

ROAD SAFETY AUDIT BRIEF TEMPLATE (DMRB GG119)

Table C.1 Project Summary

Date:	<i>22nd November 2022</i>
Document Reference:	<i>70086660-WSP-RSA-1-Brief-C2C</i>
Prepared by:	<i>WSP</i>
On behalf of:	<i>Greater Cambridge Partnership</i>
AUTHORISATION SHEET	
Project:	<i>Cambs JPSF – Cambourne to Cambridge (C2C) TWA0 Stage</i>
Report title:	<i>Cambourne to Cambridge - RSA Stage 1</i>
PREPARED BY:	
Name:	<i>Ben Newman</i>
Signed:	<i>BN</i>
Organisation:	<i>WSP</i>
Date:	<i>22nd November 2022</i>
I APPROVE THE RSA BRIEF AND INSTRUCT THE RSA TO TAKE PLACE ON BEHALF OF THE OVERSEEING ORGANISATION	
Name:	<i>Jo Baker</i>
Signed:	<i>JMB</i>
Organisation:	<i>Greater Cambridge Partnership</i>
Date:	<i>22nd November 2022</i>

Table C.2 General Details

General Details					
Highway scheme name and road number:		Cambs JPSF – Cambourne to Cambridge			
Type of scheme:	Proposed Public Transport Route (PTR) between Cambourne and Cambridge including a new travel hub site off the A428/A1303 and new cycling and walking facilities doubling as emergency and maintenance access. A new bus gate is also proposed to the west of the Long Road / St Neots Road Junction. The Bus Gate includes the realignment of a short section of St Neots Road and the inclusion of a turning head to allow vehicles heading eastbound along St Neots Road to turn back avoiding the Bus Gate and PTR. Additional background information regarding the proposed scheme can be found on the Greater Cambridge Partnership’s webpage.				
RSA stage tick as appropriate.		1 ✓	2	3	4
		Interim			
Overseeing Organisation details		Design organisation details			
Greater Cambridge Partnership		WSP UK Ltd			
Police contact details		Maintaining agent contact details			
Not required (Required for stage 3 RSAs)		Not required			
RSA team membership					
Cambridgeshire County Council to advise					
Terms of reference					
GG 119					

Table C.3 Scheme Details

Scheme description/objective
<p>General</p> <p><i>The C2C project will provide improved public transport links - connecting people to places of employment, study and key services - and help existing and new communities along the A428/A1303 grow sustainably in the coming years.</i></p> <p><i>The key objectives of the C2C project are:</i></p> <ul style="list-style-type: none"> <i>To achieve improved access to support the economic growth of Greater Cambridge.</i> <i>To deliver a sustainable transport network/system that connects areas between Cambourne and Cambridge along the A428/A1303</i> <i>Contribute to enhanced quality of life by relieving congestion and improving air quality within the surrounding areas along the A428 /A1303 and within Cambridge city centre</i> <p><i>A stage 1 RSA is required for the works that will impact on the public highway including the proposed junctions between the proposed PTR and the public highway.</i></p>
<p>Design standards applied to the scheme design</p> <p><i>Britpave Guided Busway Design Handbook (2017 Edition)</i></p> <p><i>CD 109 - Highway Link Design</i></p> <p><i>CD 123 - Geometric design of at-grade priority and signal-controlled junctions</i></p> <p><i>CD 127 - Cross-sections and headrooms</i></p> <p><i>CD 143 - Designing for walking, cycling and horse-riding</i></p> <p><i>CD 195 - Designing for cycle traffic</i></p> <p><i>Cycle Infrastructure Design LTN 1/20</i></p> <p><i>Manual for Streets 1 & 2</i></p> <p><i>Traffic Signs Manual</i></p> <p><i>Inclusive Mobility - Dec 2021</i></p> <p><i>Guidance on the Use of Tactile Paving Surfaces - Dec 2021</i></p>

Table C.3 Scheme Details Cont.

Design Speeds
<p>Public Transport Route:</p> <ul style="list-style-type: none"> Links = 85kph Junctions, Bus Stops, Pedestrian Crossings, and other discontinuities = 50kph <p>Envisaged Operating Speeds on PTR</p> <ul style="list-style-type: none"> Optical guidance max speed during the start of guidance is approximately 40kph. Trials have confirmed that the optical guidance system can operate at 90 kph in a straight line. Further trials to establish the safe operating speeds of the optical guidance system around curved sections are ongoing. <p><i>N.B. The above information on operating speeds has been taken from Siemens response to the market-sounding exercise undertaken by Mott MacDonald and subsequent trials conducted by Siemens/MIRA on behalf of the GCP.</i></p> <p><i>It should be noted that use of the guidance technology will not be permitted within the public highway</i></p> <p>Public Highway:</p> <p><i>In the absence of 85th percentile speed data, assume urban road speed limit/design speed relationship in Table 2.5 of CD 109 e.g. 60mph = 100A kph.</i></p>
Speed Limits
<p>Public Transport Route</p> <ul style="list-style-type: none"> Existing - NA Proposed – As indicated on the drawings <p>St Neots Road in the vicinity of the A428 overbridge</p> <ul style="list-style-type: none"> Existing - National Speed Limit Proposed – As indicated on the drawings <p>St Neots Road between Highfields Road and Scotland Road</p> <ul style="list-style-type: none"> Existing - National Speed Limit Proposed – As indicated on the drawings <p>Scotland Road A428 overbridge through to Dry Drayton</p> <ul style="list-style-type: none"> Existing – National Speed Limit Proposed – As indicated on the drawings <p>Scotland Road through Dry Drayton</p> <ul style="list-style-type: none"> Existing – 30mph Proposed – As indicated on the drawings <p>St Neots Road between Scotland Road and Long Road</p> <ul style="list-style-type: none"> Existing – 40mph through Hardwick and National Speed Limit to the East of Hardwick Proposed – As indicated on the drawings

Long Road

- Existing – National Speed Limit
- Proposed – As indicated on the drawings

Table C.3 Scheme Details Cont.

Speed Limits

Cambridge Road

- Existing – 30mph
- Proposed – As indicated on the drawings

Grange Road

- Existing – 20mph
- Proposed – As indicated on the drawings

Existing traffic flows/queues

Cambridgeshire County Council to provide if available/applicable

Forecast traffic flows

Junction	Dir 1	Dir 2	2026-AM				2026-PM				2036-AM				2036-PM			
			2026 Do-minimum		2026 Do-something		2026 Do-minimum		2026 Do-something		2036 Do-minimum		2036 Do-something		2036 Do-minimum		2036 Do-something	
			Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2	Dir 1	Dir 2
Grange Road	SB	NB	94	342	66	352	319	117	288	65	91	428	86	416	345	158	320	71
Cambridge Road, Coton	NB	SB	341	193	317	193	401	485	379	473	372	221	352	225	431	496	432	475
Long Road	SB	NB	50	114	40	67	206	82	134	84	87	158	75	88	253	126	215	147
St Neots Road, Hardwick (west of Cambridge Road)	EB	WB	546	471	576	463	406	563	458	406	601	485	628	483	415	554	466	433
St Neots Road (west of Scotland Road)	WB	EB	338	716	321	717	448	386	474	393	492	970	490	986	641	601	630	619
Scotland Road / Travel Hub	NB	SB	372	438	350	572	454	475	566	493	464	561	442	693	586	561	652	624
St Neots Road / Highfields Road	WB	EB	525	258	298	156	317	336	247	205	615	413	300	209	473	580	264	398

**The St Neots Road / Scotland Road (reconfigured western arm) is the new link between the roundabout and balancing pond*

Pedestrian, cyclist and equestrian desire lines

New desire lines across the junctions with the public highway would be created by the proposed active travel path adjacent to the PTR.

Environmental constraints

As indicated on the Environmental Constraints Map 70086660-WSP-GEN-XX-DR-EA-000001

Table C.4 Locality

Description of locality
<p><i>The proposed public transport route links Cambourne to Cambridge via the new Bourn Airfield development, the Scotland Farm Travel Hub, Hardwick and the West Cambridge campus. The PTR has junctions/interfaces with the existing public highway in several locations.</i></p> <p><i>The project will service existing and growing settlements along the route, including:</i></p> <ul style="list-style-type: none"> ■ <i>Cambourne,</i> ■ <i>Hardwick,</i> ■ <i>Highfields Caldecote,</i> ■ <i>Madingley, and</i> ■ <i>Future developments, including Bourn Airfield and Cambourne West.</i>
General description
<p><i>As above.</i></p>
Relevant factors which may affect road safety
<ul style="list-style-type: none"> ■ <i>The use of an optical guidance system on the proposed PTR. Detailed information on how the system would engage/disengage at the junctions/interfaces with the Public Highway is still to be confirmed, although it should be noted that use of the guidance technology will not be permitted within the public highway</i> ■ <i>High active travel – Potential for significant numbers of cyclists and pedestrians to make use of the proposed active travel path based on the popularity of similar provisions along the existing guided busway.</i> ■ <i>Potential for cyclists to travel at high speeds along the active travel path.</i> ■ <i>Minor improvement is proposed to the existing restricted forward visibility at the exit from the southern roundabout at Hardwick junction onto St Neots Road through Hardwick. However, vehicle speeds would be low at this location due to the tight bend.</i> ■ <i>Narrow footways, restricted intervisibility and tight turning movements for Buses at the proposed Grange Road junction.</i> ■ <i>St Neots Road / Long Road Junction difficulty achieving a satisfactory crossing angle for the active travel path.</i> ■ <i>Proposed Travel Hub - Potential for increased traffic flows on the slip roads at Hardwick Junction coupled with an increase in the number of people using the existing uncontrolled crossing points.</i>

Table C.5 Analysis

Collision data analysis			
<p><i>Cambridgeshire County Council to provide if available/applicable</i></p> <p><i>At stages 1, 2, and 3 provide a summary of road traffic collision data covering both the extent of the scheme and the adjoining sections of the highway.</i></p> <p><i>As a minimum the most recent 36 months of data. At stage 4, provide 12 months of post-opening validated road traffic collision data.</i></p> <p><i>Raw data should be provided as an appendix.</i></p>			
Departures from standards			
<i>As annotated on the drawings.</i>			
Previous road safety audit stage reports, road safety audit response reports and evidence of agreed actions			
<i>This is stage 1. There are no previous reports or briefs available.</i>			
Strategic decisions			
<p><i>The RSA1 is to be limited to the proposed changes to the existing public highway and any other proposed interfaces i.e. the new junctions formed between the proposed public transport route and the public highway.</i></p> <p><i>The key objective of the Stage 1 RSA is to identify any potential road safety matters which may have a bearing upon land take, licence or easement before the draft Transport and Works Act orders are published or planning consent is applied for.</i></p>			
List of included documents and drawings			
Drawing Number	Title	Revision	Status
70086660-WSP-HSR-XX-DR-HW-000001	Childerley Lodge	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000002	St Neots Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000003	Long Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000004	Long Rd St Neots Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000005	Grange Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000006	Scotland Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000007	Cambridge Rd	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000008	HW St Neots Rd (1 of 2)	P01	S2 – For Information
70086660-WSP-HSR-XX-DR-HW-000009	HW St Neots Rd (2 of 2)	P01	S2 – For Information

Table C.6 Checklist

Tick all that are included and provide reasons for those that are not included			
Site Location Plan	N/A	Scale layout plans	✓
Departures and relaxations from standards As indicated on the drawings	✓	Construction/ typical details <i>Outline design only, this is not available currently</i>	N/A
Previous RSA reports	N/A	Previous RSA response reports and evidence of agreed actions	N/A
Collision data and collision data analysis Cambridgeshire County Council to provide if available/applicable	N/A	Road traffic collision plot Cambridgeshire County Council to provide if available/applicable	N/A
Traffic signal staging As indicated on the drawings	✓	Traffic counts	✓
Speed surveys Speed survey data is not available	x	Pedestrians, cyclists and horse-riding desire lines and volumes <i>Refer to Table C.3 above</i>	✓
Walking, cycling and horse riding assessment and reviews Not available	x	Items outside the scope of the RSA/ strategic decisions	✓
Other factors that may impact road safety	✓	Design speeds/ speed limits	✓
Design standards used	✓	Adjacent land uses	✓