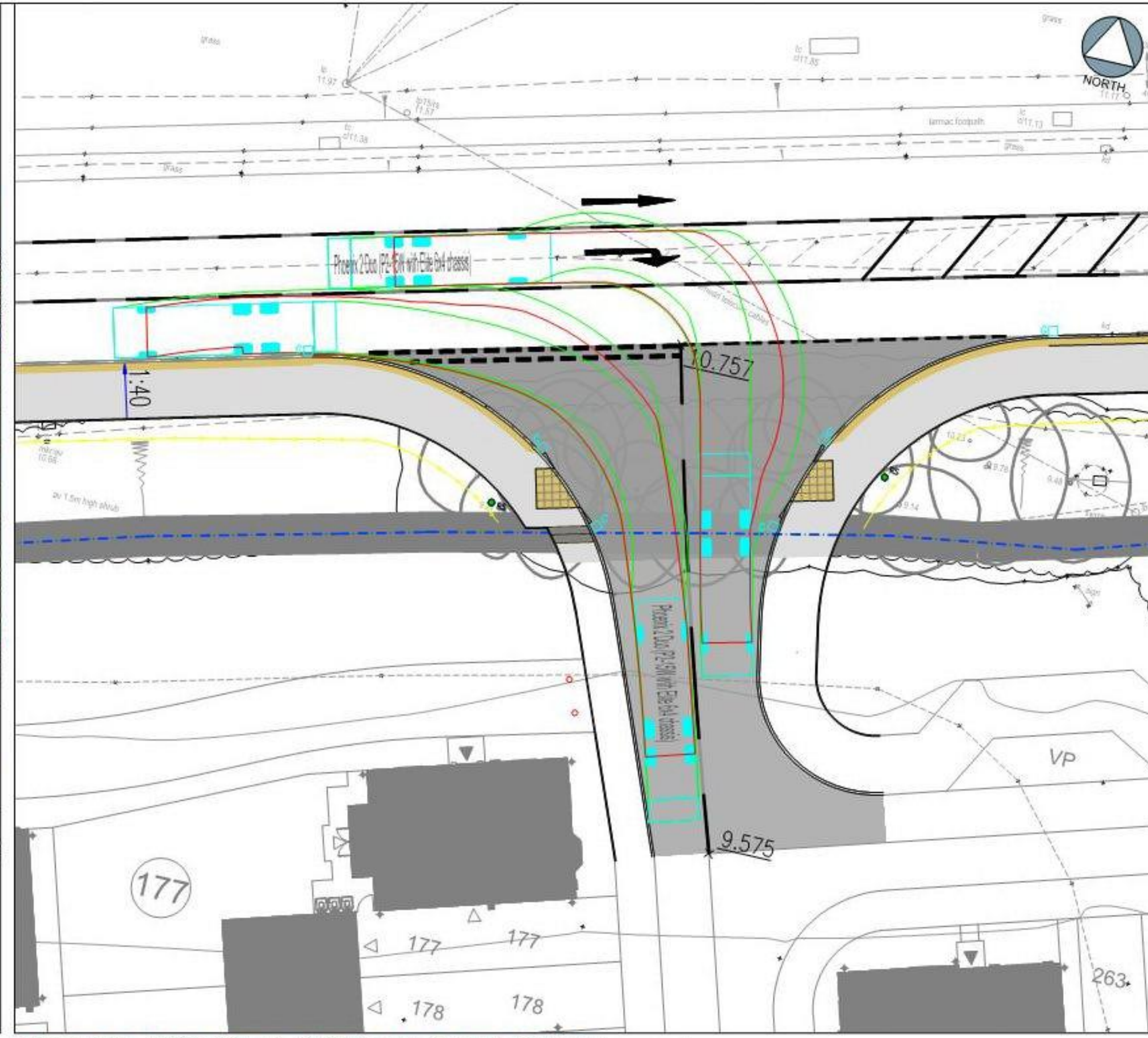
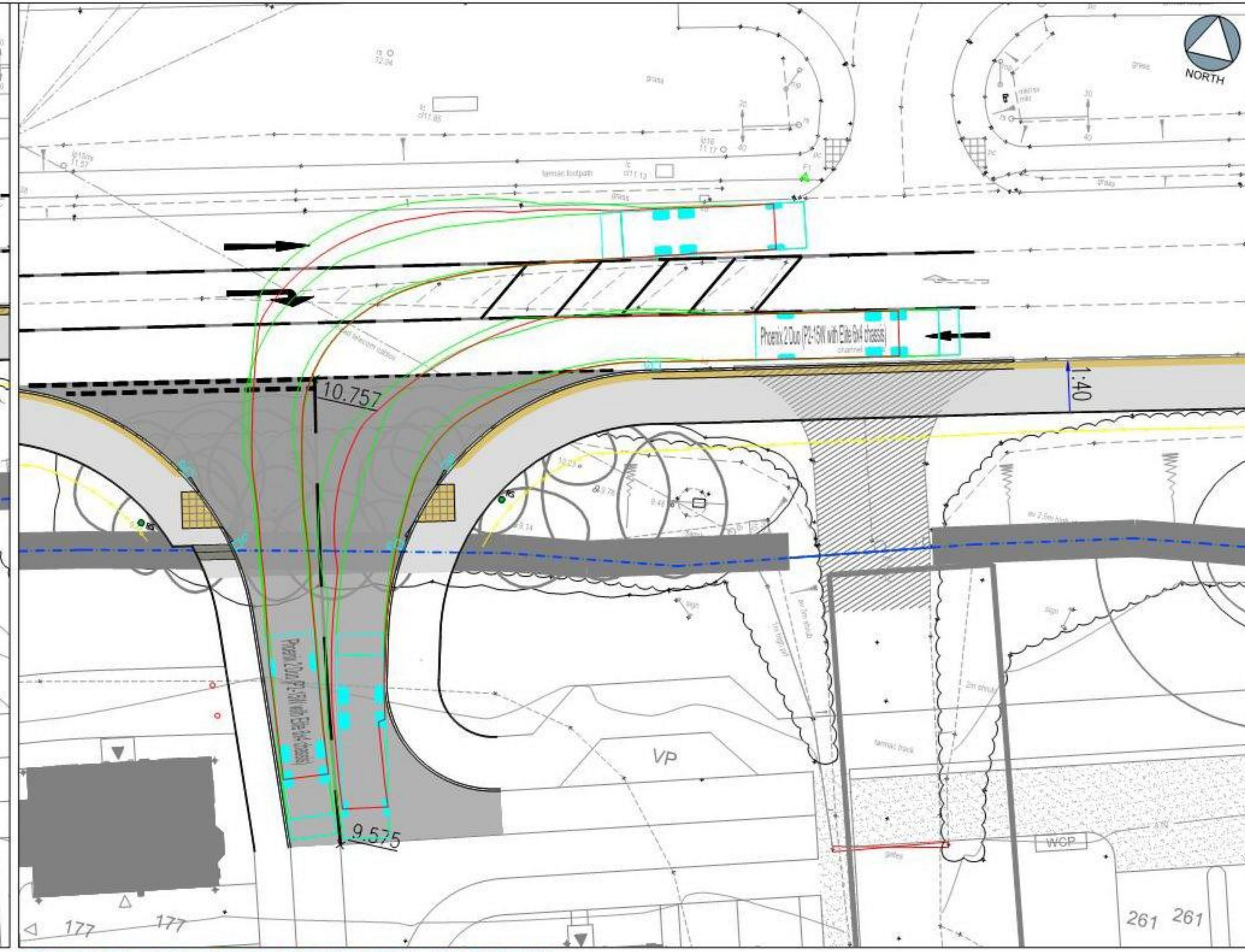




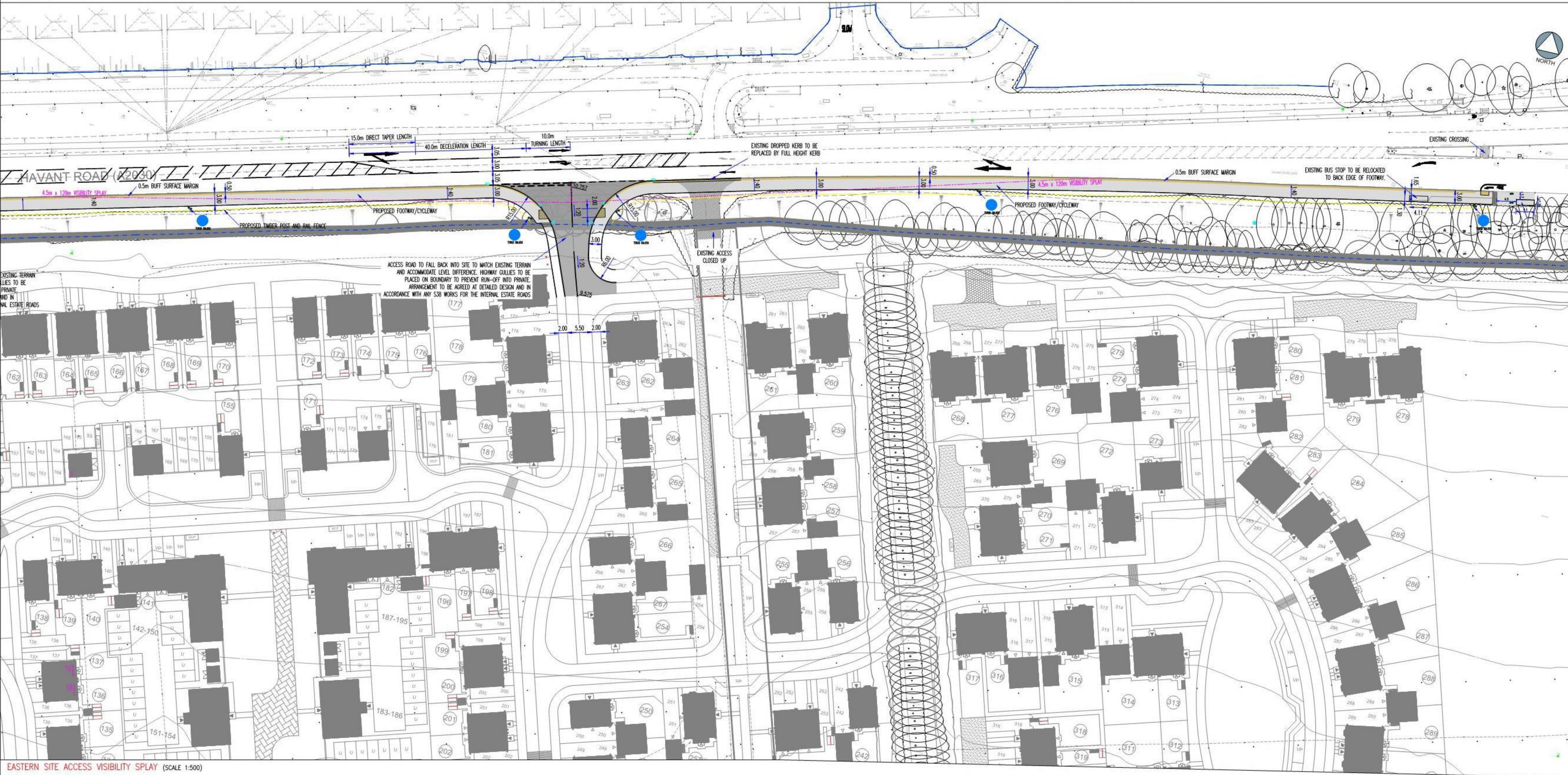
MASTERPLAN (NOT TO SCALE)



EASTERN SITE ACCESS VEHICLE TRACKING LEFT OUT AND RIGHT IN (SCALE 1:250)



EASTERN SITE ACCESS VEHICLE TRACKING LEFT IN AND RIGHT OUT (SCALE 1:250)



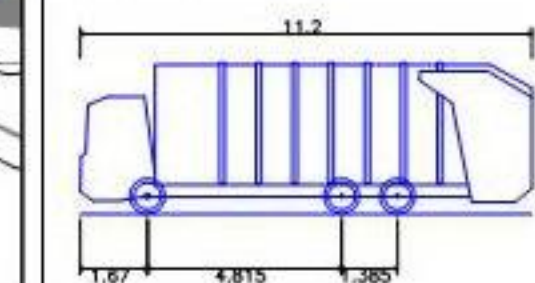
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VEHICLE PROFILE



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 4.815m
Overall Body Height 3.251m
Min Body Ground Clearance 0.104m
Lock-to-lock turn 2.500m
Curb-to-curb turning Radius 9.500m

KEY

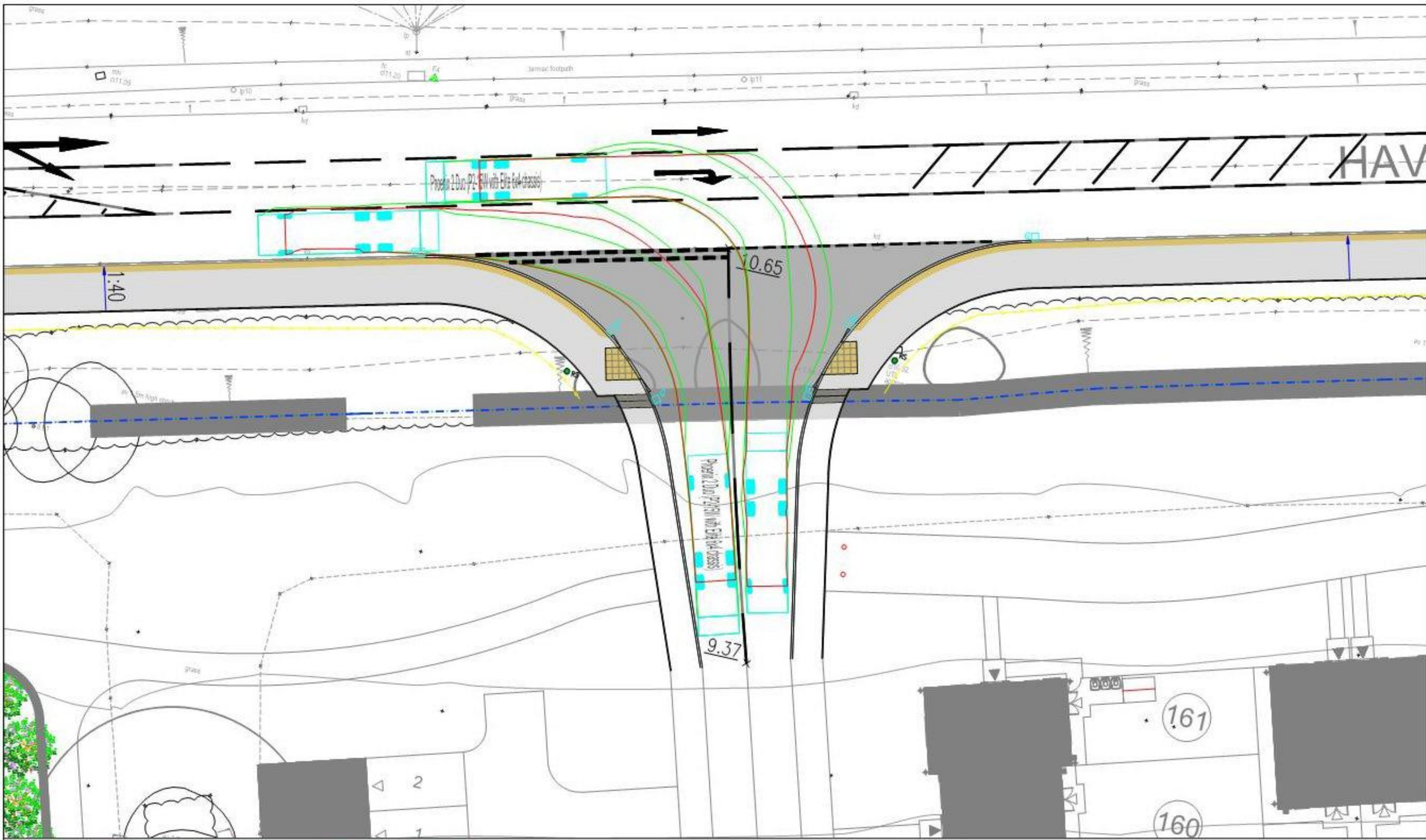
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- GULLY WITH 150m CONNECTION (U.N.O)

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G	REVISED SITE LAYOUT	14.06.19	JL	MS
F	REVISED DRAWING	01.05.18	EK	JL
E	REVISED DRAWING	10.08.17	CL	MS
D	REVISED DRAWING	28.07.17	EK	JL
C	REVISED DRAWING	28.06.17	EK	JL
B	SIGNALISED CROSSING UPGRADE	27.01.17	EK	JL
A	REVISED DRAWING	09.11.16	EK	JL
Rev	Description	Date	By	Check

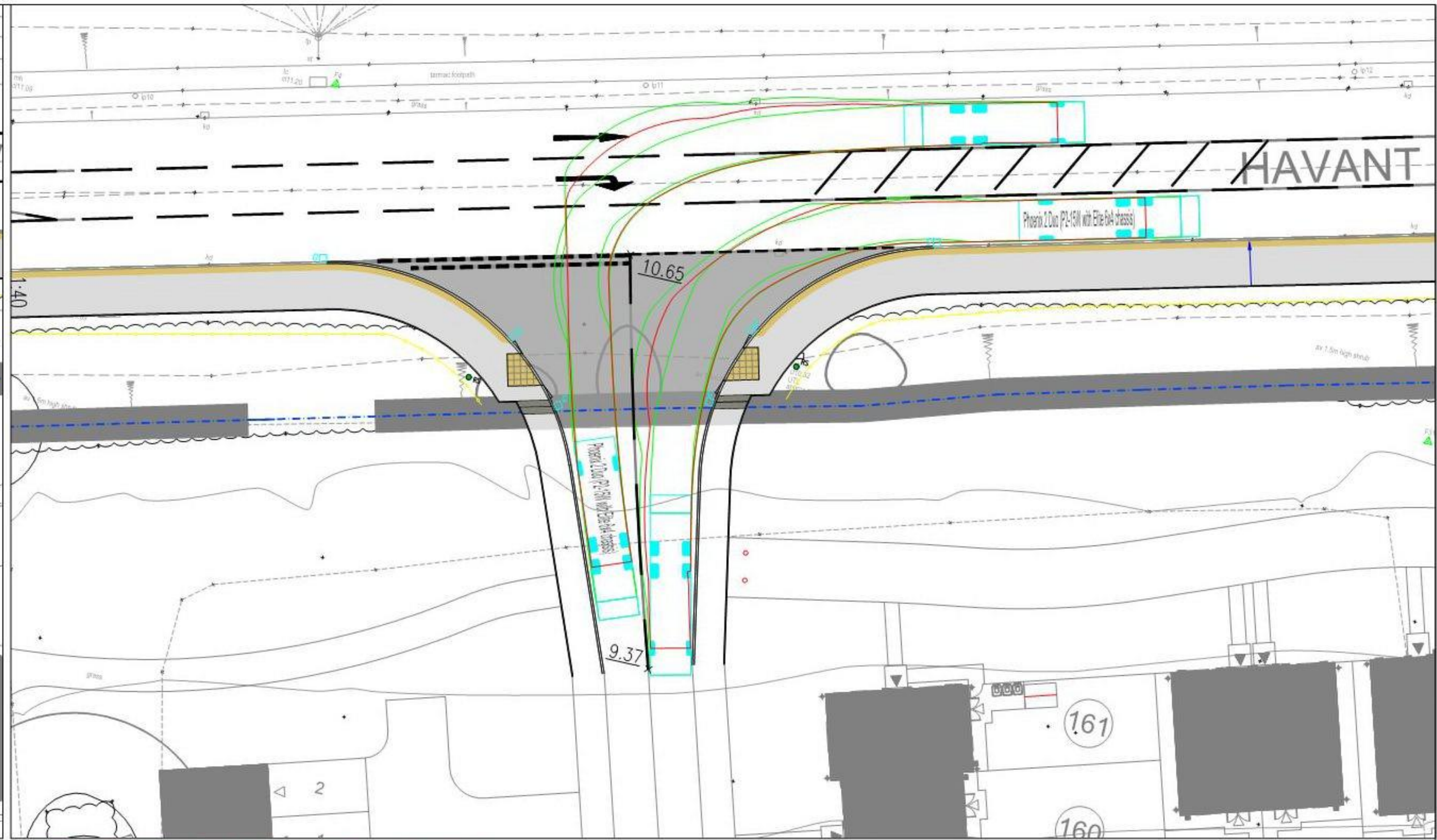
Paul Basham Associates Ltd
Lancaster Court
8 Barnes Wallis Road
Fareham Hampshire
PO15 5TU
T +44 (0) 1489 668134
E info@paulbashamassociates.com
W www.paulbashamassociates.com



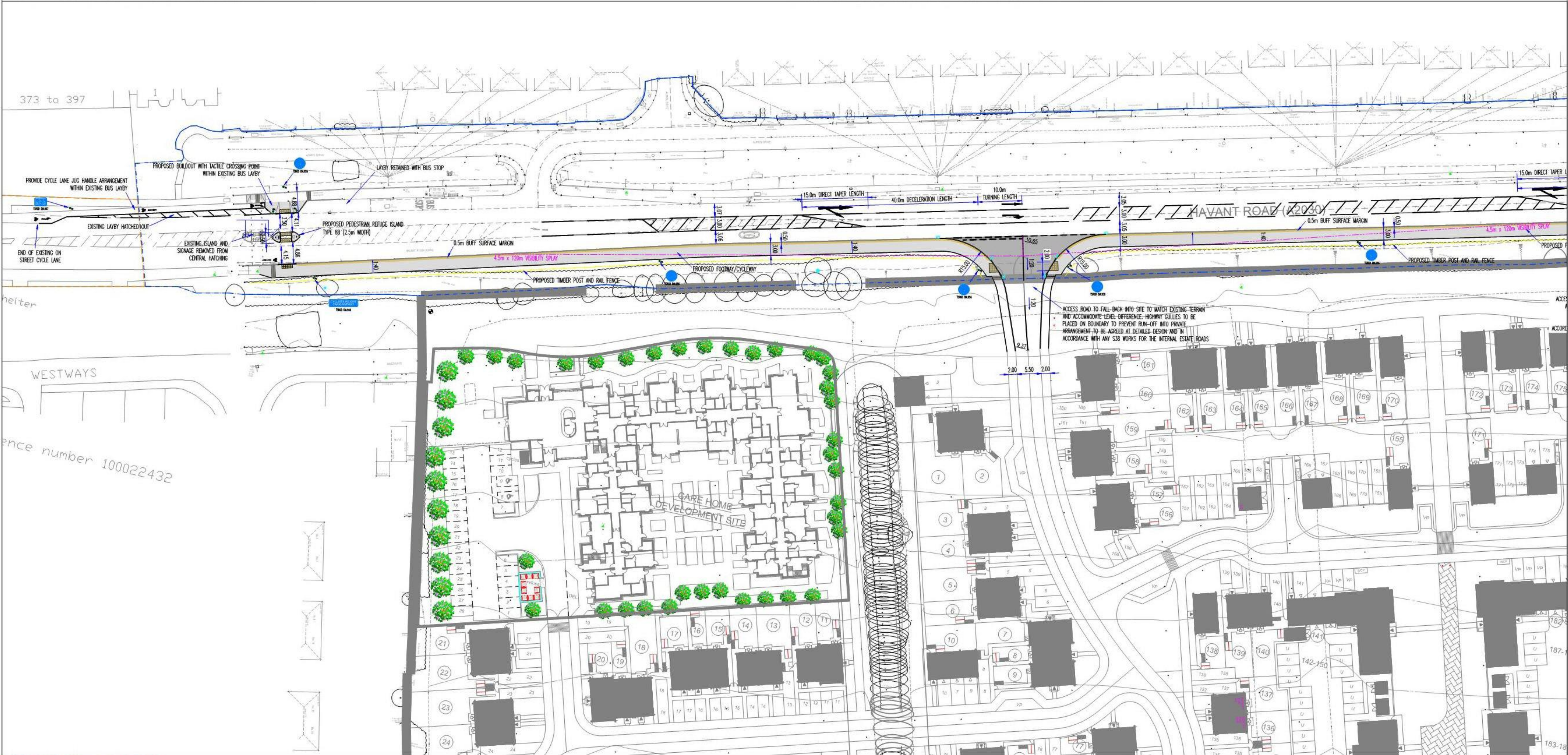
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FORTY ACRE FARM,
BEDHAMPTON
Title:
EASTERN SITE ACCESS ARRANGEMENT (SHEET 1 OF 2)
Project Phase:
PRELIMINARY
Checked By:
JL
Checked Date:
21.09.16
Drawn By:
EK
Drawn Date:
20.09.16
Client Drawing No.:
AS SHOWN (AT A1 SIZE)
PBA Drawing No.:
041-0023-003
Revision:
H



WESTERN SITE ACCESS VEHICLE TRACKING LEFT OUT AND RIGHT IN (SCALE 1:250)



WESTERN SITE ACCESS VEHICLE TRACKING LEFT IN AND RIGHT OUT (SCALE 1:250)



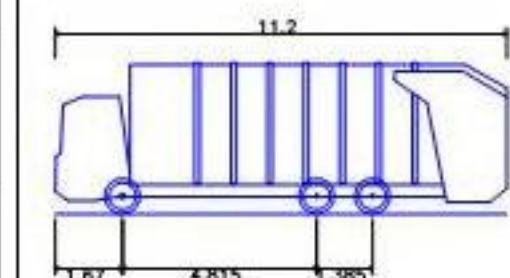
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VEHICLE PROFILE



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 2.500m
Overall Body Height 3.751m
Min Body Ground Clearance 0.104m
Track Width 2.500m
Lock-to-lock time 5.00s
Curb to curb turning Radius 9.500m

KEY

- INDICATIVE HAMPSHIRE COUNTY COUNCIL HIGHWAY BOUNDARY
- GULLY WITH 150m CONNECTION (U.N.O.)

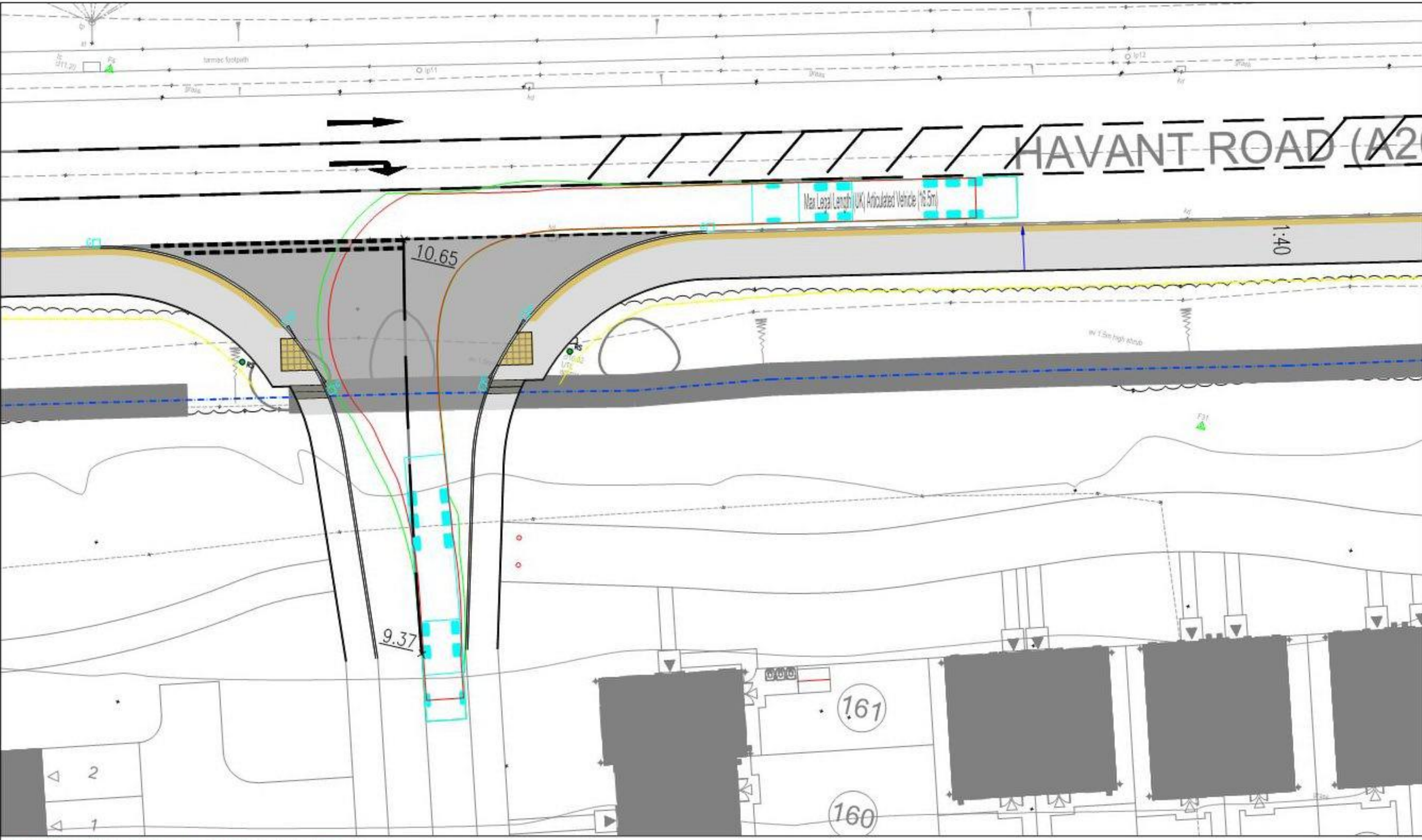


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E	REVISED DRAWING	10.08.17	CL	MS
D	REVISED DRAWING	28.07.17	EK	JL
C	REVISED DRAWING	28.06.17	EK	JL
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Rev	Description	Date	By	Check

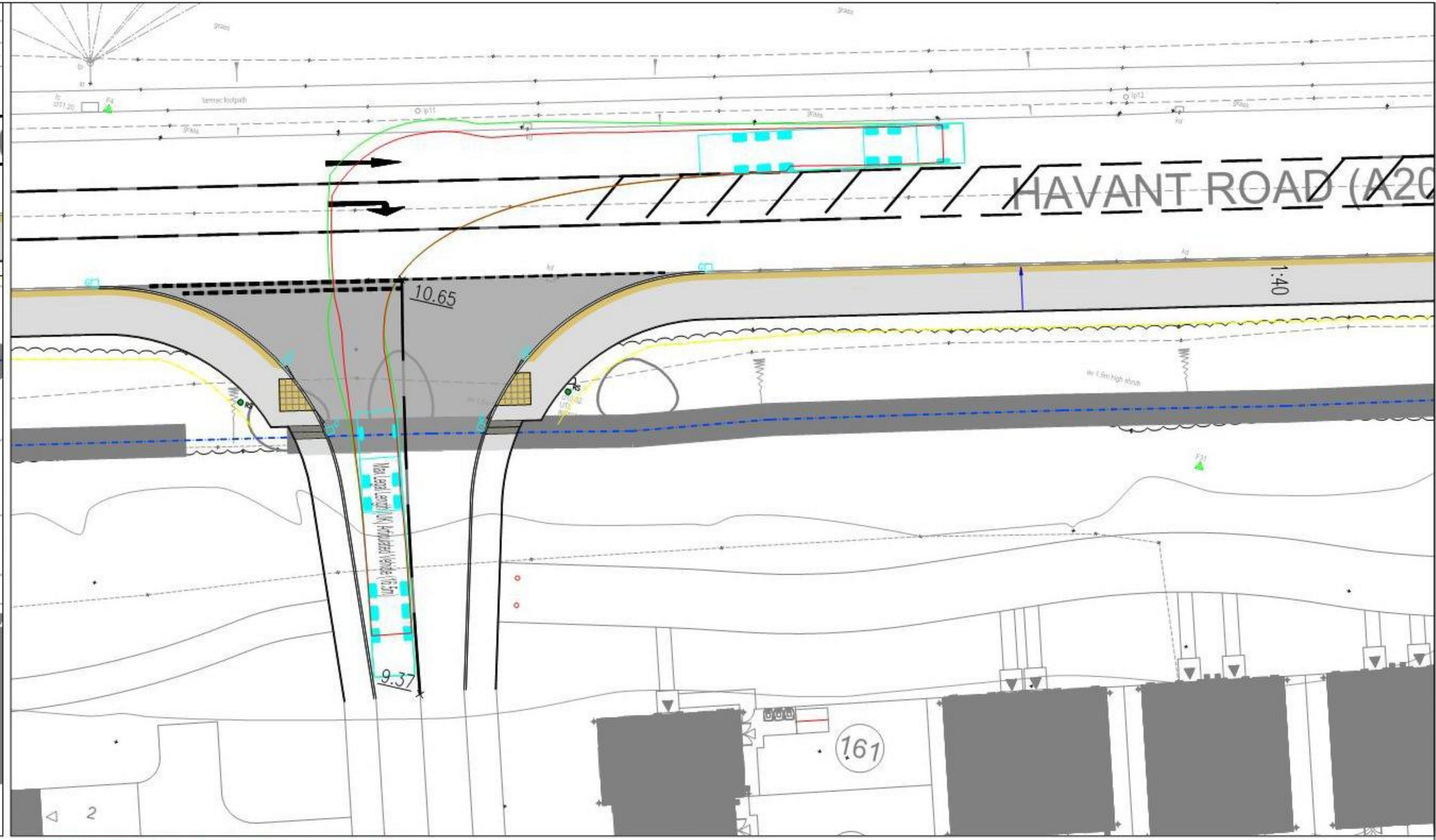
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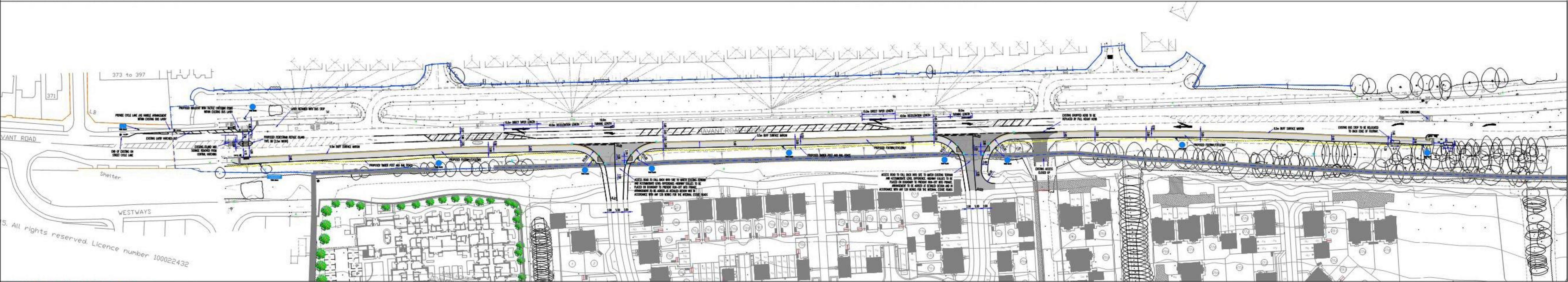
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FORTY ACRE FARM,
BEDHAMPTON
Title
WESTERN SITE ACCESS ARRANGEMENT (SHEET 2 OF 2)
Project Phase
PRELIMINARY
Checked By
JL
Checked Date
21.09.16
Drawn By
EK
Drawn Date
20.09.16
Client Drawing No.
Scale
AS SHOWN (AT A1 SIZE)
PBA Drawing No.
041-0023-004
Revision
H



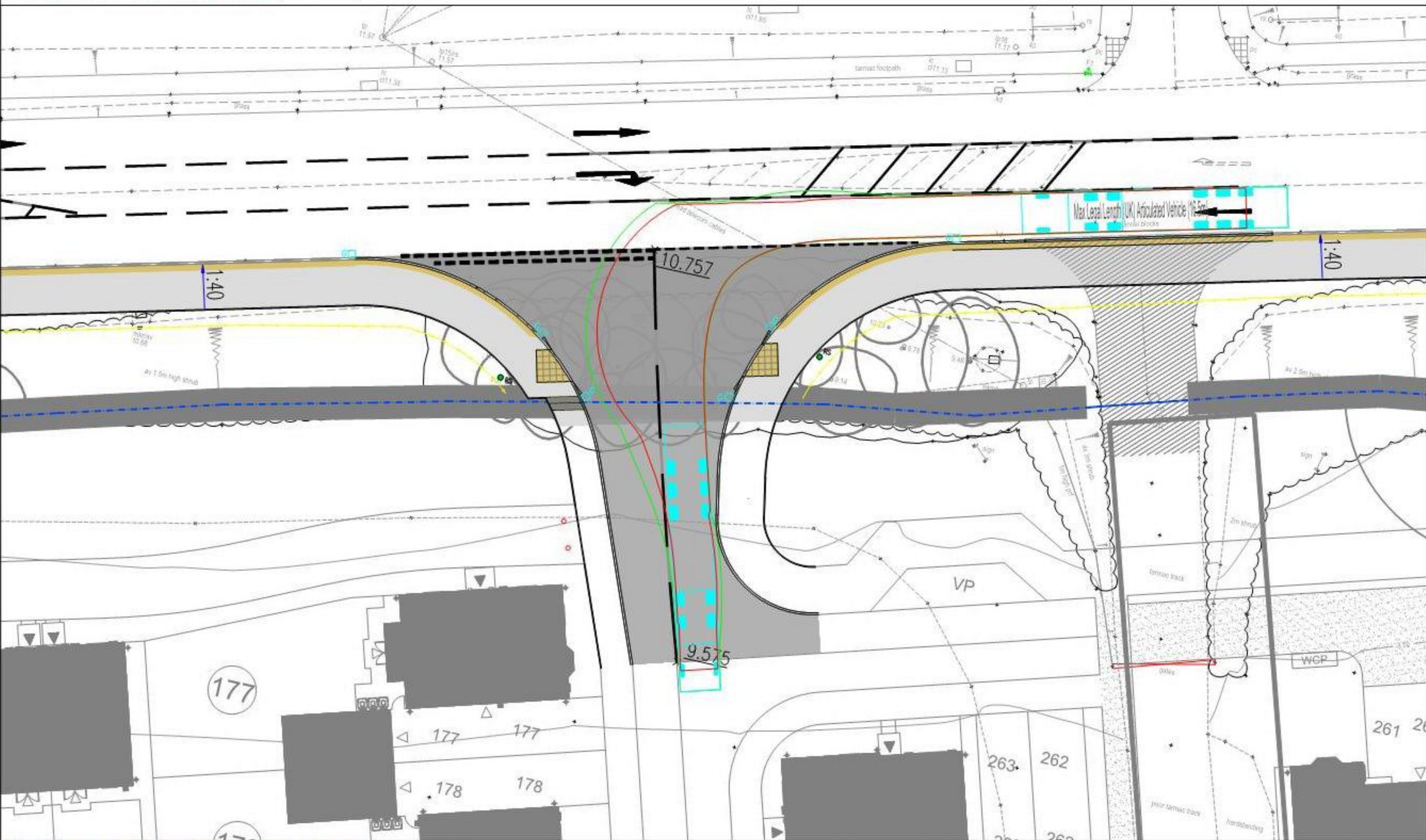
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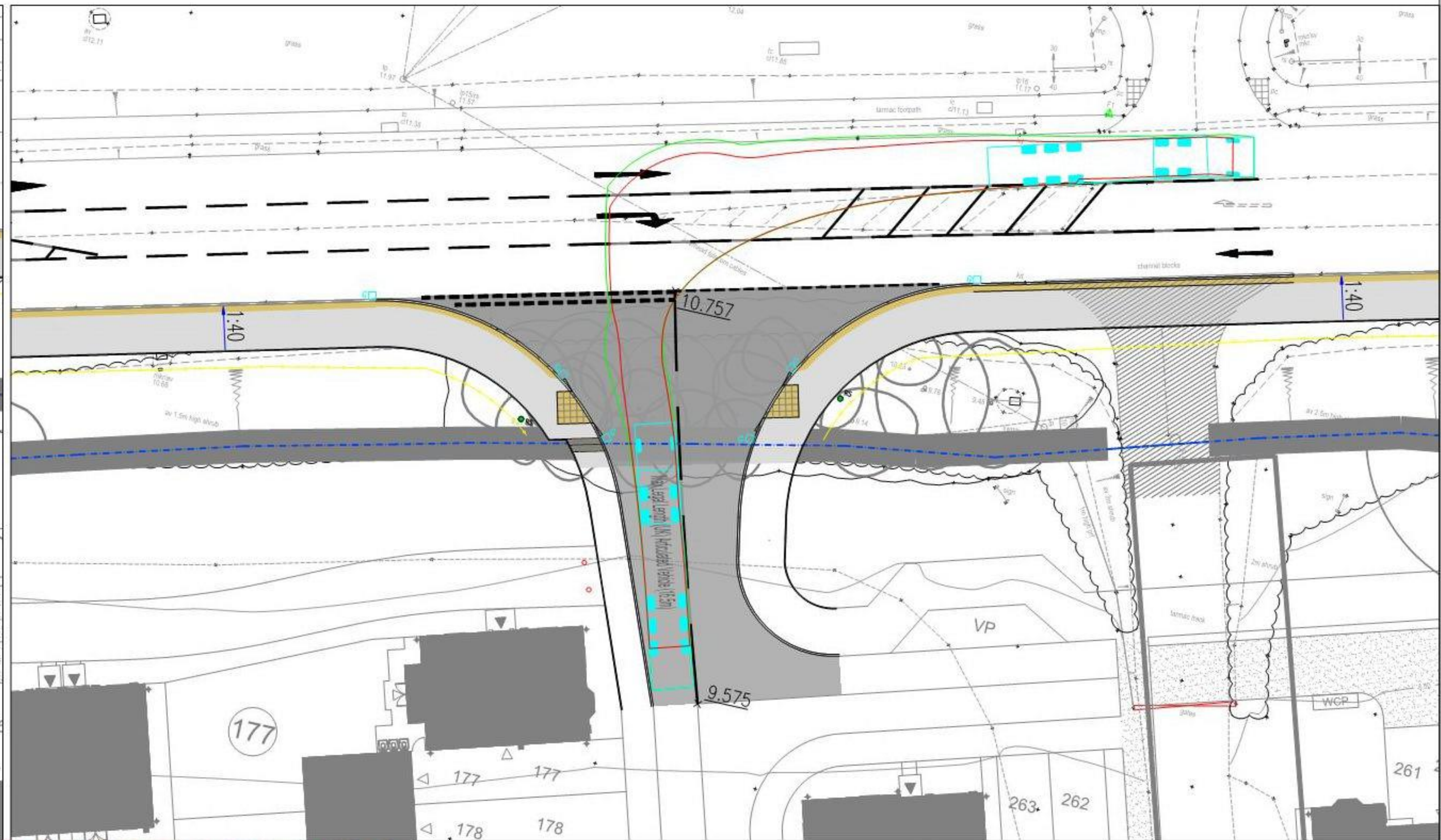
WESTERN SITE ACCESS VEHICLE TRACKING RIGHT OUT (SCALE 1:250)



WESTERN AND EASTERN SITE ACCESS (SCALE 1:1000)



EASTERN SITE ACCESS VEHICLE TRACKING LEFT IN (SCALE 1:250)



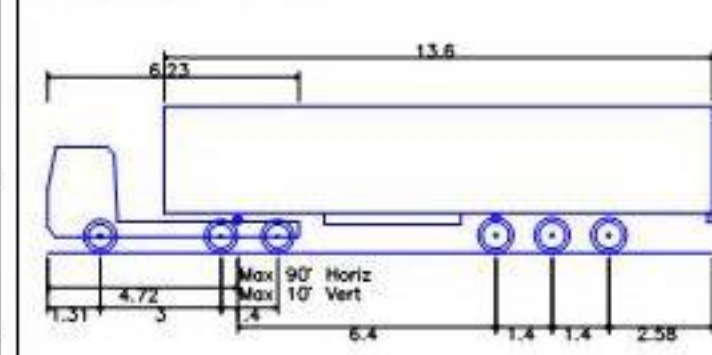
EASTERN SITE ACCESS VEHICLE TRACKING RIGHT OUT (SCALE 1:250)

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VEHICLE PROFILE



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 4.520m
Min Body Ground Clearance 0.360m
Max Truck Width 2.550m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 6.870m

KEY

- INDICATIVE PORTSMOUTH CITY COUNCIL HIGHWAY BOUNDARY
- INDICATIVE HAMPSHIRE COUNTY COUNCIL HIGHWAY BOUNDARY
- GULLY WITH 150° CONNECTION (U.N.O.)



Rev	Description	Date	By	Chkd
H	REVISED SITE LAYOUT	18.09.19	JL	MS
G	REVISED SITE LAYOUT	14.06.19	JL	MS
F	PCC BOUNDARY INCLUDED	30.08.18	EK	JL
E	REVISED DRAWING	01.05.18	EK	JL
D	REVISED DRAWING	10.08.17	CL	MS
C	REVISED DRAWING	28.07.17	EK	JL
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BARRATT HOMES

Project Name FORTY ACRE FARM, BEDHAMPTON			
Title ARTICULATED VEHICLE TRACKING			
Project Phase PRELIMINARY			
Checked By JL	Checked Date 09.11.16	Drawn By EK	Drawn Date 08.11.16
Client Drawing No.		Scale AS SHOWN (AT A1 SIZE)	
PBA Drawing No. 041-0023-005		Revision H	

Appendix G

**40 ACRE FARM
HAVANT ROAD
BEDHAMPTON**

PROPOSED ACCESS ARRANGEMENTS

STAGE 1 ROAD SAFETY AUDIT

AUGUST 2017

GM

TRAFFIC CONSULTANTS

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		7 August 2017
Designer's Response				
Authority's Response				
Audit Response				

Client:
PBA

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

Date: 7 August 2017

TABLE OF CONTENTS

1.0	INTRODUCTION	3
2.0	ITEMS CONSIDERED	4
3.0	MATTERS ARISING FROM THIS STAGE 1 RSA.....	5
4.0	AUDITOR STATEMENT	8

APPENDIX A Location Plans

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 access arrangements for a residential development on 40 Acre Farm on Havant Road in Bedhampton. Two accesses on the southern side of Havant Road will be provided for the development. Both accesses will take the form of ghost right turn lanes. Additional proposals include the provision of a 3m shared footway/cycleway on the south side of Havant Road and conversion of a traffic island to a pedestrian refuge west of the western access.
- 1.1.2 The RSA was carried out at the request of PBA.
- 1.1.3 GM Traffic Consultants Ltd carried out the Audit between 3rd August and 7th August 2017. The Auditors were:

Mark Barrett Highways England Cert. of Comp
Ian Medd MCIHT FSoRSA
- 1.1.4 The Audit Team are independent of the project design team has had no other involvement with the project.
- 1.1.5 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.6 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.
- 1.1.7 The Audit consisted of a desktop study and a site visit, which was carried out on Sunday 6th August 2017 at 12:00. It was dry and sunny with light traffic flows.
- 1.1.8 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.
- 1.1.9 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.
- 1.1.10 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
041.0023.003	D	Eastern Site Access Arrangement
041.0023.004	D	Western Site Access Arrangement

- 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: Shared footway/cycleway

SUMMARY: No margin strip

There are no proposals to provide a margin strip which may increase the risk of cyclists falling off the shared facility into the carriageway or being struck by passing traffic.

RECOMMENDATION

Provide a margin strip to highlight the kerb edge.

3.2 PROBLEM

LOCATION: Shared footway/cycleway

SUMMARY: Risk of pedestrians and cyclists falling down embankment

There are no proposals to provide a fence along the southern edge of the shared facility. The absence of any restraint system may increase the risk of cyclists/pedestrians falling down the embankment.

RECOMMENDATION

Provide appropriate restraint system along the southern side of the shared facility.

3.3 PROBLEM

LOCATION: Proposed pedestrian refuge

SUMMARY: Risk of pedestrians waiting in deceleration lane

The conversion of the existing traffic island to a pedestrian refuge may encourage pedestrians to wait in the deceleration lane when crossing from the north increasing the risk of being struck by passing traffic.

RECOMMENDATION

Build out the northern kerb line to provide physical protection and a shorter crossing distance for pedestrians.

3.4 PROBLEM

LOCATION: Throughout

SUMMARY: Existing street furniture narrows effective width of shared facility

It is unclear if the existing street furniture on the southern verge will be relocated as part of the proposals. Failure to relocate will increase the risk of cyclists riding in to them and injuring themselves.

RECOMMENDATION

Relocate the street furniture that will be located within the new shared facility ensuring adequate clearances are provided.

3.5 PROBLEM

LOCATION: Start/termination of shared facility

SUMMARY: No cycle access/exit point

No provision is shown to guide cyclists on and off the shared facility. This may lead to cyclists riding up or off the full height kerb and losing control or failing to give way when re-joining the main carriageway.

RECOMMENDATION

Provide a separate cycle access/exit points with appropriate signing and markings.

3.6 PROBLEM

LOCATION: Eastern end of shared cycle facility

SUMMARY: Risk of pedestrian/cycle collisions

It is unclear how busy the bus stop is at the eastern end of the shared facility. During busy periods pedestrians waiting for a bus may congregate near where cyclists would be joining the shared facility from the carriageway. This may increase risk of cyclists riding into pedestrians.

RECOMMENDATION

Provide sufficient space between the bus stop and where cyclists will join the shared facility.

3.7 PROBLEM

LOCATION: Shared facility

SUMMARY: No crossing facilities for cyclists

There is no provision for cyclists travelling east on the shared facility to re-join the eastbound carriageway. There is also no provision for on road eastbound cyclists to join the shared facility. This may increase the risk of cyclists being struck by passing traffic when attempting to exit/join the shared facility.

RECOMMENDATION

Provide facilities for eastbound cyclists to re-join the eastbound carriageway or shared facility.

3.8 PROBLEM

LOCATION: Pedestrian refuge

SUMMARY: Risk of pedestrians being struck by passing traffic

The area of hatch marking on the south side of the proposed pedestrian refuge may lead to pedestrians standing in the hatched area while waiting to cross, where they have no protection and are at risk of being struck by passing traffic.

RECOMMENDATION

Widen the pedestrian refuge to remove the excessive area of hatching on the south side of the refuge.

3.9 PROBLEM

LOCATION: Pedestrian refuge

SUMMARY: Confusing road markings

Road markings are shown at the pedestrian refuge which may be associated with a controlled crossing. This may lead to confusion over priority and may result in pedestrians stepping into the path of passing traffic.

RECOMMENDATION

Remove the road markings.

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:

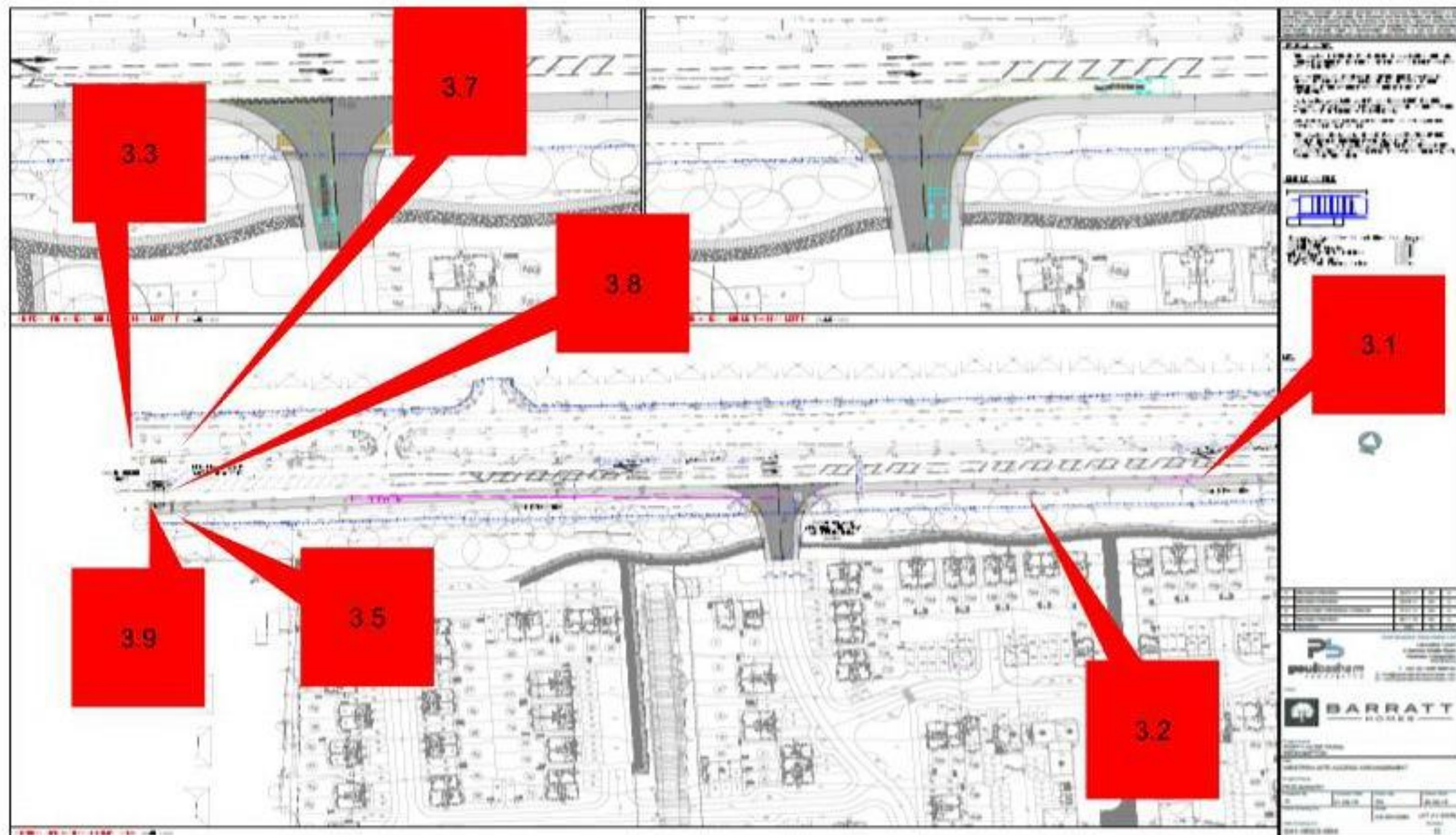
TEL: 07787 158 834

AUDIT TEAM MEMBER

Ian Medd

Signed: 

Signed: 7 August 2017



APPENDIX B: DESIGNERS RESPONSE

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

Scheme: 40 Acre Farm, Havant Road, Bedhampton - Proposed Access Arrangements

Date Audit Completed: 7 August 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	Yes	Yes	0.5m margin strip provided
3.2	Yes	Yes	Fence provided along southern edge of footway/cycleway which is behind the visibility splays
3.3	Yes	Yes	A build out is being provided on the northern boundary to reduce the crossing distance and guide pedestrian movements.
3.4	Yes	Yes	Details of relocated street furniture will be provided at detailed design stage
3.5	Yes	Yes	Improved markings provided
3.6	Yes	Yes	Bus stop has been relocated to back edge of footway as much as possible. However, the arrangement allows for a smooth and continuous transition to the existing shared facility to the north of Havant Road.

3.7	Yes	Yes	A jug handle arrangement is proposed to connect the existing eastbound cycle facility to the southern facility.
3.8	No	No	This is a regular occurrence across the county. We have provided a refuge size as in accordance with HCC's details. The distance between the refuge island kerb is a safe crossing distance and pedestrians should therefore not feel the need to wait outside the crossing.
3.9	Yes	Yes	Said markings have been removed

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for 40 Acre Farm, Havant Road, Bedhampton - Proposed Access Arrangements

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