



Project Name : Hampton Quay, Littlehampton

Job No : 18-270

Note Title : Bridge Road Roundabout

Author : ESH / RJH

Checked : RJH

Approved : RJH

Date : April 2021

1.0 INTRODUCTION

1.1.1 Odyssey have been instructed by Stolon Studios Ltd to provide highways support and advice pertaining to the outline planning application with all matters reserved, except for access, for the proposed development at the land to be known as Hampton Quay, Littlehampton, West Sussex BN17 5RA.

1.1.2 A Transport Assessment (TA) was submitted with the planning application following which West Sussex County Council (WSCC), as local highway authority, has requested further information in respect of the Bridge Road Roundabout, namely:

- Confirmation of the proposed pedestrian and cycle access improvements; and
- Sensitivity testing of the junction capacity to check if any capacity improvements are necessary when accounting for future Local Plan developments and traffic growth.

1.1.3 Further details are presented at **Sections 2.0 and 3.0** respectively.

2.0 PEDESTRIAN AND CYCLE IMPROVEMENTS

2.1.1 The pedestrian and cycle access improvements were originally identified in the TA as per the works to be brought forward via the s106 Agreement for the Kingley Gate development which is being built out to the north of the site, refer **Appendix A**.



2.1.2 This scheme has now been updated to account for new guidance, as per Local Transport Note (LTN) 1/20, and to specifically add signalised crossings on the A259 northern arm and on Broad Piece as presented on **Drawing 18-270-010E**. The A259 crossing will enable easier and safer usage by pedestrians and cyclists than the originally proposed uncontrolled crossing, whilst that on Broad Piece provides a deliverable link to the existing pedestrian cycle routes which connect from the east at this location, as well as connecting to the existing pedestrian entrance to the Tesco superstore. The works have been subject to a Stage 1 Road Safety Audit for which a Designer's Response has been prepared, refer Odyssey report 18-270-04C.

2.1.3 These works will not only serve the future users of the Hampton Quay development, but they will also:

- Deliver (and improve upon) the s106 requirement for Kingley Gate;
- Benefit existing users and suppressed demand along the A259 by providing a key missing section of the existing cycleway from the A259 west to Broad Piece and Lineside Way to the east; and
- Provide a key component of the works which would be needed for future Local Plan development to the west of the River Arun.

3.0 JUNCTION SENSITIVITY TESTING

3.1.1 The TA set out junction capacity analysis using data and the junction model from the approved Church Lane, Climping development. Sensitivity testing of the capacity of the Bridge Road Roundabout has now been undertaken using Junctions 9 (ARCADY) applying forecast model flows inclusive of Local Plan commitments. The results of the junction capacity analysis are presented in **Table 3.1** overleaf.

**Table 3.1: Bridge Road Roundabout Sensitivity Testing**

Arm	RFC	Queue (Vehicles)	Delay (seconds)	RFC	Queue (Vehicles)	Delay (seconds)
2038 Without Development						
A259 (North)	0.75	3	10	0.93	11	33
Broad Piece	0.27	0	7	0.71	2	20
B2187 Bridge Road	0.64	2	8	0.80	4	18
A259 (South)	0.82	5	10	0.94	13	29
Site Access	0.00	0	0	0.00	0	0
2038 With Development						
A259 (North)	0.76	3	11	0.95	15	42
Broad Piece	0.27	0	7	0.73	3	23
B2187 Bridge Road	0.65	2	9	0.82	4	21
A259 (South)	0.83	5	11	0.95	17	36
Site Access	0.12	0	14	0.14	0	25

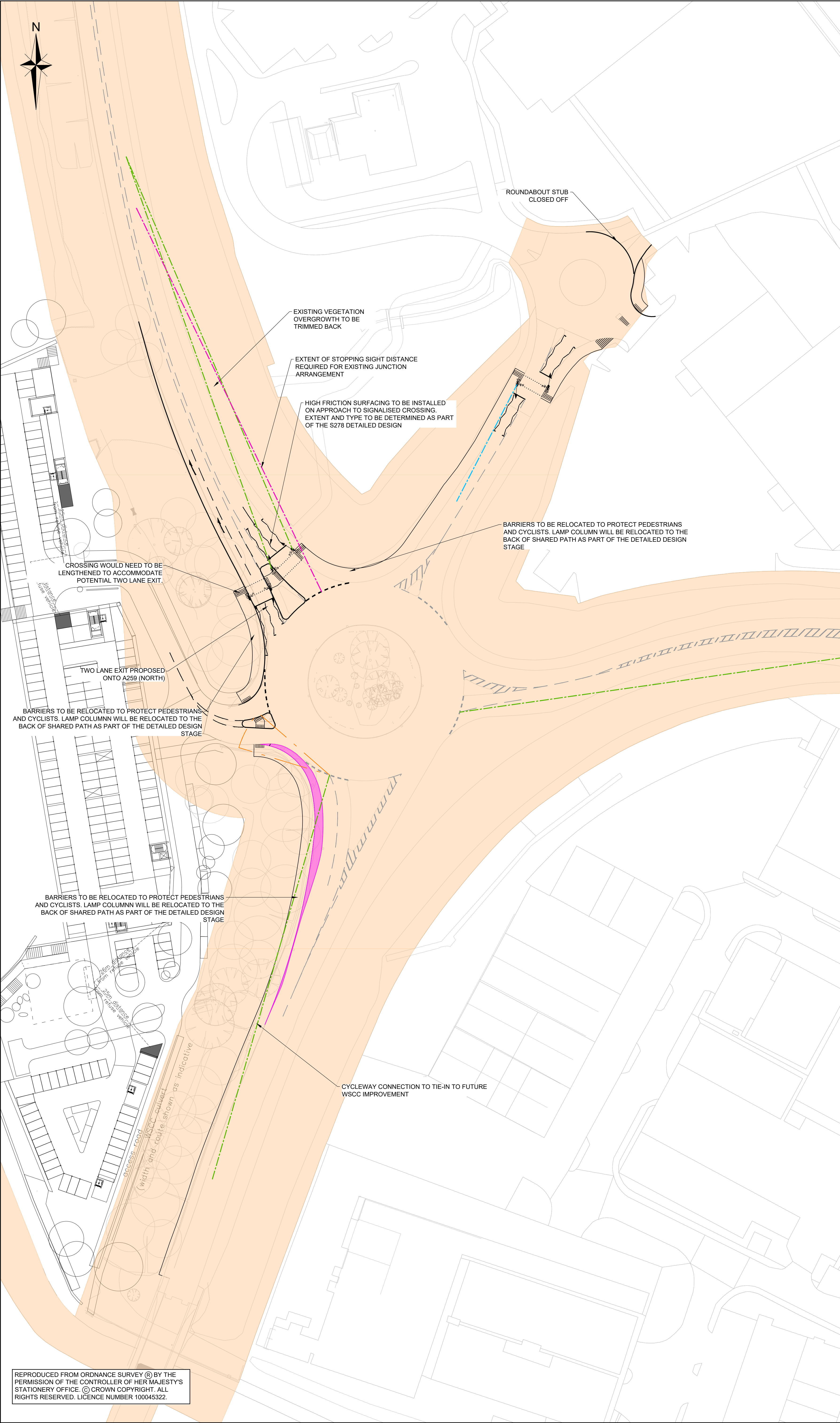
- 3.1.2 As can be seen in **Table 3.1** that the forecast traffic growth results in the A259 arms being over-capacity during the PM peak hour but the development itself does not have a material impact upon the junction operation.
- 3.1.3 As was presented in the TA we are aware that potential junction capacity improvements had been identified by Systra in their Arun Transport Study (ATS) undertaken for Arun District Council. This improvement comprises widening of the A259 (South) entry and the A259 (North) exit, refer **Appendix B**. As shown on **Drawing 18-270-010E** the proposed pedestrian and cycle improvement works have been designed to facilitate the future implementation of the ATS widening scheme so are not to prevent its delivery and indeed the exit widening on the A259 (North) has been lengthened as that in the ATS was sub-standard.
- 3.1.4 For completeness the junction has been tested with the ATS improvement as shown in **Table 3.2** overleaf.

**Table 3.2: Bridge Road Roundabout Sensitivity Testing – With ATS Improvement**

Arm	RFC	Queue (Vehicles)	Delay (seconds)	RFC	Queue (Vehicles)	Delay (seconds)
2038 Without Development						
A259 (North)	0.75	3	10	0.93	12	33
Broad Piece	0.27	0	7	0.71	2	21
B2187 Bridge Road	0.64	2	8	0.80	4	18
A259 (South)	0.75	3	7	0.85	6	12
Site Access	0.00	0	0	0.00	0	0
2038 With Development						
A259 (North)	0.76	3	11	0.95	15	43
Broad Piece	0.27	0	7	0.73	3	23
B2187 Bridge Road	0.65	2	9	0.82	4	21
A259 (South)	0.75	3	7	0.86	6	13
Site Access	0.12	0	14	0.14	0	25

3.1.5 It can be seen that the widening on the A259 southern entry increases its capacity and that the impact of the development remains immaterial.

DRAWING



NOTES

KEY

- POTENTIAL WIDER A259 IMPROVEMENTS
- HIGHWAY BOUNDARY
- VISIBILITY TO PEDESTRIAN CROSSING (DRAWN IN ACCORDANCE WITH FIGURE 3.53 OF CD116)
- 120m STOPPING SIGHT DISTANCE (UPTO 44mph DMRB)
- 37m STOPPING SIGHT DISTANCE (28mph MfS)

E	MINOR AMENDMENTS	MS	ESH/RJH	13/04/21
D	MINOR AMENDMENTS	MS	ESH/RJH	13/04/21
C	STOPPING SIGHT DISTANCES ADDED	MS	ESH/RJH	29/03/21
B	MINOR AMENDMENTS FOLLOWING RSA	MS	ESH/RJH	16/02/21
A	MINOR AMENDMENTS	MS	ESH/RJH	29/01/21

Rev	Amendments	Drm	Chk	App	Date

**ODYSSEY**

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Job Title

HAMPTON QUAY,
LITTLEHAMPTON

Drawing Title

PROPOSED OFFSITE IMPROVEMENTS &
ALLOWANCE FOR FUTURE IMPROVEMENTS

Client

STOLON STUDIO

Scale	Date	Designed
1:500 @A1	JAN 21	MS
Drawn	Checked	Approved
MS	RJH	RJH
Job No	Drawing No	Rev
18-270	18-270/010	E

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APPENDIX A

Kingley Gate s106 Scheme

Schedule 9

Highways

Part 1

1. For the purposes of this Schedule the Highway Works shall comprise the construction of:
 - (a) the signalised site access junction shown in principle on drawing no ITB3164-GA-001 Rev E at Appendix 3 of this Deed ("the Site Access Junction Works");
 - (b) the pedestrian, cyclist, bus, emergency vehicle and existing access rights via Courtwick Lane shown in principle on drawing no ITB3164-GA-003 Rev A at Appendix 3 of this Deed ("the Courtwick Lane Access Works");
 - (c) the new footway and cycleway link into the site on the A259 connecting the south east corner of the Site to New Courtwick Lane shown in principle on drawing ITB3164-GA-005 at Appendix 3 of this Deed ("the New Courtwick Lane Works");
 - (d) the new footway and cycleway on Eldon Way shown in principle on drawing ITB3164-GA-009 ("the Eldon Way Works") at Appendix 3 of this Deed; and
 - (e) the footway improvements within the Lineside Industrial Estate shown in principle on drawing ITB3164-GA-011 ("the Lineside Industrial Estate Footway") at Appendix 3 of this Deed.
2. The Owner covenants with the District Council and the County Council to enter into a Section 278 Agreement with the County Council prior to Commencement of Development to secure the provision of the Highway Works to the satisfaction of the County Council.
3. The Owner covenants with the District Council and the County Council not to Commence the Development unless and until the Owner has entered into the Section 278 Agreement to secure the provision of the Highway Works to the satisfaction of the County Council.
4. The Owner covenants with the District Council and the County Council not to Occupy or permit the Occupation of any Dwelling until it has first completed the Site Access Junction Works.
5. The Owner covenants with the District Council and the County Council not to Occupy any Dwelling or more than 667sqm (six hundred and sixty seven square metres) of gross external floorspace for purposes within Class B1 of the Town and Country Planning (Use

Classes) Order 1987 in force at the date of this Deed until it has first Completed the Courtwick Lane Access Works.

- 6 The Owner covenants with the District Council and the County Council not to Occupy any part of the Development until it has first Completed the New Courtwick Lane Works.
- 7 The Owner covenants with the District Council and the County Council not to Occupy any part of the Development until it has first Completed the Eldon Way Works.
- 8 The Owner covenants with the District Council and the County Council not to Occupy any part of the Development until it has first Completed the Lineside Industrial Estate Footway.
- 9 The County Council covenants with the Owner to enter into a Section 278 Agreement prior to the Commencement of the Development in order to secure the provision of the Highway Works required in support of the Development.

Part 2

Bridge Road Roundabout Contribution payable to the County Council

- 1 The Owner covenants with the District Council and the County Council to pay the Bridge Road Roundabout Footway Contribution to the County Council on or before the earlier of first Occupation of the 300th Dwelling constructed pursuant to the Development or first Occupation of no more than 2000 sq m (two thousand square metres) of gross external floorspace for purposes within Class B1 of the Town and Country Planning (Use Classes) Order 1987 in force at the date of this Deed.
- 2 The County Council covenants with the Owner to apply the Bridge Road Roundabout Footway Contribution towards a new footway and or cycleway on the northern side of the A259 connecting to the south-east corner of the Site to New Courtwick substantially in accordance with the works shown on drawing ITB3164-GA-009 at Appendix 4 of this Agreement and to complete such works no later than 5 (five) years from receipt of the contribution.

Part 3

Highway Contributions payable to the District Council

- 1 The Owner covenants with the District Council and the County Council to pay the Courtwick Road/Clun Road Contribution to the District Council on or before the earlier of

first Occupation of the 200th Dwelling and first Occupation of 1333 square metres gross external floorspace for purposes within Class B1 of the Town and Country Planning (Use Classes) Order 1987 in force at the date of this Agreement.

2 The District Council shall apply the Courtwick Road/Clun Road Contribution:

- (a) to meet the estimated costs requested in writing by the County Council within 7 (seven) years of the date on which the Courtwick Road/Clun Road Contribution was paid to the District Council in order to carry out improvements to the footpath link from Eldon Way under the railway line to the retail park, such improvements and estimated costs to be previously approved in writing by the District Council within 3 (three) years of the date on which the Courtwick Road/Clun Road Contribution was paid to the District Council and the County Council further covenants to use reasonable endeavours to carry out the said improvements within 7 (seven) years of the date on which the Courtwick Road/Clun Road Contribution was paid to the District Council and
- (b) then towards the provision of affordable housing in Littlehampton.

Part 4

Strategic Highways Infrastructure

1 The Owner covenants with the District Council and the County Council to pay the Strategic Highways Infrastructure Contribution to the District Council in accordance with the provisions of this Schedule.

2 The Owner covenants to pay the Strategic Highway Infrastructure Contribution to the District Council in accordance with the following instalments:

- (a) 25% (twenty five per cent) prior to the first Occupation of more than 100 Dwellings
- (b) a further 25% (twenty five per cent) prior to the first Occupation of more than 250 Dwellings
- (c) a further 25% (twenty five per cent) prior to the first Occupation of more than 400 Dwellings
- (d) a final 25% (twenty five per cent) prior to the first Occupation of more than 500 Dwellings.

- 3 The Owner covenants with the District Council not to Occupy or permit the Occupation of more than 100 Dwellings until it has first paid 25% (twenty five percent) of the Strategic Highways Infrastructure Contribution to the District Council.
- 4 The Owner covenants with the District Council not to Occupy or permit the Occupation of more than 250 Dwellings until it has first paid a further 25% (twenty five percent) of the Strategic Highways Infrastructure Contribution to the County Council.
- 5 The Owner covenants with the District Council not to Occupy or permit the Occupation of more than 400 Dwellings until it has first paid a further 25% (twenty five percent) of the Strategic Highways Infrastructure Contribution to the District Council.
- 6 The Owner covenants with the District Council not to Occupy or permit the Occupation of more than 500 Dwellings until it has first paid the final 25% (twenty five percent) of the Strategic Highways Infrastructure Contribution to the District Council.
- 7 The District Council agrees to apply the Strategic Highways Infrastructure Contribution only towards the delivery of the Northern Section of the Lyminster By-Pass and to no other purpose.
- 8 The Parties hereby agree that:
 - (a) All monies collected by the District Council in respect of County Council highway or transportation schemes shall be held by the District Council until the County Council notifies the District Council of its intention to incur expenditure on such schemes;
 - (b) Such notification shall stipulate the purpose of the expenditure (which for the avoidance of doubt may include feasibility and design work as well as internal costs associated therewith) and the amount required and shall be accompanied by evidence that such expenditure is required to be immediately incurred; and
 - (c) The District Council shall pay to the County Council the sum so notified within fifteen working days of the notification

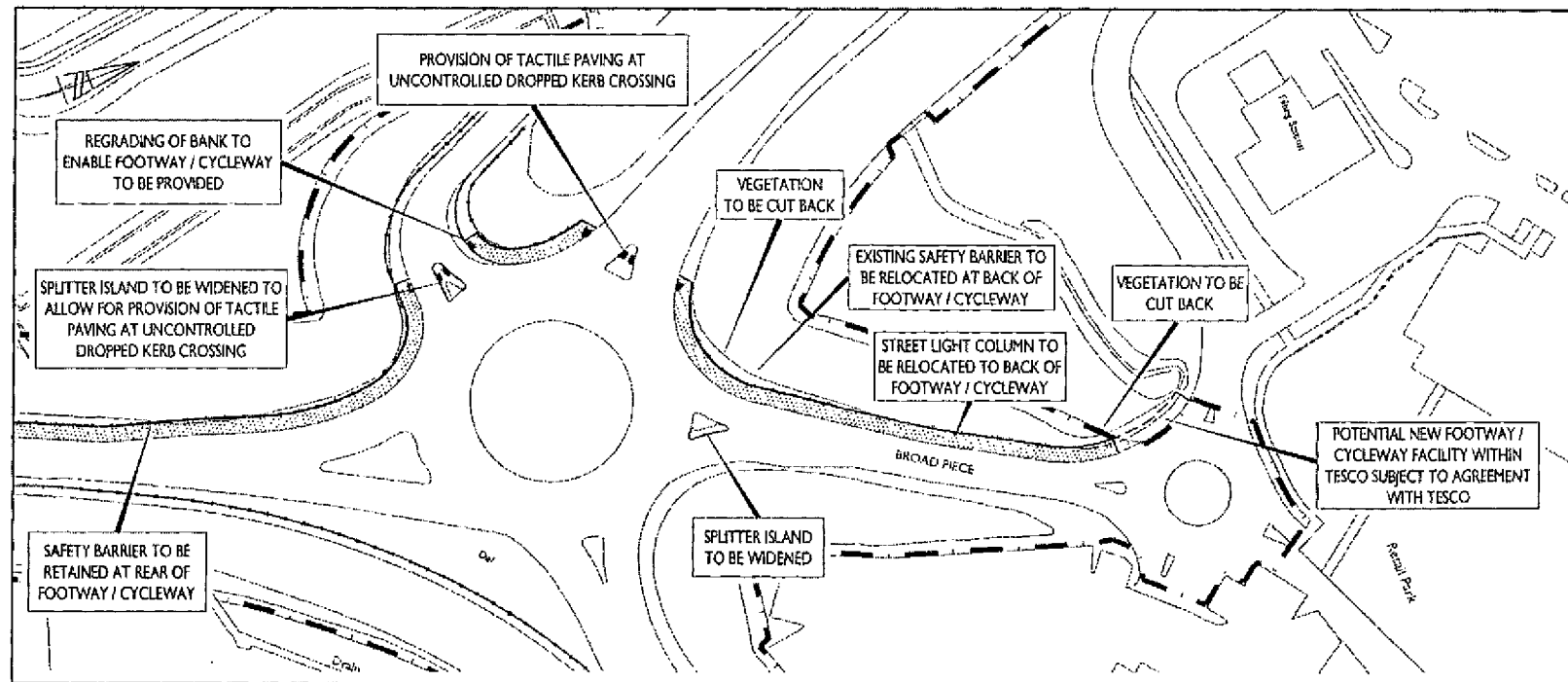
PROVIDED always that any sums held by the County Council in respect of a scheme which remain unspent on the completion thereof or when a decision is made not to proceed with a scheme (or one in substitution therefore which is considered by the County Council to achieve the same mitigation results as the original scheme) shall be returned

to the District Council and any sums still held by the District Council at the date of completion or abandonment of a scheme shall remain with it and no call for funds from the County Council shall be made in respect thereof.

Appendix 4

Bridge Road Roundabout Contribution

ITB3164-GA-009 Rev B



KEY:

— HIGHWAY BOUNDARY

■ PROPOSED FOOTWAY / CYCLEWAY

— SAFETY BARRIER

B	25.10.11	TK	MINOR AMENDMENTS	BT	BT
A	27.09.10	TK	REVISED IN ACCORDANCE WITH RSA1	SG	BT
REV	DATE	BY	DESCRIPTION	CHK	APP

STATUS: DRAFT



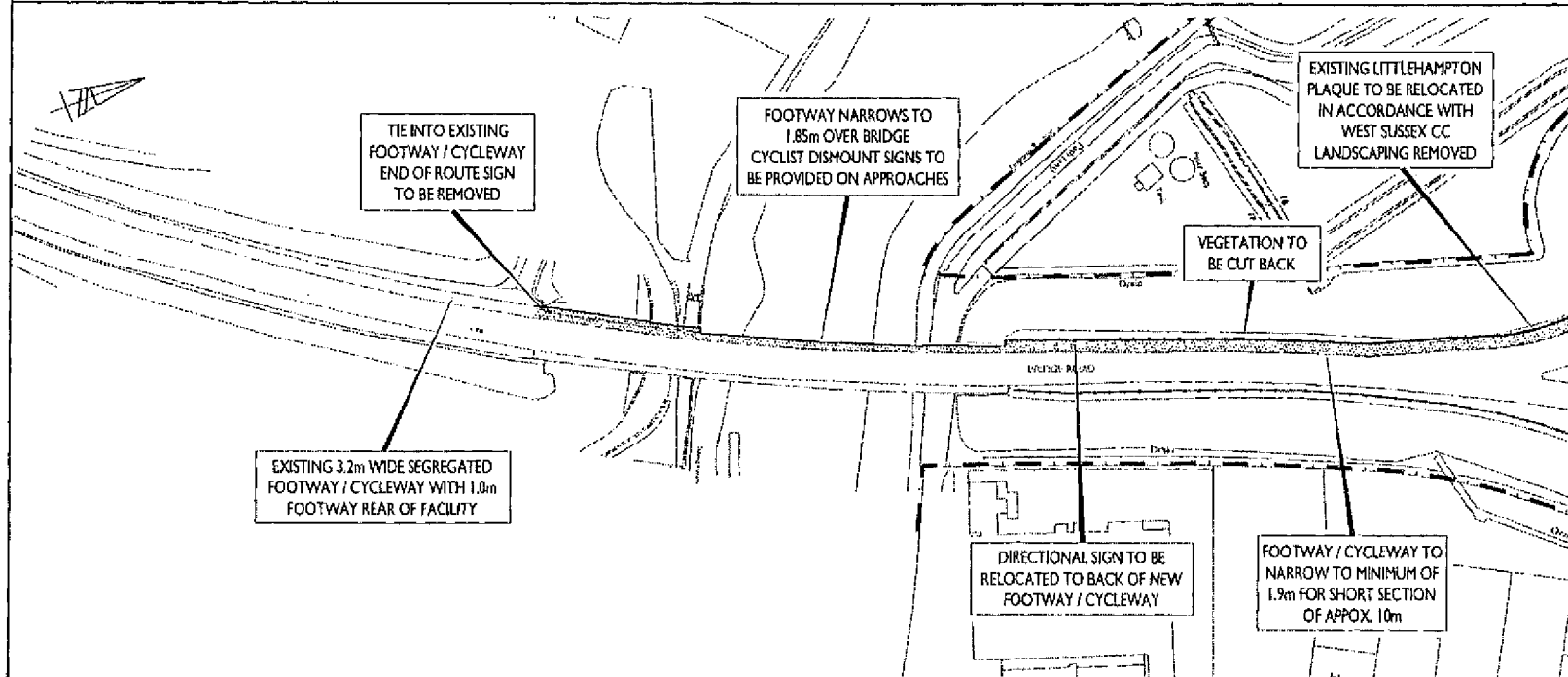
Grove House, Luryens Close, Chichester
Basingstoke, Hampshire, RG24 8AG
Tel: 01256 338640
Fax: 01256 338644
www.i-transport.co.uk

PROPOSED FOOTWAY / CYCLEWAY
LINK ON A259 BRIDGE ROAD

LAND AT COURTWICK LANE,
LITTLEHAMPTON

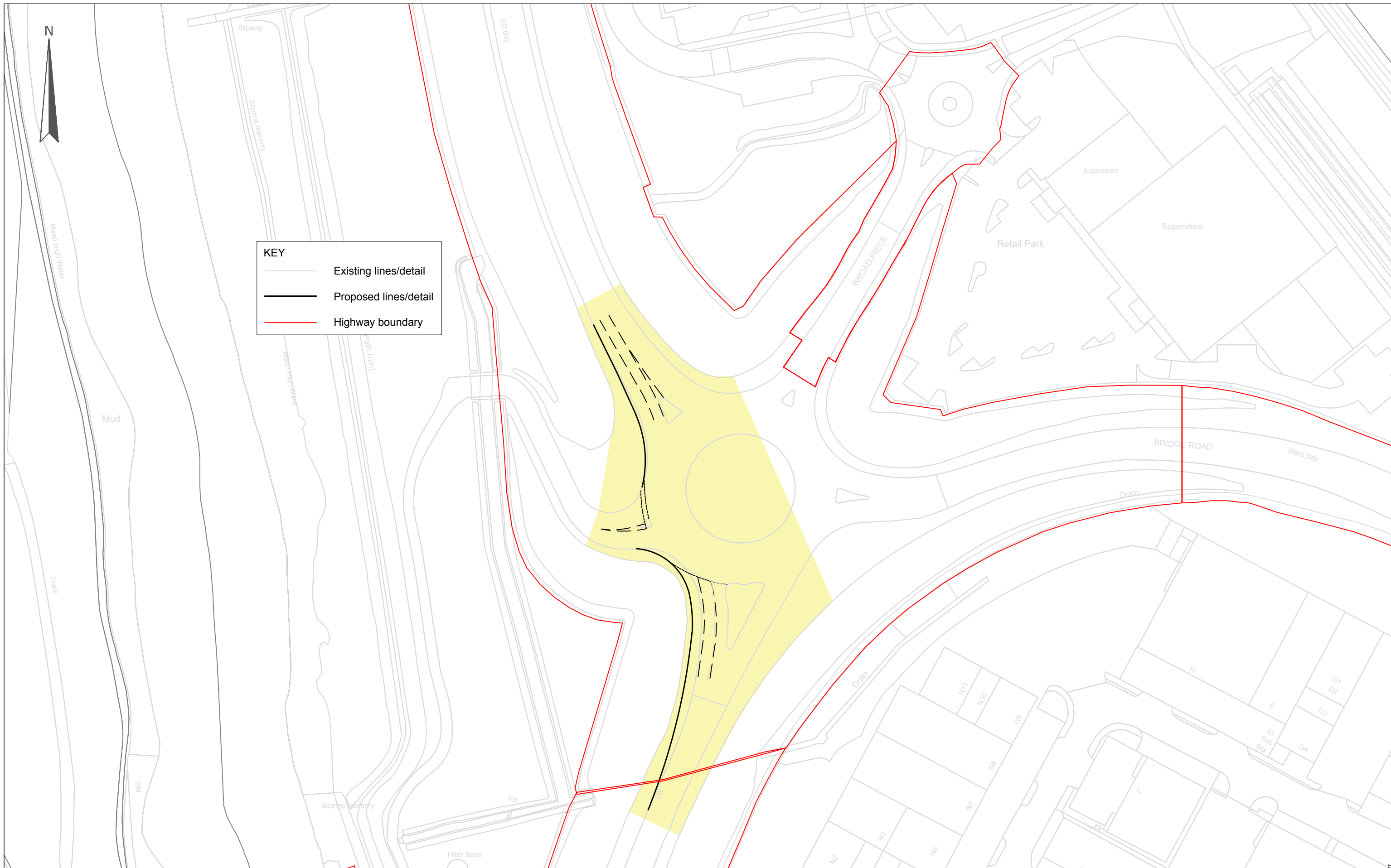
GLEESON DEVELOPMENTS LIMITED

SCALE @ A1:	1:1250	CHECKED:	BT	APPROVED:	JCB
FILE REF:	ITB3164-GA-009	DRAWN:	TK	DATE:	JUNE 10
DRAWING NO:	ITB3164-GA-009				
PROJECT NO:	ITB3164				REV: B



APPENDIX B

Arun Transport Study Scheme



-	-	-	-	-	-
REVISION	DATE	DESCRIPTION		DRAWN	CHECKED APPROVED

SYSTRA

Dukes Court Duke Street
WOKING GU21 5BH
Tel: +44 (0)1483 728051
Fax: +44 (0)1483 755207

DRAWN : SW		STATUS: Draft		PROJECT: Arun Transport Study 2016	
CHECKED : -		SCALE: 1:1000@A3	DATE: November 2016	TITLE: A259/B2187 Littlehampton West Widening of A259(EB)	
APPROVED : -		FORMAT: AutoCAD	CLIENT : -		
PROJECT MANAGER : --		This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior written permission of SYSTRA Ltd.		DRAWING NO. 103800_D023	
				REV: -	