

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

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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

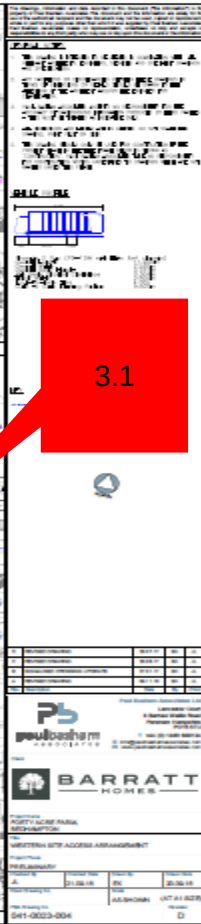
AUDIT TEAM MEMBER

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

Appendix H



Hampshire
County Council

Forty Acre Farm, Bedhampton

Pre-Application Design Review Report Revision A

For Revision 'A' Details – See Section 6.1 Revision 'A' - Addendum

Job No: R.J506176.01 (JZ)

Report No: PAR506176-A



Stuart Jarvis BSc DipTP FCIHT MRTPI

Director of Economy, Transport and Environment, The Castle, Winchester



Forty Acre Farm, Bedhampton

Prepared by: Abayomi Kesinro

Signed:

Date: 13-09-17

Checked by: Graham Redman

Signed:

Date: 13th September 2017

Approved by: Kathie Murray

Signed:

Date: 13th September 2017

Report issued to Development Planning

Officer: Holly Drury

Date: 13th September 2017

REPORT EXPIRY DATE: **2 Years after Issue**

Revision A

Prepared by: Abayomi Kesinro

Signed:

Date: 15th November 2017

Checked by: Graham Redman

Signed:

Date: 20th November 2017

Approved by: Kathie Murray

Signed:

Date: 20th November 2017

Report issued to Development Planning

Officer: Holly Drury

Date: 21st November 2017

REPORT EXPIRY DATE: **2 Years after Issue**

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1. Scheme Details

1.1. Development Planning Officer

Name: Holly Drury
Tel: 01962 826996

1.2. Consultant Details

Name: Paul Basham Associates
Address: Lancaster Court, 8 Barnes Wallis Road, Fareham, Hampshire
PO15 5TU
Tel: 01489 668136
Contact: Jessica Lloyd (jessica@paulbashamassociates.com)

1.3. Developer

Name: Barratt David Wilson Homes
Address: Tollbar Way, Hedge End, Southampton, SO30 2UH
Contact: James Snelgar (james.snelgar@barratthomes.co.uk)

1.4. Scheme Location

A2030 Havant Road, Bedhampton. Opposite Auriol Drive.

1.5. Description of Highway Improvements

Provide two new accesses off Havant Road to service a new development of 340 homes. Construction of a new shared-use path on the southern side as well as improved pedestrian crossing facilities.

It is not clear if the internal road network is to be adopted via a Section 38 agreement.

1.6. Estimate

Consultant has not provided an estimate for the works.

1.7. Submitted Information

1.7.1. Drawings

Drawing no.	Rev	Drawing Title	Date Received
041.0023.003	D	Eastern Site Access Arrangement	31-08-17
041.0023.004	D	Western Site Access Arrangement	31-08-17
041.0023.005	D	Tracking	31-08-17

1.7.2. Documents

Document no.	Rev	Document Title	Date Received
		RSA 1 and designers response	31-08-17
041.0023/CDTN/1		Concept Design Check Technical Note	31-08-17

2. Design Check Details

2.1. Date documents received from Development Planning

The design check was received from development planning 5th September 2017.

2.2. Date review meeting was held

No meeting held.

2.3. Internal Consultations

Due to the high level nature of a pre application check no internal consultations were carried out.

2.4. Quality of Drawings etc. provided

Drawings were suitable to carry out a pre-application design check.

3. Comments on Design

3.1. General Comments

The concept design check transport note provided states that the form of the access has been agreed previously with HCC; however only the general principles were discussed. The purpose of the pre application review is to agree the best form of access for this location based on the updated information submitted.

The boundary with Portsmouth City Council should be indicated on the drawing to ascertain how the proposals link into the existing infrastructure.

Is there a need for two points of access, as stated in the CDTN at least 60% of the trips will use the eastern access and 85% of the traffic will be traveling east bound there doesn't seem to be a justification for two points of access.

There are concerns that with the level of flow on Havant Road vehicles exiting the access and turning right will struggle to find an appropriate gap. This could result in accidents. As per section 4 of TD16/07 a roundabout might be required to accommodate the right turning traffic out of the access.

Whilst a roundabout would address the issues raised to right turning traffic out of the access the land take up to achieve the appropriate deflection could pose issues to the developer from a viability point of view. As such signalling the eastern junction should be investigated. If possible one of the accesses for Auriol Drive should be incorporated into the design to create signalised cross roads.

It is unclear from the provided plans how the internal site will be linked and if the site will be offered for adoption. There appears to be an internal footway that runs through the site and into Westways. If the internal site is to be offered for adoption then the internal boundary footpath should be made shared-use if not already. This will remove the need to provide a shared-use path adjacent to Havant Road.

The proposed new development access would need to be designed in accordance with TD41/95 a "dwell" area of at least 15m shall be provided immediately adjacent to Havant Road.

If a signalised junction is progressed, consultant should look at repositioning the bus stop closer and introducing a pedestrian phase to offer pedestrians improved crossing facilities. This could result in reduced footway on the southern side of Havant Road.

3.2. Other elements of design

There are currently street lighting columns on Havant Road; these will need to be relocated to the back of any proposed footway.

As per HD42/17 a Walking, Cycling & Horse-Riding Assessment and Review should be provided with a future submission.

A stopping up order might be required for the existing access off Havant Road.

The proposed separation from the live carriageway should be 1m as this is the desirable minimum; this should also be a verge strip.

4. Statutory Requirements

Orders. (line / side road)	N / A
Compulsory Purchase Orders.	N / A
Traffic Regulation Orders.	N / A
Parking Restriction Orders.	N / A
Road Hump Regulation Consultations.	N / A
Public Consultation.	N / A
Hedgerow Regulation Act.	N / A
Footway Conversion	N / A

The process of any Statutory requirements will not be commenced until a written request is received from the Consultant; this should include an undertaking to pay all costs incurred.

Consultant to note that the procedure for dealing with any Statutory Requirements will normally take some four to six months, but in exceptional circumstances could exceed nine months. The scheme programme should take this into account.

Initial contact should be made with the Assistant Service Manager for Area

Office	Tel	Email
North	01256 764455	highways-transport.north@hants.gov.uk
East	01730 235800	highways-transport.east@hants.gov.uk
South	01329 824757	highways-transport.south@hants.gov.uk
West	023 8066 3311	highways-transport.west@hants.gov.uk

5. Future Submissions

5.1. Guidance

Consultant shall note that any future preliminary, combined or detail design submissions must be made in accordance with HCC's Section 278 Technical Submission Guidance, which can be found together with other important information for developers at;

<http://www3.hants.gov.uk/roads/highways-developers/construction-standards.htm>

5.2. Considerations

The comments below are to assist the Consultant in future submissions.

5.2.1. Officers

No further comments.

5.2.2. Preliminary Design Check

Sight visibilities / Land Plan

Consultant to confirm that all land required for visibility splays will be dedicated to the Highway Authority. A plan showing extent of existing highway, new development land for adoption and any third party land required is required.

Departures from DMRB / HCC Standards.

The Consultant is to provide an explanation of the case for inclusion of any departures or relaxation's to standards proposed, together with an assessment of risks involved in adopting such proposals, along with any mitigation measures proposed. An independent safety auditor's comment is also required.

The developer shall note that departures or relaxations will not be approved if their inclusion is considered inappropriate. Where proposals have been recommended for approval which are subsequently found to contain 'departures from standards' not previously indicated by the Developers Consultant it must be noted that acceptance of retrospective applications cannot be guaranteed.

Traffic speed surveys

The existing speed limit is to be confirmed. The 85th%ile speed of the site required if any Departures from Standard are included within proposals or if Consultant is applying Manual for Streets criteria.

Accident History Report.

The Consultant shall provide a narrative of the Accident History Report (most recent 5 years) from Hampshire Constabulary, contact the Collision Records Team by phone on 02380 479678 or E-mail:

collision.records@hampshire.pnn.police.uk and identify any trends that are addressed by the proposals or that could exacerbated.

5.2.3. Combined Design Check

HCC Standard Detail Drawing/Specification

The Consultant shall provide a list of HCC Standard Details, including Revision suffix, relevant to the works. It should be noted that

The latest HCC standard details may be found at:

<http://www3.hants.gov.uk/roads/highways-developers/construction-standards/standard-details.htm>

Also, for all but the smallest schemes a Contract Document will be required. The Consultant must confirm they have based their specification on the latest HCC model contract document. This specification can be supplied, but will need to be made “scheme specific”.

Road Markings and Signing

Submission to be in accordance with the Traffic Sign Regulations & General Directions and any Highway Authority’s requirements. A fully detailed sign schedule will be required for larger schemes.

Pavement Design.

The sub-base shall be recycled granular material as detailed in HCC Specification (Hampshire County Council Master Contract Documents). Virgin crushed rock sub-base may only be used where it can be demonstrated that recycled or secondary materials are not available locally.

Furthermore, during the first week of construction work equilibrium CBR values shall be established.

Street Lighting Proposals.

The consultant should note that Southern Electric Contracting will not undertake any servicing works until a ‘Certificate of Approval for Illuminated Street Furniture Installation’ has been signed the HCC Street Lighting Engineer.

It is a requirement of the Consultant to consult the relevant Local Lighting Authority regarding any proposals. Written confirmation of the consultation will be required prior to commencement of works on site.

<http://www3.hants.gov.uk/index/your-area/localpages/districts.htm> or

<http://www3.hants.gov.uk/index/council/localgov/parish.htm>

Drainage Proposals.

To promote the use of recycled plastic, please consider HAPAS certified recycled plastics, such as twinwall drainage piping. Installation of such piping should be installed as per manufacturer’s recommendations.

Jetting of new drainage runs may be necessary at end of contract, in order to ensure all new pipe-work is free of debris and free running.

6. Recommendation on Proposals

RECOMMENDED TWO STAGE APPROACH

Extent of pre-application advice

Hampshire County Council pre-application advice is subject to the following terms:

- *Any views or opinions expressed in responses are made at officer level in good faith and to the best of ability, without prejudice to the formal consideration of any planning application which will be subject to public consultation and ultimately determined by the relevant Planning Authority.*
- *Any advice given by officers does not constitute a formal response or decision by the County Council. Save for cases of negligence, the County Council will not be liable for any loss or damage suffered arising from or in connection with the use of the advice.*
- *The pre-application advice given may not necessarily be exhaustive but will be intended to highlight the main issues that need to be addressed / considered as part of the application process on the basis of the discussions that have taken place and the information that is available at the time.*
- *Should the detail or the nature of the proposal change, further advice should be sought. Similarly, once the detail of any proposal has been worked up if not previously available, it may be helpful to seek further advice prior to the submission of an application.*
- *The advice and any attachments to it are solely for the use of the individual to whom it is addresses. If you are not the intended recipient of the advice, you must not take any action based on its contents, nor disclose the communication to a third party.*

6.1. Revision 'A – Addendum 15-11-17

Following the issue of the Report (with concerns highlighted), the consultant has provided additional information for consideration.

Drawings issued new / updated –

None

Documents issued new / updated –

Addendum to RSA 1

041.023 – Westways PM Turning Count Survey

041.023 – Westways AM Turning Count Survey

HCC Comments

The consultant has demonstrated that whilst a majority of vehicles exiting the new access will be heading eastwards towards the A3 (M) junction they have confirmed that the AADT will only require a ghost island junction.

They have also provided turning movements for the existing Westways Junction onto Havant Road which shows a 50:50 split which supports their assumption that there will be no requirement for a signalised junction.

The proposed access arrangements are acceptable based on the revised details.

Comments raised in section 3.2 of the original report above are still applicable.