



LAND WEST OF B2132 BILSHAM ROAD, YAPTON

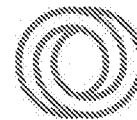
**STAGE 1 ROAD SAFETY AUDIT DESIGNERS RESPONSE
DROVE LANE SITE ACCESS**

On Behalf of
GLEESON STRATEGIC

Prepared by

Odyssey
Tuscany House
White Hart Lane
Basingstoke
RG21 4AF

December 2017



DOCUMENT CONTROL SHEET

Project Name: Land West of Bilsham Road and South of Main Road, Yapton

Project No. 14-111

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	For Review	TDM	RJH	TDM	RJH	07/12/2017



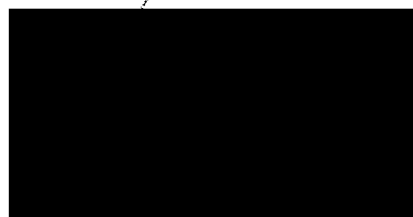
1.0 DESIGNER'S STATEMENT

- 1.1 Odyssey have been appointed by Gleeson Strategic to provide highways and transport advice for proposed residential development totaling 250 dwellings. The site is part of a larger area of land allocated as a single site for 400 dwellings in the emerging Arun Local Plan.
- 1.2 As part of the application a Stage 1 Road Safety Audit has been undertaken by GM Traffic Ltd for the proposed site access from The B2132 Bilsham Road. The audit covers Odyssey **Drawing 14-111/201**. **Appendix A** contains a full copy of the S1RSA report.

"I have considered the issues and problems raised in the Safety Audit and have appended my comments, which set out:

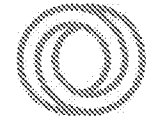
- the changes to the design which I propose to make; or*
- the reasons why I do not propose to make any changes"*

Signed:



Thomas Moloney

Date: 07/12/2017

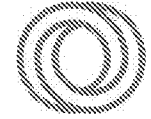


2.0 DESIGNERS RESPONSE

2.1 **Table 2.1** references the issues raised in the S1RSA and provides the designers Response

Table 2.1 – S1RSA Issues and Response

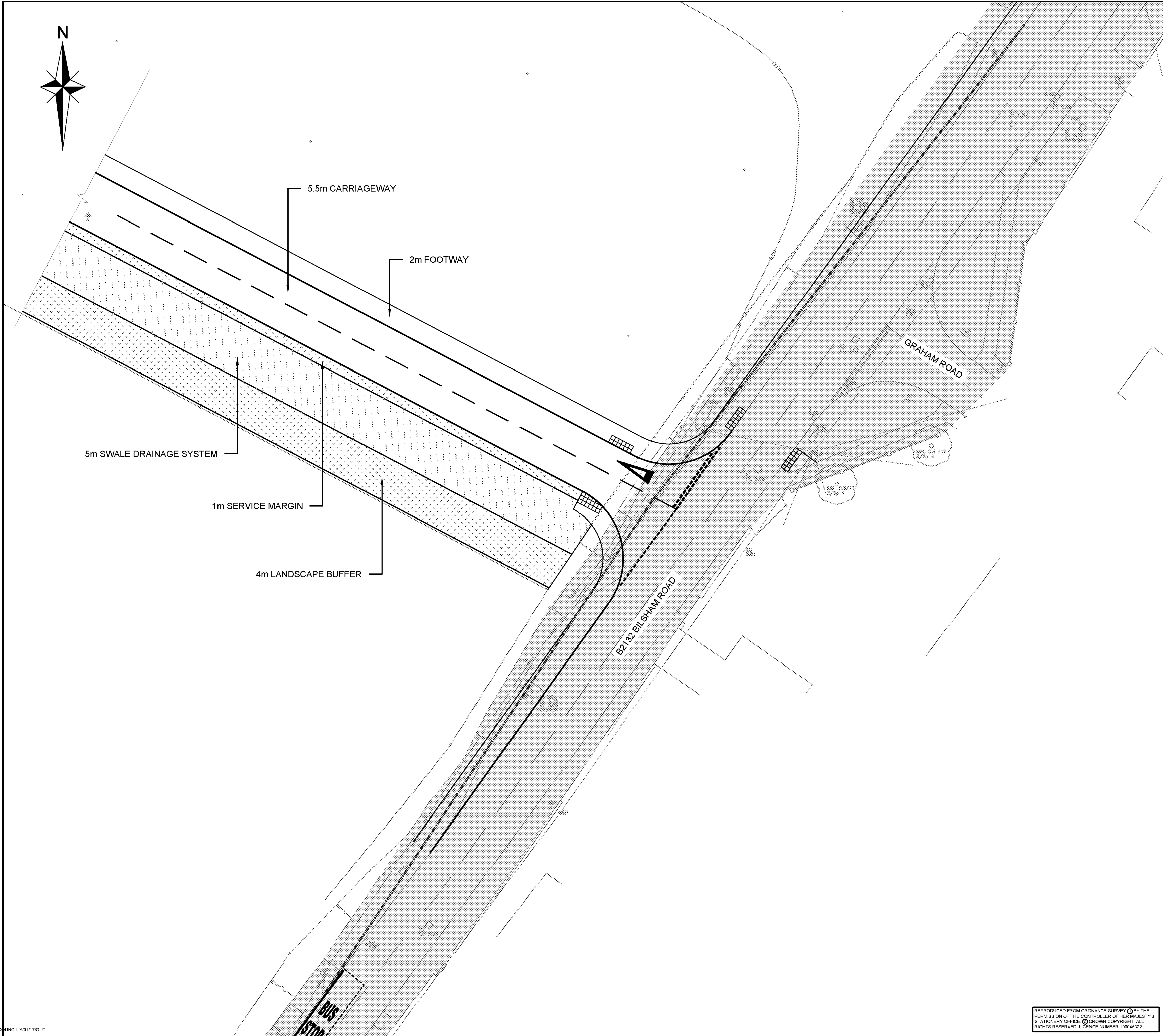
Audit Item No.	Audit Team Observation	Audit Team Recommendation	Designers Response
3.0	Matters Arising From This Stage 1 RSA		
Location	Gladstone Road		
3.1	No hazard paving is proposed at the start/termination of the shared footway/cycleway at Gladstone Road. This could result in pedestrians being unaware they are entering a shared facility or cyclists continuing to cycle on footway not designated as shared, increasing the risk of collisions between pedestrians and cyclists.	Provide hazard paving and appropriate signing to highlight start/termination of the shared facility.	Agreed, appropriate paving will be provided to show the start / termination of the shared walking and cycling facility. Drawing 14-111/003-A illustrates.
Location	Bilsham Road		



3.2	There is no pedestrian crossing facility proposed to the north of the proposed access for pedestrians wishing to cross Bilsham Road when travelling to and from the development. The absence of a pedestrian crossing facility could result in pedestrians with impairments falling/stumbling on full height kerbs. It may also lead to pedestrians attempting to cross at locations drivers will not be expecting them increasing the risk of vehicle/pedestrian collisions.	Provide an uncontrolled pedestrian crossing on Bilsham Road north of the proposed access.	An uncontrolled pedestrian crossing has been added to the on the northern side of proposed access. Drawing 14-111/003-A illustrates.
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DRAWINGS

\\14-111 - Land West of Bilsham Road, Yapton\\Tech\\Acad\\Drawings\\Gleeson Drawings for TA14-111-201 Proposed Site Access.dwg
ARUN DISTRICT COUNCIL Y91/17/OUT



NOTES

FOR PLANNING PURPOSES ONLY

1. DO NOT SCALE FROM THIS DRAWING.

2. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES.

HIGHWAY BOUNDARY (EXTRAPOLATED FROM PLAN PROVIDED BY WEST SUSSEX COUNTY COUNCIL)

2.4m x 59m VISIBILITY SPLAY (UPTO 37mph MIS IN ACCORDANCE WITH OBSERVED 85th PERCENTILE SPEEDS OF 35mph NORTHBOUND & 36mph SOUTHBOUND)

Rev

Amendments

Drn

Chk

App

Date

ODYSSEY

Tuscany House
White Hart Lane
Basingstoke
Hampshire RG21 4AF

Telephone: 01256 331144
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Job Title

LAND WEST OF BILSHAM ROAD, YAPTON

Drawing Title

PROPOSED SITE ACCESS
B2132 BILSHAM ROAD

Client

GLEESON STRATEGIC LAND

Scale

1:250 @A2

Date

DEC 17

Designed

TDM

Drawn

TDM

Checked

TDM

Approved

RJH

Job No

14-111

Drawing No

14-111/201

Rev

APPENDIX A

Stage 1 Road Safety Audit

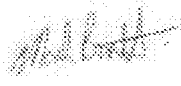
**LAND WEST OF BILSHAM ROAD
YAPTON**

PROPOSED SITE ACCESS

STAGE 1 ROAD SAFETY AUDIT

SEPTEMBER 2017

GM
Traffic Consultants Ltd
Registered in England No. 07100121.
Registered Office: 7 Bournemouth Rd, Chandlers Ford Eastleigh, Hants, SO53 3DA

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		26 September 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
Odyssey

Engineer:
GM
Traffic Consultants Ltd
33 Riverside Gardens
Romsey
SO51 8HN

Date: 26 September 2017

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APPENDIX A	Location Plan
APPENDIX B	Designers Response
APPENDIX C	Local Highway Authority Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the highway works associated with a proposed residential development on land west of Bilsham Road in Yapton.
- 1.1.2 This report focuses on the proposed site access which will take the form of a simple priority T-junction on Bilsham Road in Yapton with visibility splays of 2.4m x 59m. New footway links are also proposed on either side of the junction linking to the existing bus stop to the south and footway to the north. A shared footway/cycleway/emergency access will be provided at Gladstone Road.
- 1.1.3 The RSA was carried out at the request of Odyssey.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 25th September and 26th September 2017. The Auditors were:
 Mark Barrett Highways England Cert. of Comp
 Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team are independent of the project design team and have undertaken a number of RSA's relating to off-site works. They have had no other involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and a site visit (for all sites), which was carried out on Monday 25th September 2017 between 16:30 and 18:30. Traffic flows ranged between light and moderate and the weather was overcast with light rain at times.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in

the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
14-111/003	-	Proposed Site Access

- 2.2 The Audit Team have not been informed of any Departure from Standards.

3.0 MATTERS ARISING FROM THIS STAGE 1 RSA

3.1 PROBLEM

LOCATION: Gladstone Road

SUMMARY: No hazard paving.

No hazard paving is proposed at the start/termination of the shared footway/cycleway at Gladstone Road. This could result in pedestrians being unaware they are entering a shared facility or cyclists continuing to cycle on footway not designated as shared, increasing the risk of collisions between pedestrians and cyclists.

RECOMMENDATION

Provide hazard paving and appropriate signing to highlight start/termination of the shared facility.

3.2 PROBLEM

LOCATION: Bilsham Road

SUMMARY: No crossing facility

There is no pedestrian crossing facility proposed to the north of the proposed access for pedestrians wishing to cross Bilsham Road when travelling to and from the development. The absence of a pedestrian crossing facility could result in pedestrians with impairments falling/stumbling on full height kerbs. It may also lead to pedestrians attempting to cross at locations drivers will not be expecting them increasing the risk of vehicle/pedestrian collisions.

RECOMMENDATION

Provide an uncontrolled pedestrian crossing on Bilsham Road north of the proposed access.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in compliance with HD 19/15.

AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd


Signed:

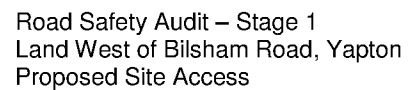
TEL: 07787 158 834

AUDIT TEAM MEMBER

Ian Medd

Signed: ... 

Date: 26 September 2017



APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member)

Scheme: Land West of Bilsham Road, Yapton – Proposed Site Access

Date Audit Completed: 26 September 2017

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1			
3.2			

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for Land West of Bilsham Road, Yapton

Proposed Site Access

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer



LAND WEST OF BILSHAM ROAD AND SOUTH OF MAIN ROAD, YAPTON

**STAGE 1 ROAD SAFETY AUDIT DESIGNERS RESPONSE
A259 OYSTERCATCHER IMPROVEMENT SCHEME**

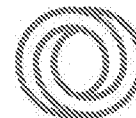
On Behalf of
LANDLINK ESTATES LTD & GLEESON STRATEGIC LAND

Prepared by

Odyssey
Tuscany House
White Hart Lane
Basingstoke
RG21 4AF

Tel: 01256 331144

December 2017

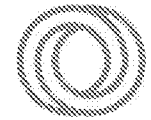


DOCUMENT CONTROL SHEET

Project Name: Land West of Bilsham Road and South of Main Road, Yapton

Project No. 14-111

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	For Issue	TDM	RJH	TDM	RJH	07/12/2017



1.0 DESIGNER'S STATEMENT

- 1.1 Odyssey have been appointed by Gleeson Strategic and Landlink Estates Ltd to provide highways and transport advice for proposed residential development totaling 550 dwellings across two sites, allocated as a single site in the Arun emerging Local Plan.
- 1.2 As part of the application a Stage 1 Road Safety Audit has been undertaken by GM Traffic Ltd for potential improvements at the Oystercatcher junction. The audit covers Odyssey **Drawing 14-111/202**. **Appendix A** contains a full copy of the S1RSA report.

"I have considered the issues and problems raised in the Safety Audit and have appended my comments, which set out:

- the changes to the design which I propose to make; or*
- the reasons why I do not propose to make any changes"*

Signed:

Thomas Moloney

Date: 07/12/2017

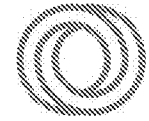


2.0 DESIGNERS RESPONSE

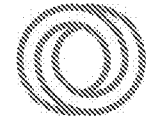
2.1 **Table 2.1** references the issues raised in the S1RSA and provides the designers Response

Table 2.1 – S1RSA Issues and Response

Audit Item No.	Audit Team Observation	Audit Team Recommendation	Designers Response
3.0	Matters Arising From This Stage 1 RSA		
Location	A259/Yapton Road and A259/Climping Street		
3.1	The removal of the acceleration lanes on to the A259 will result in vehicles having to join the main carriageway from a stationary position. This could increase the risk of vehicles attempting to join the A259 being struck in the rear by traffic already on the A259.	Retain the acceleration lanes.	As part of the proposals the speed limit will be reduced to 40mph. A full DMRB standard visibility splay of 2.4m x 120m is easily attainable on the Climping Street arm. The need to retain the acceleration lane is therefore unnecessary.
Location	A259/Climping Street		
3.2	The introduction of the central median will result in traffic wishing to travel west from Yapton Road having to carry out a U-turn manoeuvre at the A259/Climping Street junction. The limited space may result in large cars being unable to carry out the manoeuvre in one	Review the junction arrangements to provide a safe U-turn facility.	A swept path assessment has been undertaken using an agricultural vehicle and trailer to demonstrate that a large vehicle can turn within junction (see Drawing 14-111/###). It is also noted that Climping Roundabout is c.650m east of the proposed junction allowing large vehicles to easily U-turn if required to travel west along the A259.



	movement increasing the risk of collisions with westbound traffic on the A259 or right turning vehicles from Climping Street. This problem will be exacerbated with larger vehicles. Drivers may also drive to Bairds Farm Shop to carry out the U-turn which may increase the risk of collisions with other road users.		
Location	A259/Climping Street		
3.3	Vehicles exiting the A259 into Climping Street have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn into Climping Street queuing back on to the A259 (East) increasing the risk of tail-end shunts.	Provide adequate stacking space to accommodate any queues of left turning traffic.	The right turning lane from the A259 to Climping Street has a length of 14m leaving space for two PCU's (5.75m) to wait at the giveaway line. It is also noted that vehicle turning count surveys at the existing junction show just 10 vehicles turn into Climping Street in the AM peak and 12 in the PM peak hours from both the east and west. This will see very little increase in traffic up to the 2031 future assessment year with 12 vehicles in the AM peak and 14 in the PM peak. This equates to 1 vehicle every 4.5 minutes, the likelihood of vehicles queueing back into the main carriageway is therefore very remote.
Location	A259		
3.4	The proposed pedestrian crossing facility to the east of Climping Street is unlikely to be used by pedestrians travelling to and from Yapton	Provide a suitable pedestrian crossing facility on the A259 between Climping Street and Yapton Road.	Accepted. A crossing has been added west of the B2233 Yapton Road. A new footway has also been added to the proposals on the southern side of the A259 between the bus stop and the access to the Paintball facility.

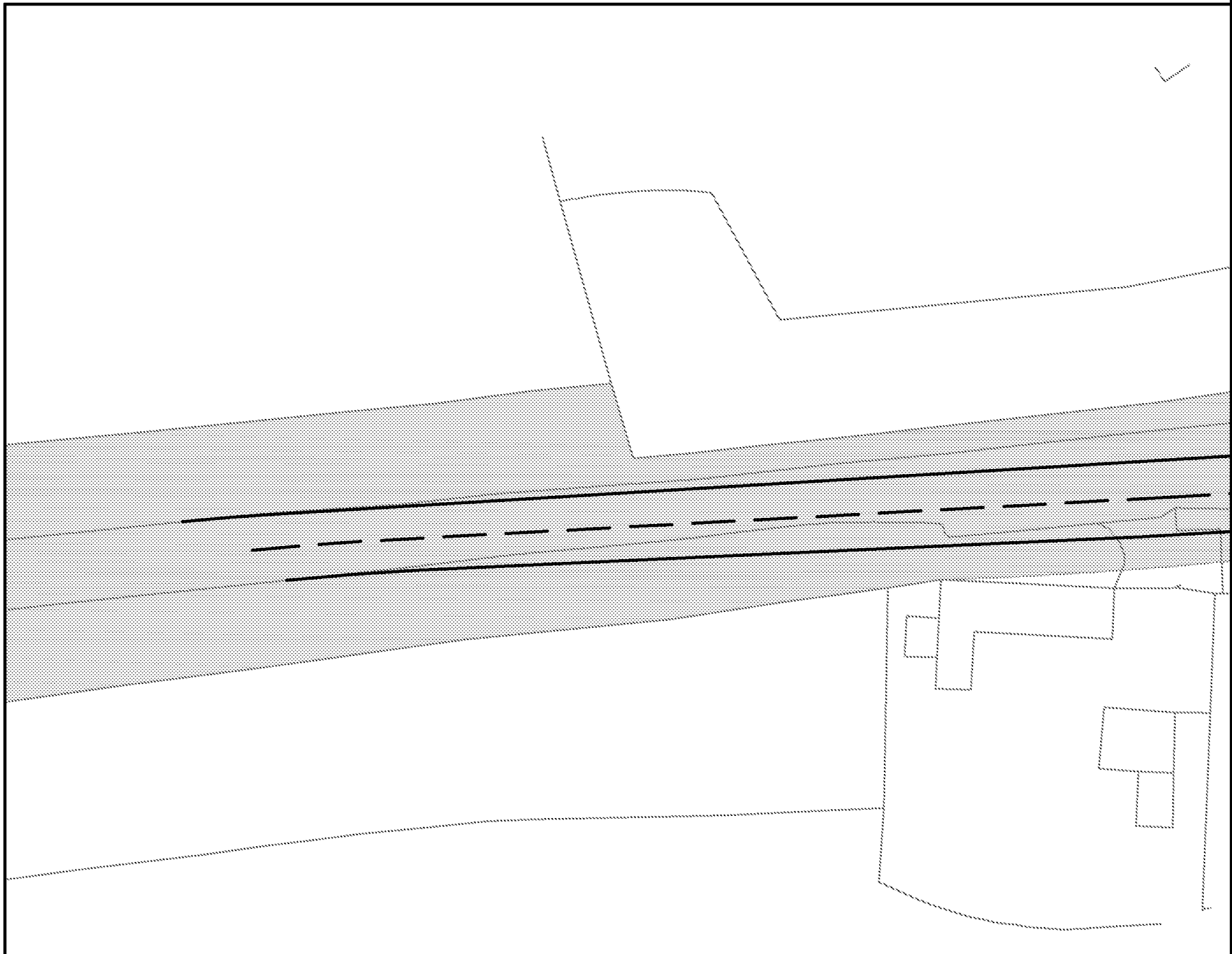
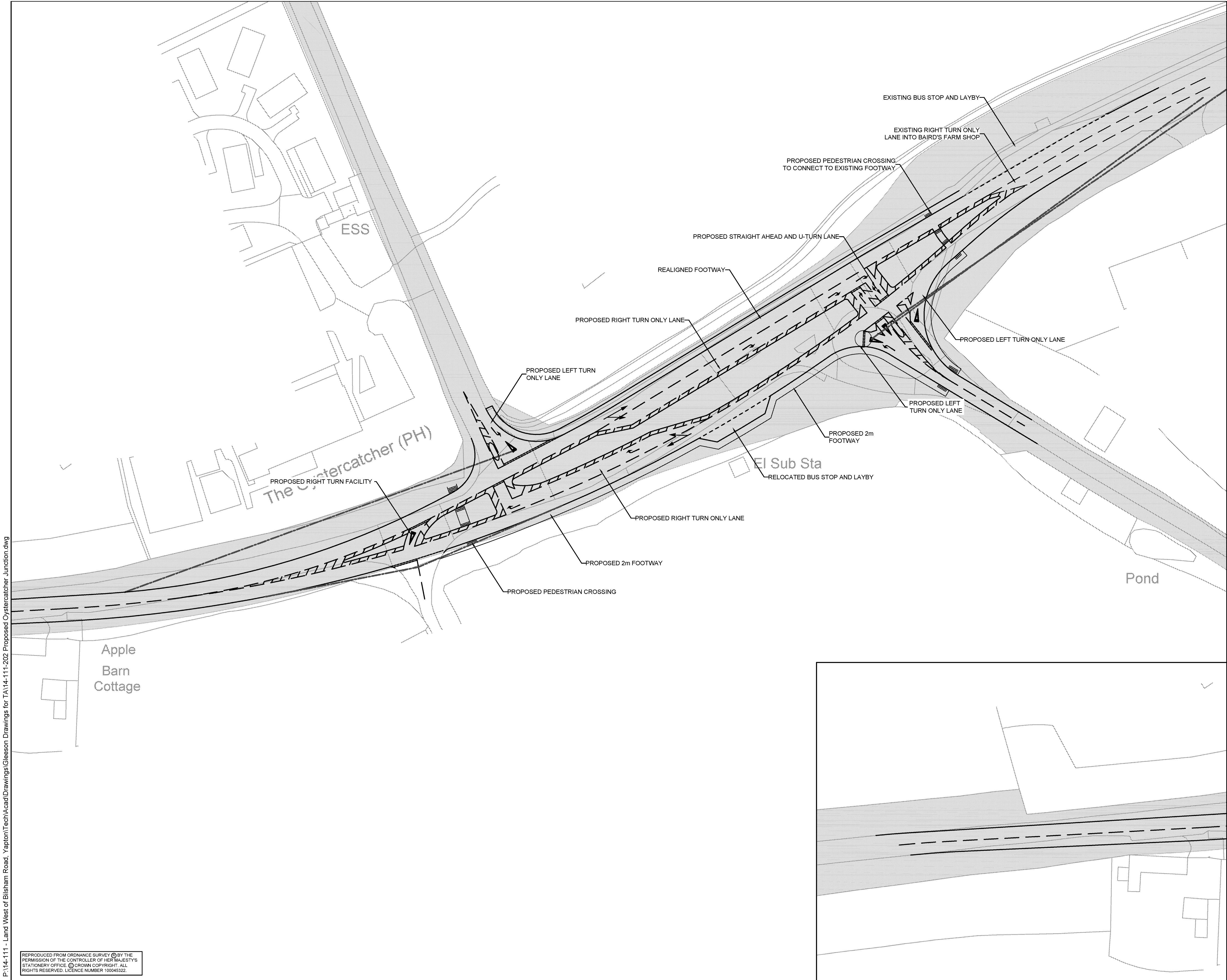


	Road as it involves a lengthy diversion. This may lead to pedestrians attempting to cross at the central median between Yapton Road and Climping Street where drivers may not be expecting them to cross. This could result in vehicle/pedestrian collisions.		It is noted that WSCC are currently constructing a new shared footway / cycleway along the northern side of the A259 from Climping to Felpham. The proposed crossing has been designed to tie in with this new facility see Drawing 14-111/004-A
Location	A259/Unnamed lane to Paint Ball		
3.5	The introduction of the A259 central median will restrict the right turn manoeuvre to and from the lane. This could lead to traffic undertaking injudicious maneuvers to carry out a U-turn increasing the risk of collisions with traffic on the A259.	Review the junction arrangements to provide a safe U-turn facility.	Agreed. A right turn lane has been added to allow vehicles exiting the paintball facility to head east without having to perform a U-turn maneuver. See Drawing 14-111/004-A

DRAWINGS

P:\14-111 - Land West of Bisham Road, Yapton\Tech\Acad\Drawings\Gleeson Drawings for TA14-111-202 Proposed Oystercatcher Junction.dwg

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- NOTES
- FOR PLANNING PURPOSES ONLY**
- DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES.
- HIGHWAY BOUNDARY (EXTRAPOLATED FROM PLAN PROVIDED BY WEST SUSSEX COUNTY COUNCIL)
 - 2.4m x 120m VISIBILITY SPLAY (DMRB)

Rev	Amendments	Dm	Chk	App	Date
ODYSSEY Tuscany House White Hart Lane Basingstoke Hampshire RG21 4AF Telephone: 01256 321144 Fax: 01256 321134 E: info@odysseyconsult.co.uk W: www.odysseyconsult.co.uk					
Job Title LAND WEST OF BILSHAM ROAD, YAPTON					
Drawing Title POTENTIAL IMPROVEMENTS TO COMET CORNER JUNCTION - OPTION A					
Client GLEESON STRATEGIC LAND					
Scale	1:500 @A1	Date	DEC 17	Designed	SD
Drawn	SD	Checked	MS	Approved	RJH
Job No	14-111	Drawing No	14-111/202	Rev	

APPENDIX A

Stage 1 Road Safety Audit

**LAND WEST OF BILSHAM ROAD
YAPTON**

**POTENTIAL IMPROVEMENTS TO
OYSTERCATCHER JUNCTION**

STAGE 1 ROAD SAFETY AUDIT

SEPTEMBER 2017

GM
Traffic Consultants Ltd
Registered in England No. 07100121.
Registered Office: 7 Bournemouth Rd, Chandlers Ford Eastleigh, Hants, SO53 3DA

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		26 September 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
Odyssey

Engineer:
GM
Traffic Consultants Ltd
33 Riverside Gardens
Romsey
SO51 8HN

Date: 26 September 2017

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1.0	INTRODUCTION	3
2.0	ITEMS CONSIDERED	5
3.0	MATTERS ARISING FROM THIS STAGE 1 RSA.....	6
4.0	AUDITOR STATEMENT	8

APPENDIX A Location Plan

APPENDIX B Designers Response

APPENDIX C Local Highway Authority Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the highway works associated with a proposed residential development on land west of Bilsham Road in Yapton.
- 1.1.2 This report focuses on the proposed highway works at the A259/B2233 Yapton Road/ Climping Street junction (Oystercatcher junction) in Yapton. The proposals would provide a central median on the A259 between Climping Street and Yapton Road. This would restrict the right turn manoeuvre from Yapton Road. To accommodate the central median the acceleration lanes from Yapton Road and Climping Street would be removed.
- 1.1.3 The RSA was carried out at the request of Odyssey.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 25th September and 26th September 2017. The Auditors were:
Mark Barrett Highways England Cert. of Comp
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team are independent of the project design team and have undertaken a number of RSA's relating to off-site works. They have had no other involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and a site visit (for all sites), which was carried out on Monday 25th September 2017 between 16:30 and 18:30. Traffic flows ranged between light and moderate and the weather was overcast with light rain at times.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in

the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
14-111/004	-	Potential Improvements to Oystercatcher Junction

- 2.2 The Audit Team have not been informed of any Departure from Standards.

3.0 MATTERS ARISING FROM THIS STAGE 1 RSA

3.1 PROBLEM

LOCATION: A259/Yapton Road and A259/Climping Street

SUMMARY: Risk of tail-end shunts

The removal of the acceleration lanes on to the A259 will result in vehicles having to join the main carriageway from a stationary position. This could increase the risk of vehicles attempting to join the A259 being struck in the rear by traffic already on the A259.

RECOMMENDATION

Retain the acceleration lanes.

3.2 PROBLEM

LOCATION: A259/Climping Street

SUMMARY: Risk of u-turning traffic collisions

The introduction of the central median will result in traffic wishing to travel west from Yapton Road having to carry out a U-turn manoeuvre at the A259/Climping Street junction. The limited space may result in large cars being unable to carry out the manoeuvre in one movement increasing the risk of collisions with westbound traffic on the A259 or right turning vehicles from Climping Street. This problem will be exacerbated with larger vehicles. Drivers may also drive to Bairds Farm Shop to carry out the U-turn which may increase the risk of collisions with other road users.

RECOMMENDATION

Review the junction arrangements to provide a safe U-turn facility.

3.3 PROBLEM

LOCATION: A259/Climping Street

SUMMARY: Risk of tail-end shunts

Vehicles exiting the A259 into Climping Street have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn into Climping Street queuing back on to the A259 (East) increasing the risk of tail-end shunts.

RECOMMENDATION

Provide adequate stacking space to accommodate any queues of left turning traffic.

3.4 PROBLEM

LOCATION: A259

SUMMARY: Risk of vehicle/pedestrian collisions

The proposed pedestrian crossing facility to the east of Climping Street is unlikely to be used by pedestrians travelling to and from Yapton Road as it involves a lengthy diversion. This may lead to pedestrians attempting to cross at the central median between Yapton Road and Climping Street where drivers may not be expecting them to cross. This could result in vehicle/pedestrian collisions.

RECOMMENDATION

Provide a suitable pedestrian crossing facility on the A259 between Climping Street and Yapton Road.

3.5 PROBLEM

LOCATION: A259/Unnamed lane to Paint Ball

SUMMARY: Risk of u-turning traffic collisions

The introduction of the A259 central median will restrict the right turn manoeuvre to and from the lane. This could lead to traffic undertaking injudicious manoeuvres to carry out a U-turn increasing the risk of collisions with traffic on the A259.

RECOMMENDATION

Review the junction arrangements to provide a safe U-turn facility.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in compliance with HD 19/15.

AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd



Signed:

TEL: 07787 158 834

AUDIT TEAM MEMBER

Ian Medd



Signed: ...

Date: 26 September 2017

APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member)

Scheme: Land West of Bilsham Road, Yapton – Potential Improvements to Oystercatcher Junction

Date Audit Completed: 26 September 2017

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1			
3.2			
3.3			
3.4			
3.5			

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for Land West of Bilsham Road, Yapton

Potential Improvements to Oystercatcher Junction

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer



LAND WEST OF BILSHAM ROAD AND SOUTH OF MAIN ROAD, YAPTON

**STAGE 1 ROAD SAFETY AUDIT DESIGNERS RESPONSE
A259 COMET CORNER OPTION A IMPROVEMENT SCHEME**

On Behalf of

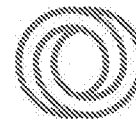
LANDLINK ESTATES LTD / GLEESON STRATEGIC LAND

Prepared by

Odyssey
Tuscany House
White Hart Lane
Basingstoke
RG21 4AF

Tel: 01256 331144

December 2017

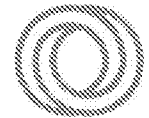


DOCUMENT CONTROL SHEET

Project Name: Land West of Bilsham Road and West of Main Road, Yapton

Project No. 14-111

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	For Review	TDM	RJH	TDM	RJH	07/12/2017



STAGE 1 ROAD SAFETY AUDIT, DESIGNERS RESPONSE – A259 COMET CORNER OPT A

1.0 DESIGNER'S STATEMENT

- 1.1 Odyssey have been appointed by Gleeson Strategic and Landlink Estates Ltd to provide highways and transport advice for proposed residential development totaling 550 dwellings across two sites, allocated as a single site in the Arun emerging Local Plan.
- 1.2 As part of the application a Stage 1 Road Safety Audit has been undertaken by GM Traffic Ltd for potential improvements at the Oystercatcher junction. The audit covers Odyssey **Drawing 14-111/203**. **Appendix A** contains a full copy of the S1RSA report.

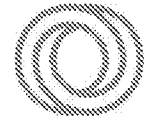
"I have considered the issues and problems raised in the Safety Audit and have appended my comments, which set out:

- the changes to the design which I propose to make; or*
- the reasons why I do not propose to make any changes"*

Signed:

Thomas Moloney

Date: 07/12/2017



STAGE 1 ROAD SAFETY AUDIT, DESIGNERS RESPONSE –
A259 COMET CORNER OPTION A

2.0 DESIGNERS RESPONSE

2.1 **Table 2.1** references the issues raised in the S1RSA and provides the designers Response

Table 2.1 – S1RSA Issues and Response

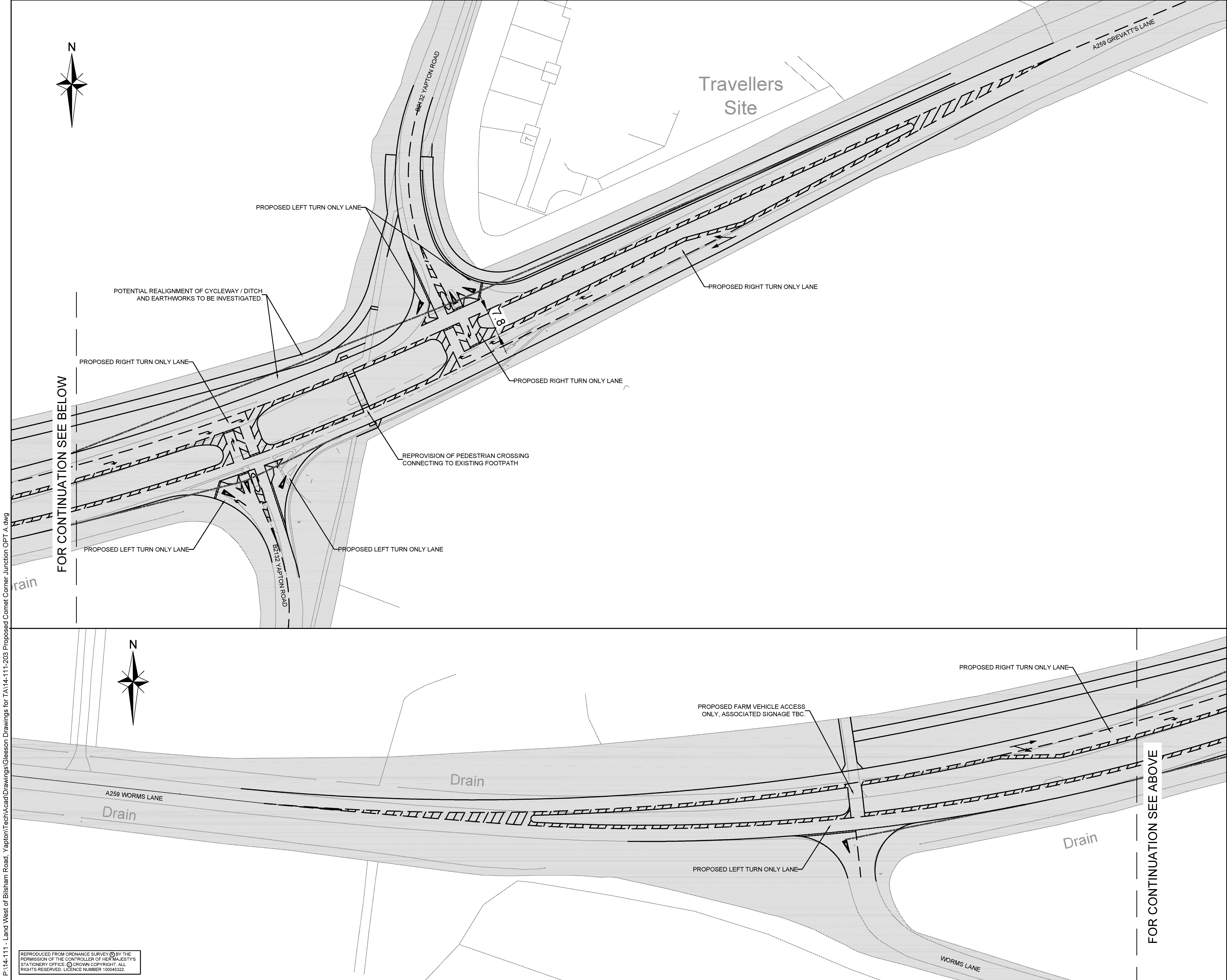
Audit Item No.	Audit Team Observation	Audit Team Recommendation	Designers Response
3.0	Matters Arising From This Stage 1 RSA		
Location	A259/Worms Lane		
3.1	The introduction of the central median at Worms Lane may restrict the left turn out of the field access on the north side of the A259. Large agricultural vehicles may have to undertake multiple manoeuvres to join the A259 which may increase risk of collisions with vehicles on the A259.	Ensure all vehicles anticipated using the field access can do so in one forward manoeuvre.	A swept path assessment of a large agricultural vehicle has been undertaken to demonstrate that turning left out of the field access is possible. See Drawing 14-111/005A
Location	A259/Yapton Road junctions		



STAGE 1 ROAD SAFETY AUDIT, DESIGNERS RESPONSE –
A259 COMET CORNER OPTION A

3.2	Vehicles exiting the A259 into Yapton Road north and south have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn queuing back on to the A259 increasing the risk of tail-end shunts.	Provide adequate stacking space to accommodate any queues of left turning traffic.	[redesign to take account of southern deceleration lane]
Location	A259/Yapton Road junctions		
3.3	It is unclear from the information if large vehicles can turn right to and from the A259 in one manoeuvre. Failure to turn in one movement will result in vehicles having to undertake multiple manoeuvres increasing the risk of collision with other vehicles.	Ensure all vehicles turning at the junctions can do so in one manoeuvre.	A swept path assessment of various vehicles has been undertaken to demonstrate that turning left out of the field access is possible. See Drawing 14-111/###

DRAWINGS



NOTES

FOR PLANNING PURPOSES ONLY

1. DO NOT SCALE FROM THIS DRAWING.

2. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES.

HIGHWAY BOUNDARY
(EXTRAPOLATED FROM PLAN PROVIDED BY WEST SUSSEX COUNTY COUNCIL)

2.4m x 120m VISIBILITY SPLAY (DMRB)

Rev

Amendments

Dm

Chk

App

Date

ODYSSEY

Tuscany House
White Hart Lane
Basingstoke
Hampshire RG21 4AF

Telephone: 01256 331144
Fax: 01256 331134
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

LAND WEST OF BILSHAM ROAD,
YAPTON

Drawing Title

POTENTIAL IMPROVEMENTS TO
COMET CORNER JUNCTION - OPTION A

Client

GLEESON STRATEGIC LAND

Scale

1:500 @A1

Date

DEC 17

Designed

SD

Drawn

SD

Checked

MS

Approved

RJH

Job No

14-111

Drawing No

14-111/203

Rev

P:\14-111 - Land West of Bilsham Road, Yapton\Tech\Acad\Drawings\Gleeson Drawings for TA\14-111-203 Proposed Comet Corner Junction OPT A.dwg

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ARUN DISTRICT COUNCIL V09/17/OUT

APPENDIX A

Stage 1 Road Safety Audit

**LAND WEST OF BILSHAM ROAD
YAPTON**

**PROPOSED COMET CORNER JUNCTION
(OPTION A)**

STAGE 1 ROAD SAFETY AUDIT

SEPTEMBER 2017

GM
Traffic Consultants Ltd
Registered in England No. 07100121.
Registered Office: 7 Bournemouth Rd, Chandlers Ford Eastleigh, Hants, SO53 3DA

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		26 September 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
Odyssey

Engineer:
GM
Traffic Consultants Ltd
33 Riverside Gardens
Romsey
SO51 8HN

Date: 26 September 2017

TABLE OF CONTENTS

1.0	INTRODUCTION	3
2.0	ITEMS CONSIDERED	5
3.0	MATTERS ARISING FROM THIS STAGE 1 RSA.....	6
4.0	AUDITOR STATEMENT	7

APPENDIX A Location Plan

APPENDIX B Designers Response

APPENDIX C Local Highway Authority Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the highway works associated with a proposed residential development on land west of Bilsham Road in Yapton.
- 1.1.2 This report focuses on the Proposed Comet Corner Junction (Option A) in Yapton. The proposals would provide a central median on the A259 between Worms Lane and B2132 Yapton Road. This would restrict the right turn manoeuvre to and from Worms Lane. To accommodate the central median the deceleration lanes to Yapton Road and Bilsham Road would be removed.
- 1.1.3 The RSA was carried out at the request of Odyssey.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 25th September and 26th September 2017. The Auditors were:
Mark Barrett Highways England Cert. of Comp
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team are independent of the project design team and have undertaken a number of RSA's relating to off-site works. They have had no other involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and a site visit (for all sites), which was carried out on Monday 25th September 2017 between 16:30 and 18:30. Traffic flows ranged between light and moderate and the weather was overcast with light rain at times.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in

the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
14-111/005	-	Proposed Comet Corner Junction Option A

- 2.2 The Audit Team have not been informed of any Departure from Standards.

3.0 MATTERS ARISING FROM THIS STAGE 1 RSA

3.1 PROBLEM

LOCATION: A259/Worms Lane

SUMMARY: Insufficient width for agricultural vehicles to turn

The introduction of the central median at Worms Lane may restrict the left turn out of the field access on the north side of the A259. Large agricultural vehicles may have to undertake multiple manoeuvres to join the A259 which may increase risk of collisions with vehicles on the A259.

RECOMMENDATION

Ensure all vehicles anticipated using the field access can do so in one forward manoeuvre.

3.2 PROBLEM

LOCATION: A259/Yapton Road junctions

SUMMARY: Risk of tail-end shunts

Vehicles exiting the A259 into Yapton Road north and south have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn queuing back on to the A259 increasing the risk of tail-end shunts.

RECOMMENDATION

Provide adequate stacking space to accommodate any queues of left turning traffic.

3.3 PROBLEM

LOCATION: A259/Yapton Road junctions

SUMMARY: No swept path analysis

It is unclear from the information if large vehicles can turn right to and from the A259 in one manoeuvre. Failure to turn in one movement will result in vehicles having to undertake multiple manoeuvres increasing the risk of collision with other vehicles.

RECOMMENDATION

Ensure all vehicles turning at the junctions can do so in one manoeuvre.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in compliance with HD 19/15.

AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd



Signed:

TEL: 07787 158 834

AUDIT TEAM MEMBER

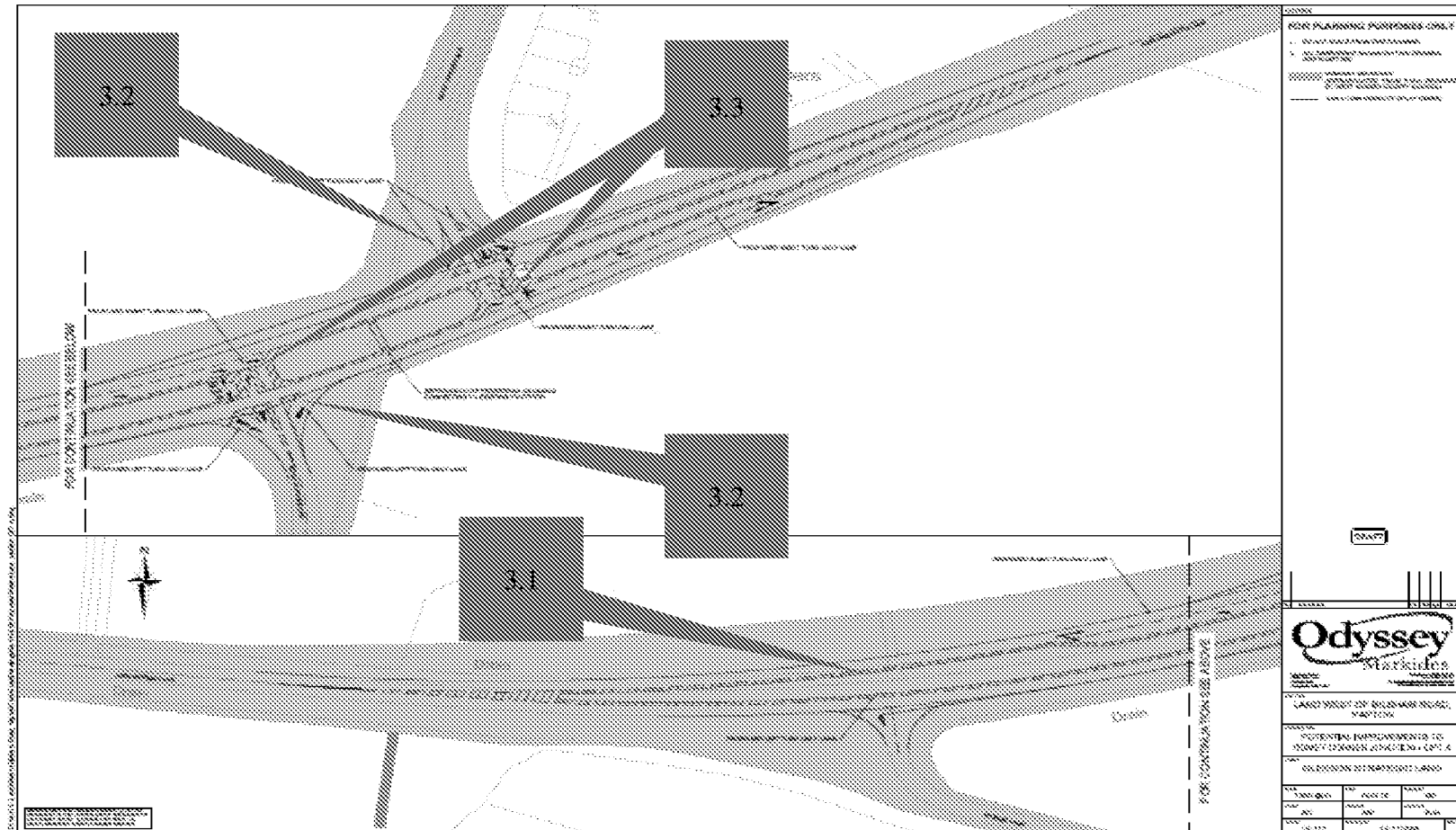
Ian Medd



Signed: ...

Date: 26 September 2017

APPENDIX A: LOCATION PLAN



Road Safety Audit – Stage 1
 Land West of Bilsham Road, Yapton
 Proposed Comet Corner Junction
 Option A

APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member)

Scheme: Land West of Bilsham Road, Yapton – Proposed Comet Corner Junction - Option A

Date Audit Completed: 26 September 2017

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1			
3.2			
3.3			

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for Land West of Bilsham Road, Yapton

Proposed Comet Corner Junction - Option A

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer



LAND WEST OF BILSHAM ROAD AND SOUTH OF MAIN ROAD, YAPTON

**STAGE 1 ROAD SAFETY AUDIT DESIGNERS RESPONSE
A259 COMET CORNER OPTION B IMPROVEMENT SCHEME**

On Behalf of

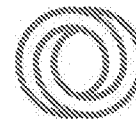
LANDLINK ESTATES LTD / GLEESON STRATEGIC LAND

Prepared by

Odyssey
Tuscany House
White Hart Lane
Basingstoke
RG21 4AF

Tel: 01256 331144

December 2017

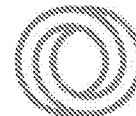


DOCUMENT CONTROL SHEET

Project Name: Land West of Bilsham Road and West of Main Road, Yapton

Project No. 14-111

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	For Review	TDM	RJH	TDM	RJH	07/12/2017



STAGE 1 ROAD SAFETY AUDIT, DESIGNERS RESPONSE – A259 COMET CORNER OPT B

1.0 DESIGNER'S STATEMENT

- 1.1 Odyssey have been appointed by Gleeson Strategic and Landlink Estates Ltd to provide highways and transport advice for proposed residential development totaling 550 dwellings across two sites, allocated as a single site in the Arun emerging Local Plan.
- 1.2 As part of the application a Stage 1 Road Safety Audit has been undertaken by GM Traffic Ltd for potential improvements at the Oystercatcher junction. The audit covers Odyssey **Drawing 14-111/204**. **Appendix A** contains a full copy of the S1RSA report.

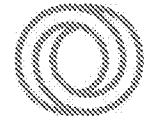
"I have considered the issues and problems raised in the Safety Audit and have appended my comments, which set out:

- the changes to the design which I propose to make; or*
- the reasons why I do not propose to make any changes"*

Signed:

Thomas Moloney

Date: 07/12/2017

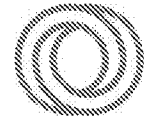


2.0 DESIGNERS RESPONSE

2.1 **Table 2.1** references the issues raised in the S1RSA and provides the designers Response

Table 2.1 – S1RSA Issues and Response

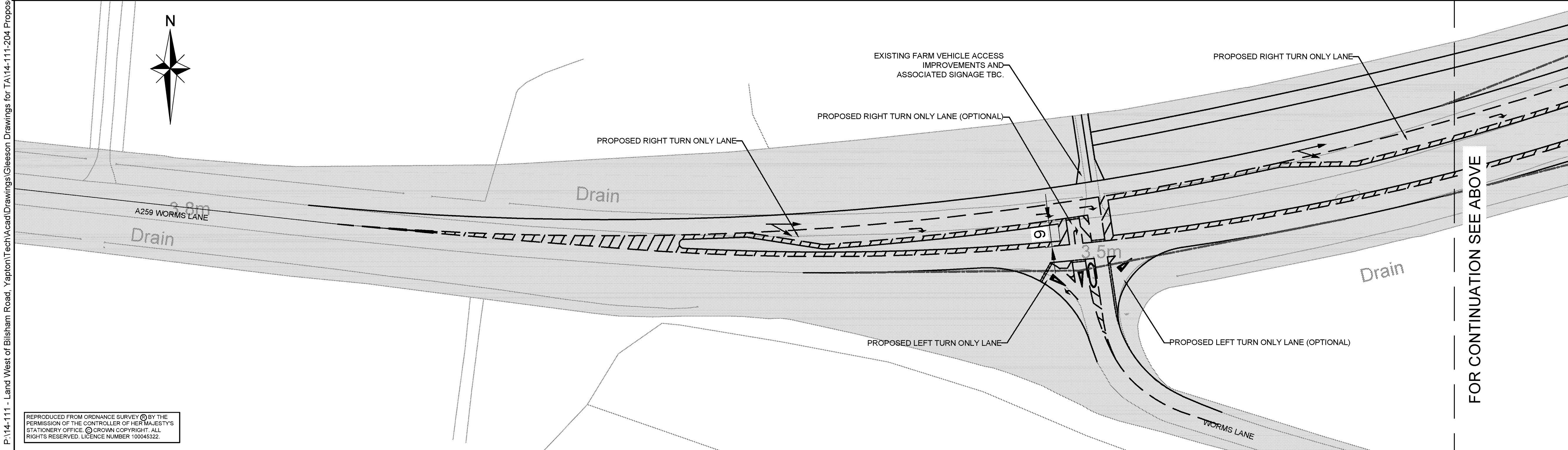
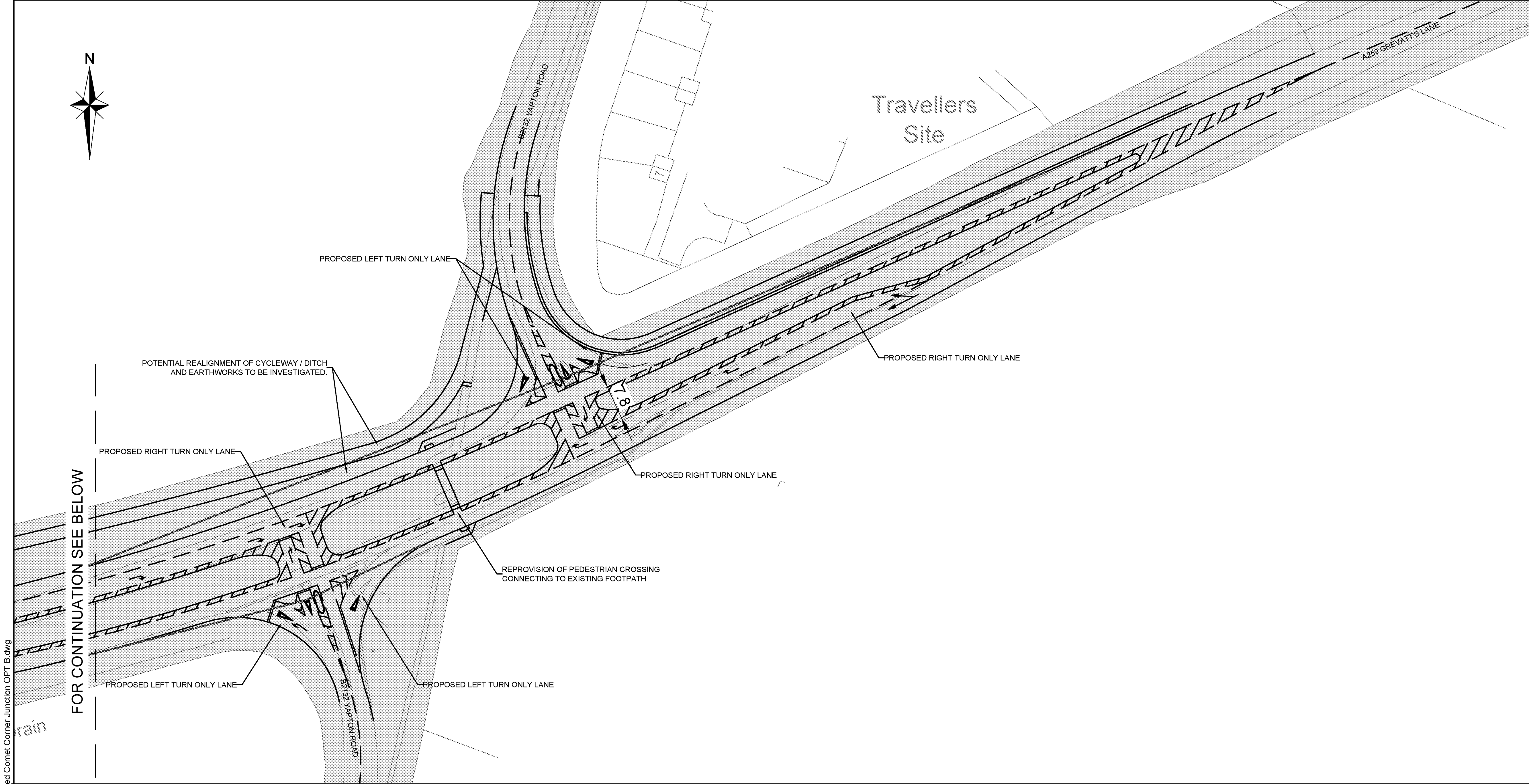
Audit Item No.	Audit Team Observation	Audit Team Recommendation	Designers Response
3.0	Matters Arising From This Stage 1 RSA		
Location	A259/Worms Lane		
	The introduction of the central median at Worms Lane may restrict the left turn out of the field access on the north side of the A259. Large agricultural vehicles may have to undertake multiple manoeuvres to join the A259 which may increase risk of collisions with vehicles on the A259.	Ensure all vehicles anticipated using the field access can do so in one forward manoeuvre.	
Location	A259/Yapton Road and A259 Worms Lane junctions		



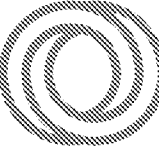
STAGE 1 ROAD SAFETY AUDIT, DESIGNERS RESPONSE – A259 COMET CORNER
OPTION B

	Vehicles exiting the A259 into Yapton Road north and south and Worms Lane have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn queuing back on to the A259 increasing the risk of tail-end shunts.	Provide adequate stacking space to accommodate any queues of left turning traffic.	
Location	Throughout		
	It is unclear from the information if large vehicles can turn right to and from the A259 in one manoeuvre. Failure to turn in one movement will result in vehicles having to undertake multiple manoeuvres increasing the risk of collision with other vehicles.	Ensure all vehicles turning at the junctions can do so in one manoeuvre.	

DRAWINGS



- NOTES
- FOR PLANNING PURPOSES ONLY**
- DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES.
- HIGHWAY BOUNDARY (EXTRAPOLATED FROM PLAN PROVIDED BY WEST SUSSEX COUNTY COUNCIL)
- 2.4m x 120m VISIBILITY SPLAY (DMRB)

Rev	Amendments	Dm	Chk	App	Date
 ODYSSEY Tuscany House White Hart Lane Basingstoke Hampshire RG21 4AF Telephone: 01256 321144 Fax: 01256 321134 E: info@odysseyconsult.co.uk W: www.odysseyconsult.co.uk					
Job Title LAND WEST OF BILSHAM ROAD, YAPTON					
Drawing Title POTENTIAL IMPROVEMENTS TO COMET CORNER JUNCTION - OPTION B					
Client GLEESON STRATEGIC LAND					
Scale 1:500 @A1	Date DEC 17	Designed SD			
Drawn SD	Checked MS	Approved RJH			
Job No 14-111	Drawing No 14-111/204	Rev			

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P:\14-111 - Land West of Bilsham Road, Yapton\Tech\Acad\Drawings\Gleeson Drawings for TA\14-111-204 Proposed Comet Corner Junction OPT B.dwg

APPENDIX A

Stage 1 Road Safety Audit

**LAND WEST OF BILSHAM ROAD
YAPTON**

**PROPOSED COMET CORNER JUNCTION
(OPTION B)**

STAGE 1 ROAD SAFETY AUDIT

SEPTEMBER 2017

GM
Traffic Consultants Ltd
Registered in England No. 07100121.
Registered Office: 7 Bournemouth Rd, Chandlers Ford Eastleigh, Hants, SO53 3DA

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		26 September 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
Odyssey

Engineer:
GM
Traffic Consultants Ltd
33 Riverside Gardens
Romsey
SO51 8HN

Date: 26 September 2017

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3.0	MATTERS ARISING FROM THIS STAGE 1 RSA.....	6
4.0	AUDITOR STATEMENT	7

APPENDIX A Location Plan

APPENDIX B Designers Response

APPENDIX C Local Highway Authority Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the highway works associated with a proposed residential development on land west of Bilsham Road in Yapton.
- 1.1.2 This report focuses on the Proposed Comet Corner Junction (Option B) in Yapton. The proposals would provide a central median on the A259 between Worms Lane and B2132 Yapton Road. Gaps in the central median will cater for all movements at the junctions. To accommodate the central median the deceleration lanes to Yapton Road would be removed.
- 1.1.3 The RSA was carried out at the request of Odyssey.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 25th September and 26th September 2017. The Auditors were:
Mark Barrett Highways England Cert. of Comp
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team are independent of the project design team and have undertaken a number of RSA's relating to off-site works. They have had no other involvement with the design of the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.8 The Audit consisted of a desk top study and a site visit (for all sites), which was carried out on Monday 25th September 2017 between 16:30 and 18:30. Traffic flows ranged between light and moderate and the weather was overcast with light rain at times.
- 1.1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in

the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
14-111/006	-	Proposed Comet Corner Junction Option B

- 2.2 The Audit Team have not been informed of any Departure from Standards.

3.0 MATTERS ARISING FROM THIS STAGE 1 RSA

3.1 PROBLEM

LOCATION: A259/Worms Lane

SUMMARY: Insufficient width for agricultural vehicles to turn

The introduction of the central median at Worms Lane may restrict the left turn out of the field access on the north side of the A259. Large agricultural vehicles may have to undertake multiple manoeuvres to join the A259 which may increase risk of collisions with vehicles on the A259.

RECOMMENDATION

Ensure all vehicles anticipated using the field access can do so in one forward manoeuvre.

3.2 PROBLEM

LOCATION: A259/Yapton Road AND a259 Worms Lane junctions

SUMMARY: Risk of tail-end shunts

Vehicles exiting the A259 into Yapton Road north and south and Worms Lane have to give way to traffic turning into the junction from the west. This could, during peak periods, result in left turning traffic waiting to turn queuing back on to the A259 increasing the risk of tail-end shunts.

RECOMMENDATION

Provide adequate stacking space to accommodate any queues of left turning traffic.

3.3 PROBLEM

LOCATION: Throughout

SUMMARY: No swept path analysis

It is unclear from the information if large vehicles can turn right to and from the A259 in one manoeuvre. Failure to turn in one movement will result in vehicles having to undertake multiple manoeuvres increasing the risk of collision with other vehicles.

RECOMMENDATION

Ensure all vehicles turning at the junctions can do so in one manoeuvre.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in compliance with HD 19/15.

AUDIT TEAM LEADER

Mark Barrett

GM Traffic Consultants Ltd



Signed:

TEL: 07787 158 834

AUDIT TEAM MEMBER

Ian Medd



Signed: ...

Date: 26 September 2017

APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member)

Scheme: Land West of Bilsham Road, Yapton – Proposed Comet Corner Junction - Option B

Date Audit Completed: 26 September 2017

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1			
3.2			
3.3			

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for Land West of Bilsham Road, Yapton

Proposed Comet Corner Junction - Option B

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer