well as two priority accesses; one of which is to serve 20 dwellings and the other circa 3,300 sqm of commercial floorspace. It is understood that the proposed 6.3 metre wide access road could allow access to a further 210 dwellings on land to the northwest.
- 2.2 The Audit Brief identifies that the proposals do not include any Departures from Standard, whether related to strategic decisions or otherwise.
- 2.3 The Road Safety Audit was undertaken during August and September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Landform Bersted Limited. 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.
- 2.4 The Road Safety Audit has been undertaken by an Audit Team whose qualifications and experience accord with the requirements of GG119. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 4:30pm and 5:15pm. The site visit involved walking and driving around the local highway network for a 45-minute period whilst observing local infrastructure and current off-peak traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians but no cyclists were observed during the site visit. Vehicular traffic to include cars, light and heavy goods vehicles were also observed.
- 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**.

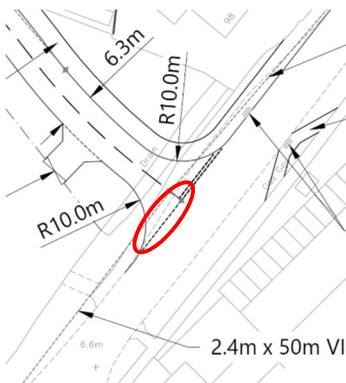
Design Organisation Response

- 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: Dominic Smith
Position / Organisation: Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.

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.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

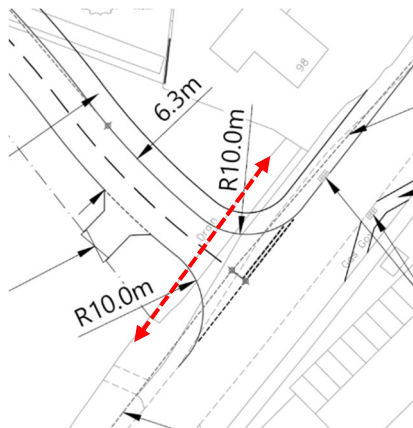
A.1	LOCAL ALIGNMENT
	<i>No Road Safety Concerns regarding LOCAL ALIGNMENT have been raised at this stage</i>
A.2	GENERAL
A.2.1	PROBLEM
Location:	Proposed access, Chalcraft Lane
Summary:	Existing road gully will be within the path of vehicles
Acc Type:	Loss of control
Chalcraft Lane benefits from a network of road gullies that provide for the drainage of surface water that accumulates on the carriageway. Following implementation of the proposed access, a pair of existing gullies will be situated within the path of a vehicle or cyclist approaching and entering the proposed access. A road gully within the path of a vehicle could give rise to loss of control type incidents especially for two wheeled vehicles and vehicles undertaking a braking manoeuvre.	
RECOMMENDATION:	
It is recommended that the gullies are relocated and an adequate surface water drainage network is provided.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020	
Accepted – to be addressed as part of the S278 Detailed Design.	
A.2.2	PROBLEM
Location:	Proposed access
Summary:	A ditch and number of outlets / headwalls are present within the area of the works
Acc Type:	Vehicle loss of control
A drainage ditch is present along the northern side of Chalcraft Lane that accommodates a number of headwalls and outlets from the network of road gullies that are situated along the channel line and allow surface water for the drainage of surface water. The proposals provide a priority junction	

that allows access to a 6.3-metre wide carriageway that accommodates a 3-metre wide shared footway / cycleway along the northern side, which will have an impact on the ditch and outlets that are present. Inadequate surface water drainage could result in ponding and loss of control incidents.

RECOMMENDATION:

It is recommended that measures are provided to ensure that surface water drains adequately

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020

Accepted – to be addressed as part of the S278 Detailed Design.

A.3 JUNCTIONS

A.3.1 PROBLEM

Location: Proposed access, northern verge of Chalcraft Lane

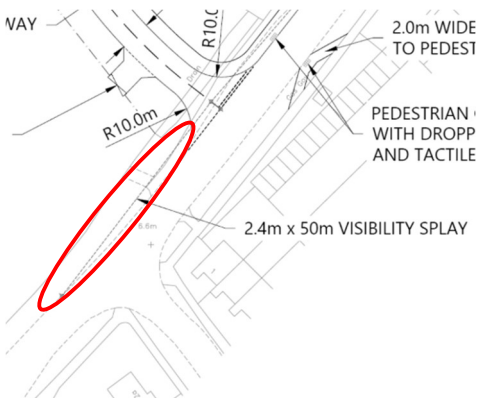
Summary: Foliage within the verge to the south of the proposed access restricts visibility

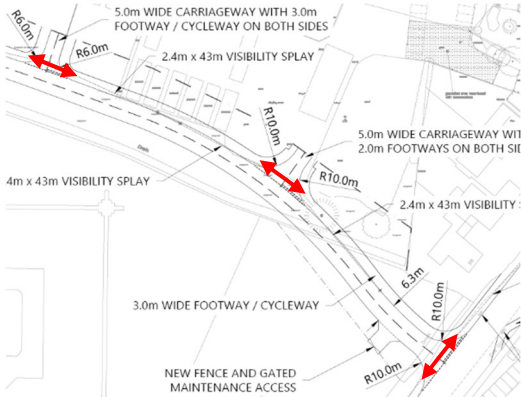
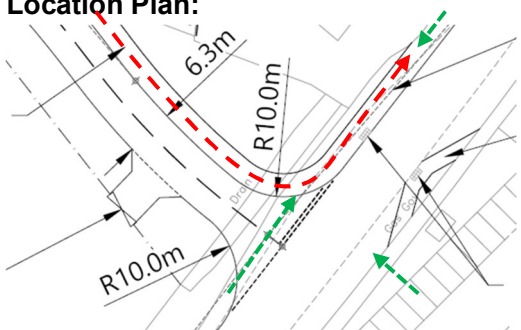
Acc Type: Side impact and rear end collision

Chalcraft Lane forms part of a primary route between North Bersted and Aldwick and is subject to a 30mph speed limit. The proposals include the provision of a simple priority access off the northern side of the carriageway from which the scheme drawing illustrates that 2.4 x 50 metre visibility splays are achievable in accordance with the 30mph speed limit of the road. However, the verge along the southern side of the proposed access is overgrown with foliage encroaching the carriageway in places. The tree canopies and vegetation will restrict visibility to and from a vehicle exiting the proposed simple priority access which could give rise to side impact or rear end collision when a vehicle proceeds when it is not safe to do so.

RECOMMENDATION:

It is recommended that the appropriate visibility splays are maintained clear and free of obstructions.

Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020	
Accepted – vegetation encroaching within the visibility splay to be cut back as part of the site access work. On-going maintenance of vegetation within the highway is a statutory responsibility of the local highway authority.	
A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Chalcraft Lane and Proposed access road
Summary:	Full height kerbs will be an obstruction to pedestrians especially the mobility impaired
Acc Type:	Vehicle pedestrian and pedestrian trips and falls
Ffairfach Close provides access to the existing commercial development off Chalcraft Lane where pedestrians are required to walk in the carriageway. The proposals provide a spine road accessed off a simple priority junction with Chalcraft Lane and accommodates two priority accesses off the northern side that are to serve a commercial development and 20 dwellings. A shared footway / cycleway is provided along the northern side of the proposed carriageway that allows cyclists and pedestrians to join the existing footway along the northern side of Chalcraft Lane; however, the scheme drawings do not identify that dropped kerbs are to be provided where users are required to cross the proposed accesses. Whilst full height kerbs will become an obstruction to pedestrians particularly the mobility impaired or those walking with buggies and children on a scooter, the lack of a tactile warning could result in a visually impaired pedestrian entering the carriageway when it is not safe to do so which raises the risk of a vehicle-pedestrian collision.	
RECOMMENDATION:	
It is recommended that dropped kerbs with a maximum upstand of 6mm and tactile paving are provided where appropriate.	

Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020	
Accepted – design amended to incorporate tactile paving and dropped kerbs (see drawing ITB14224-GA-001 Rev C).	
A.4.2	PROBLEM
Location:	Proposed footway / cycleway, northern footway
Summary:	Visually impaired pedestrians could step into the path of a cyclist without warning
Acc Type:	Cyclist-pedestrian collisions
Chalcraft Lane is subject to a 30mph speed limit and accommodates a footway along each side of the carriageway. The proposals provide a 3.0-metre shared footway cycleway along the northern side of the proposed access carriageway that wraps around the corner radius to meet the existing footway of Chalcraft Lane. The scheme drawings illustrate that the existing parking bay is to be stopped up and a dropped kerb crossing point with tactile paving provided to allow access to the footway on the eastern side of Chalcraft Lane; however, no measures are provided to highlight the transition between the existing footways and proposed shared facility where cyclists are likely to be observed. As such, pedestrians particularly the visually impaired, could step into the path of a cyclist or a cyclist could continue on the footway, raising the risk of a cyclist-pedestrian collision.	
RECOMMENDATION:	
It is recommended that sufficient warning is provided to highlight the change of use.	
Location Plan:  	

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020

Accepted – drawing has been amended to incorporate signing and corduroy paving to denote change of use.

A.4.3 PROBLEM

Location: Proposed crossing point, southern footway Chalcraft Lane

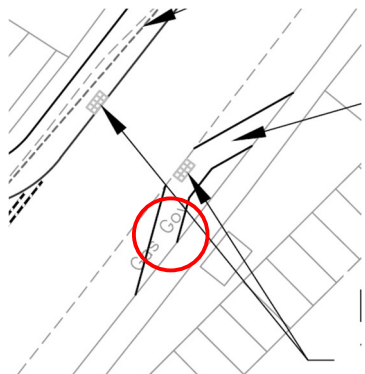
Summary: Existing street lighting column will become an obstruction to pedestrians

Acc Type: Pedestrian collision and pedestrian trips and falls

Chalcraft Lane benefits from street lighting with a number of street lighting columns located within the existing verge to the east of the carriageway. The proposals provide a 2.0-metre footway link from the existing footway to a proposed uncontrolled crossing point on Chalcraft Lane. The Audit Team observed that an existing streetlight column may be situated at this location which will be located within the proposed footway and be an obstruction to pedestrians. Such an obstruction could be struck by a pedestrian or force one to enter the carriageway suddenly raising the risk of vehicle collisions with pedestrians as well as trips and falls.

RECOMMENDATION:

It is recommended that the street lighting column is relocated out of the footway

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020

Accepted – crossing point has been relocated as to avoid conflict with lighting column (see drawing ITB14224-001 Rev C).

A.4.4 PROBLEM

Location: Proposed crossing point, eastern footway of Chalcraft Lane

Summary: The verge to the east of the carriageway forms an embankment

Acc Type: Loss of control and vehicle-pedestrian collisions

Chalcraft Lane is subject to a 30mph speed limit and accommodates a footway along each side of the carriageway with the footway to the east beyond a verge and set at a higher level. The scheme drawings identify that an uncontrolled crossing point is to be provided to the north of the access. Due to the gradient of the verge on the eastern side of Chalcraft Lane, the proposals

provide an angled 2.0-metre footway link from the existing footway to the crossing point; however, scheme drawings do not detail the effect of the likely crossfall towards the carriageway. As such, a user of a wheeled device such as a child on a scooter or wheelchair user, approaching the crossing point may not become aware of the crossfall combined with the steep incline towards the carriageway and could inadvertently lose control and continue into the path of an oncoming vehicle.

RECOMMENDATION:

It is recommended that the crossing point is set at a maximum gradient of 1 in 12 down to the carriageway.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020

Accepted – to be addressed as part of the S278 Detailed Design.

A.4.5 PROBLEM

Location: Proposed footway / cycleway, northern footway

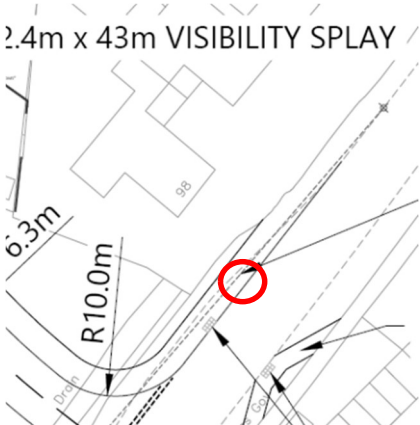
Summary: Services covers will be an obstruction

Acc Type: Pedestrian trips and falls

Chalcraft Lane accommodates a number of utility covers within the existing footway, verge, and carriageway. The proposals include the provision of a priority access off the western side of Chalcraft Lane that accommodates a 3.0-metre footway cycleway along the northern radius which ties into the local pedestrian network. The scheme stops up an existing parking bay situated along the western side of the Chalcraft Lane carriageway where a number of the utility covers are present and will be located within the footway following the works. Raised or sunken utility covers along a pedestrian desire line, will be an obstruction and trip hazard.

RECOMMENDATION:

It is recommended that service covers are adjusted or relocated accordingly.

Location Plan: 2.4m x 43m VISIBILITY SPLAY  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 8th September 2020 following formal issue of this Stage 1 Road Safety Audit on the 7th September 2020	
Accepted – to be addressed as part of the S278 Detailed Design.	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
	<i>No Road Safety Concerns regarding ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING have been raised at this stage</i>

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: 7th September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 7th September 2020

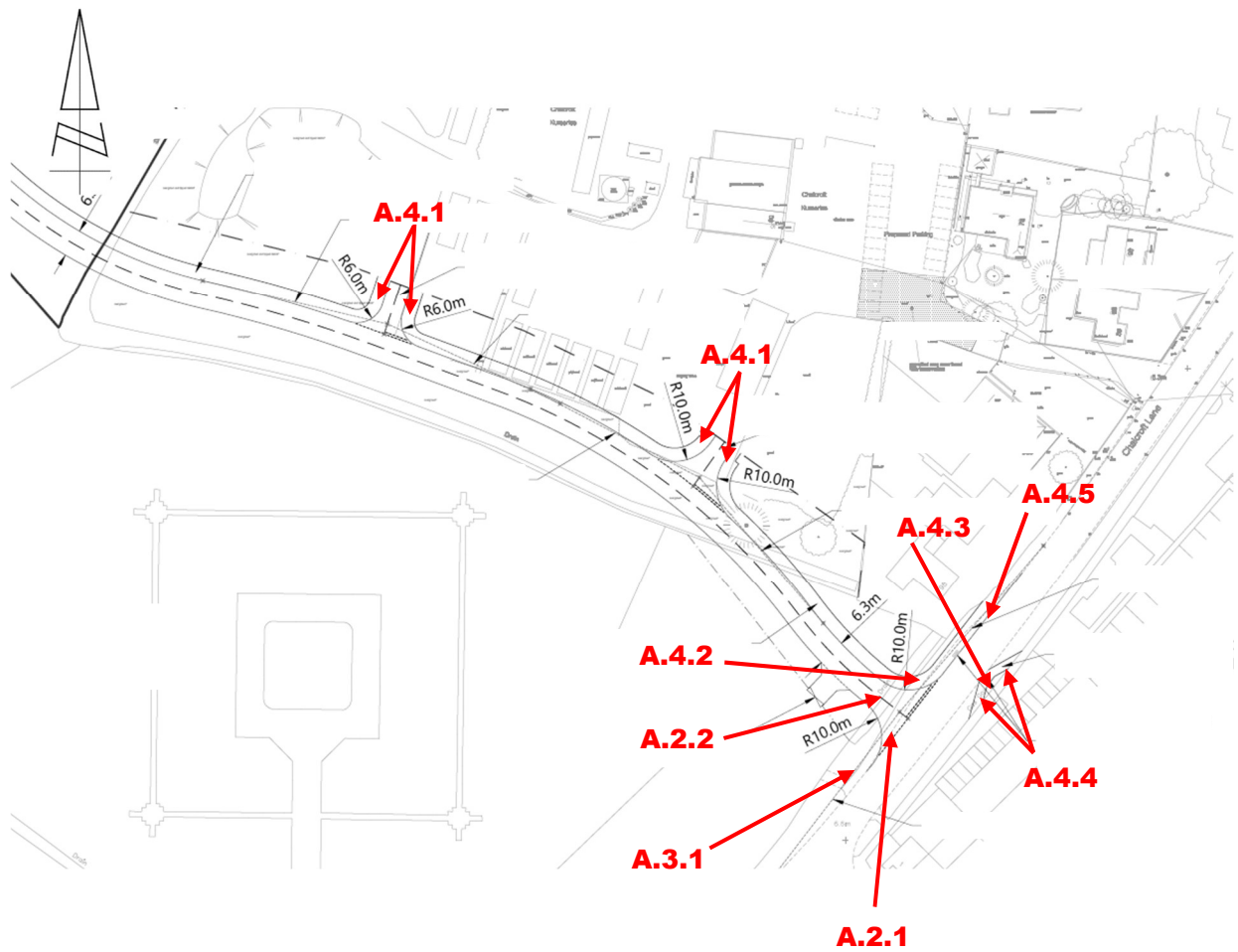
Appendix A1

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	DS/ITB14224-007	-	Road Safety Audit Brief
	AI/IN/ITB14224-002 R	-	Transport Statement
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB14224-GA-001	B	Site Access Arrangement
	ITB14224-GA-002	A	Swept Path Analysis – Superlarge 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	ITB14224-GA-001	C	Site Access Arrangement

fenley