

# MEMO

|                |  |                        |              |
|----------------|--|------------------------|--------------|
| <b>TO</b>      | Devon County Council   | <b>FROM</b>            | Matt Coleman |
| <b>DATE</b>    | 16 March 2022  | <b>CONFIDENTIALITY</b> | Public       |
| <b>SUBJECT</b> | History of Harbertonford community traffic concerns raised with Devon County Council |                        |              |

## 1.0 INTRODUCTION

Over a number of years, members of the community of Harbertonford have raised a number of concerns with Devon County Council regarding the safe operation of the A381 through the village. These primarily include the speed of traffic and use of the existing zebra crossing.

The concerns were further brought to DCCs attention following a report sent from Teignbridge District Councillor John McKay who authored a “A381 Harbertonford Traffic & Issues” on behalf of the community.

The purpose of this memorandum are twofold.

- To summarise the various correspondence understood to have occurred between DCC and local stakeholders over the last couple of years since the report sent on 5 December 2019.
- To clarify the latest position on each issue and any WSP design work associated with the issues raised.

WSP are undertaking this review as part of their delivery of a highway surfacing maintenance due to take place in 2023 under the “Doing What Matters” principle adopted by DCC.

## 2.0 COMMUNITY CONCERNS

More recently, Councillor John McKay provided a report on behalf of the community on 5 December 2019 titled “A381 Harbertonford Traffic & Issues”, that provided his analysis of issues with regard to increasing traffic levels, type and speed through the village and the direct impact and concerns the community had with the risk of using the zebra crossing.

As part of the outcome of this report, Councillor John McKay had made a number of recommendations that he wished to see DCC support. The parish council is actively pursuing a number of these. The recommendations made and with which the structure of this memorandum has been accorded to are:

1. The speed of traffic within the village needs to be reduced to 20 mph. (See section 3).
2. The zebra-crossing needs to be moved. (See section 4).
3. SafeZone cameras should be considered. (See section 5).
4. There needs to be much better signage and road markings. (See section 6.1).
5. The pavements need to be greatly improved and made suitable for prams and the disabled and able to accommodate concepts like the walking school bus which requires a safe environment. (See section 6.2).

6. The effect of damaging emissions needs to be addressed, although 1 above partly addresses this. (Refer to section 6.3).
7. Longer term, the traffic flow through the village needs to be reduced by better policies that reduce the need for so many heavy goods movements, together with improvements in public transport, car-sharing, lorry/load sharing etc. (aka Demand Management). Also, the District Council should adopt strategic policies which will reduce traffic on the A381, not increase it (as would a hotel in Kingsbridge built by the Council on behalf of Premier Inn). (Refer to section 6.3).

### **3.0 SPEED LIMIT CHANGE**

#### **3.1 Existing DCC Traffic Policies**

The section of A381 through the village has a 30mph speed limits, which under DCC policy should be the norm for roads through communities.

However, as an 'A' road primary route the road is therefore recognised as serving a strategic function for the local economy. It is current DCC policy that 20mph speed limits or speeds zones must not be applied to roads serving a strategic function.

DCC policy criteria that need to apply for consideration of a 20mph speed limit or zone are:

- Significant vulnerable road user activity
- Speed related casualty accident history
- Mean speeds low (around 20mph) or proposed engineering will make limit self-enforcing (evidence to be collated).
- Environmental impact of scheme to be considered in terms of signing lining noise pollution etc.
- Not on roads serving a strategic function
- If outside a school should also be part of the adopted school travel plan
- Must have support in the wider community

#### **3.2 DCC Responses**

With respect to imposing a 20mph speed limit through Harbertonford, Lee Cramner (DCC Traffic Engineer at the time) provided a response to Councillor John McKay from his report on 22 January 2020 (see Appendix A) in which he outlined how a number of criteria for a 20mph speed limit or zone are not met under current DCC policy. It was noted that Councillor John McKay's request on behalf of Harbertonford will be held on record for consideration as part of any future review.

## **4.0 RELOCATION OF THE ZEBRA CROSSING**

### **4.1 Existing Crossing**

The Harbertonford Traffic & Issues report outlines the history of concerns and actions that have been raised and implemented for the crossing since its initial implementation in 2002. The report references the poor visibility for vehicles approaching the existing crossing from the south which is below standard for a 30mph road with approximately 23m. The report refers to anecdotal experience's residents have of near misses using the crossing and damage only collisions that would not be recorded as part for STATS19 data.

Recently, DCC were made aware by Councillor John McKay of a collision taking place in February 2021 by the crossing. However, it is not known to what extent, if any, injury was caused. If an injury did occur and was reported, this would be collated within the 2021 data, which is published in April of the following year (i.e. April 2022).

### **4.2 DCC Process for Reviewing Site Safety**

The Cluster Site Methodology is used to assess whether further investigation is needed to address safety issues at identified black spots. The current qualification for a review of the site as a possible Casualty Severity Reduction (CSR) scheme is 5 collisions causing injury within a five-year period.

Any site that matches the criteria will need to be manually verified to check if each site's collisions have a genuine link with potential road surface issues. All of the annual investigation collision processes do not automatically presume a capital funded solution will be sought and undertaken. Once a site is fully investigated, if appropriate, a viable solution is sought and a preliminary cost for the solution is calculated.

DCC do provide guidance that as collision numbers are falling over time it is increasingly likely that the starting point minimum criteria will need to be varied accordingly to either search for fewer collisions or a wider geographical radius. The revised and confirmed minimum criteria is decided by the Safer Travel Programme Officer using professional judgement.

STATS19 data currently shows one recorded incident causing 'slight' injuries within the last 5 years occurring on 12 September 2018 (see Appendix B) which does not meet the criteria set for CSR funding.

### **4.3 Alternative Crossing Proposals**

Councillor John McKay provided two alternative locations within his report that would be preferred over the existing location. Option 1 was for a crossing immediately south of the river bridge with an alternative option 2 just north of the crossings existing position adjacent the north bound bus stop. In December 2020, WSP were asked by DCC to review these proposals.

An initial review of the site with respect to a crossing found that both locations also have their own constraints. However work was undertaken to determine whether either option could provide the improvement necessary to satisfactorily address community concerns to have a crossing that can be used in confidence.

#### **4.3.1 Option 1 – South of Harbourne Bridge** (see draft drawing 70074832-001 Rev P01 in Appendix C).

WSP initially provided a concept design for an Option 1 layout. This was then reviewed by a Road Safety Auditor Team Lead who provided their assessment of a crossing at this location via email in December 2020 (see Appendix C).

It was felt that there would be no, to marginal, improvement only as although forward visibility improved at the crossing for northbound vehicles to observe pedestrians waiting to cross on the west side, this was at the detriment to forward visibility for south bound vehicles as this would become poor. It was also considered unsuitable for any visually impaired pedestrians to need to access the crossing using the east side of the bridge which would be absent of any physical separation from the A381.

#### **4.3.2 Option 2 – Adjacent Northbound Bus Stop** (see drawing 70074832-001 Rev P03 in Appendix D)

A second option was developed approximately 20m north of the existing crossing within the north side of Woodland Road entrance. This improves visibility for north bound vehicles, achieving an absolute minimum, but compliant length of forward visibility. With this improvement, it was considered that this was a more viable solution and was taken forward to a Stage 1 Road Safety Audit for further assessment.

The RSA Stage 1 Report raised problems that are outlined and discussed within the RSA Stage 1 Response Document (see Appendix D). It has been agreed with DCC's Safer Travel Programme Officer that although this solution has issues with reduced intervisibility when a bus is at the bus stop, it provides a noticeable improvement on the current Zebra crossing.

The proposal is planned to be issued to key community stakeholders to consult with whether this would address local concerns acceptably. It would be planned to be implemented during the proposed maintenance resurfacing works in 2023 should this be adopted.

## **5.0 COMMUNITY SPEEDWATCH**

### **5.1 Existing concerns regarding traffic speed**

The Harbertonford Traffic & Issues report provides anecdotal evidence of vehicles regularly exceeding the 30mph speed limit and makes a recommendation that SafeZone cameras should be installed as a measure to support speed limit compliance. It is understood that the parish council is establishing a Community SpeedWatch team and through the Community SpeedWatch Coordinator, have raised concerns regarding traffic speed through the village with the police.

### **5.2 Police response with 2019 traffic data**

Gary Williamson (Police Operations Manager for Safety Camera Unit) has provided a response that outlines current guidance within which they work to establish the deployment of mobile speed camera units (see Appendix D). Currently the latest traffic data from 2019 calculates the average mean speed recorded was 24mph and the 85<sup>th</sup> percentile was 30mph. This data therefore does not support the number of speeding vehicles through the village as justifying a mobile unit being occasionally placed there. With an effective (serious) collision rate of zero the criteria for enforcement is also not met.

### **5.3 Further Actions**

Harbertonford Parish Council procured their own traffic speed survey for one week between July 29 to August 4, 2021 located just north of the existing zebra crossing by the VAS, which has been made available online. This shows an average mean speed of 23mph and an 85<sup>th</sup> percentile of 28mph.

It is understood that a Community SpeedWatch will be supported in the village. However, a safe location to undertake this needs to be identified.

## **6.0 OTHER ITEMS**

### **6.1 Signage and Road markings**

As part of the highways resurfacing scheme, the existing signage and road markings will be reviewed to ensure items put back on the new road surface are still compliant and/or suitable.

### **6.2 Pavement Improvements**

The highway corridor is highly constrained throughout the village. Footway widening is considered necessary as part of the Option 2 crossing relocation on the southeast pedestrian approach to improve access to the crossing from Old Road where the existing footway reduces to as low as 800mm wide. The desirable minimum should be 1.2m.

### **6.3 Traffic Emissions and Long-Term Future of A381**

At the time of writing, there are understood to have been no further considerations to Recommendations 6 and 7 in Section 1.2 of this memorandum.



## APPENDIX A

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- Lee Cramner (DCC Traffic Engineer) response 22 January 2020

**From:** Lee Cranmer <[lee.cranmer@devon.gov.uk](mailto:lee.cranmer@devon.gov.uk)>  
**Sent:** 22 January 2020 10:02  
**To:** Cllr John McKay <[cllr.John.McKay@southhams.gov.uk](mailto:cllr.John.McKay@southhams.gov.uk)>  
**Cc:** Councillor Jacqi Hodgson <[jacqi.hodgson@devon.gov.uk](mailto:jacqi.hodgson@devon.gov.uk)>; Alan Martin <[Alan.Martin@devon.gov.uk](mailto:Alan.Martin@devon.gov.uk)>  
**Subject:** A381 - Harbertonford

Dear Councillor McKay

Thank you for your correspondence and comprehensive report regarding traffic issues in Harbertonford.

In relation to your concerns regarding the location of the zebra crossing, a number of these were raised after the crossing was initially installed and whilst forward visibility is not ideal there are a number of intervention measures that were put in place to highlight the zebra crossing, including warning signs supplemented with road markings and an advisory maximum speed of 20mph and vehicle activated signs. These features supplement the zig zag markings and flood lights at the crossing.

I do understand that there has been recent discussion on conducting a CCTV survey at the crossing. I have subsequently discussed the matter with Meg Booth the Chief Officer for Highways, Infrastructure, Development and Waste who has indicated that such a survey would be unhelpful in trying to understand the degree of conflict at the crossing.

Devon County Council current speed limit policy defines the required criteria for considering a 20mph speed limit/zone. For clarity I have provided details of this criteria below for information:

- Significant vulnerable road user activity and an identified speed-related casualty record.
- Mean speeds will already be low; if not, the new restriction should be self-enforcing.
- Careful consideration should be given to the environmental impacts associated with the scheme.
- Should not be introduced on roads serving a strategic function.
- 20mph speed limits may be provided in the vicinity of schools where the above criteria are met, ideally where highlighted in the school's travel plan.

There are several elements associated with your request that do not meet our current policy, which are speed related casualty record, mean speeds already low and if not, the new restriction would need to be self-enforcing and that the road forms part of the strategic network.

However, you may be aware that on the 10 July 2019 Devon County Councils Scrutiny Committee – Traffic Speed Task Group submitted a report to Cabinet that provided several recommendations regarding speed of vehicles, including taking a different approach to our policy. Details of the report can be found at the following link:

<https://democracy.devon.gov.uk/documents/s26516/Traffic%20Speed%20Scrutiny%20Task%20Group.pdf>

In line with our Cabinets resolution, officers are currently investigating those recommendations contained in the report relevant to Highways. You will note that a number of the points that you raise in your request have been identified by the Traffic Speed Task Group, which identify the benefits associated with 20mph speed limits.

One of the recommendations contained in the report relates to a trial of a default residential 20mph limit in Newton Abbot and this will be the focus of resources for officers over the coming year. This review will not only focus on speed and casualty reduction but also other outcomes such as environmental benefits and encouraging walking and cycling.

Whilst the above will not address your current desire for a 20mph speed limit in the village I hope it clarifies that we are seeking to deal with concerns raised by communities regarding our current policy. Going forward Devon County Council will need to ensure that it manages expectations relating to a number of communities that have already expressed a desire for default 20mph speed limits against what resources, both budget and staff, will be available. I will ensure that your request is held on record for future consideration following the trial in Newton Abbot and review of our current policy.

The resurfacing to the south of the crossing is too large to be progressed as a local order so a scheme has been raised for consideration through Devon County Council's Asset Management Strategy. In recent years Devon County Council have been aware that we are unable to spend what we need to maintain our highway network to keep up with annual deterioration and therefore need to manage its deterioration. It's necessary for Devon County Council to take a long term approach to the maintenance of all of its highway infrastructure assets which considers the cost and anticipated performance of the maintenance work we do. Details of our Asset Management Strategy can be found using the link below:

<https://www.devon.gov.uk/roadsandtransport/highway-asset-management/>

In essence the Asset Management Team draw together a number of data sets to provide a way to appraise and prioritise the high number of similar schemes throughout the County. At this time the scheme remains under review which indicates that it is not planned to be progressed in 2020/21 but will remain in the system for consideration in the future. There is no scope within this scheme to consider altering other elements of the network such as the crossing.

Yours sincerely

Lee Cranmer

Lee Cranmer | Traffic Engineer | Highways & Traffic Management | Devon County Council | County Hall | Topsham Road | EXETER | EX2 4QD

Tel: 0345 155 1004 Email: [lee.cranmer@devon.gov.uk](mailto:lee.cranmer@devon.gov.uk)

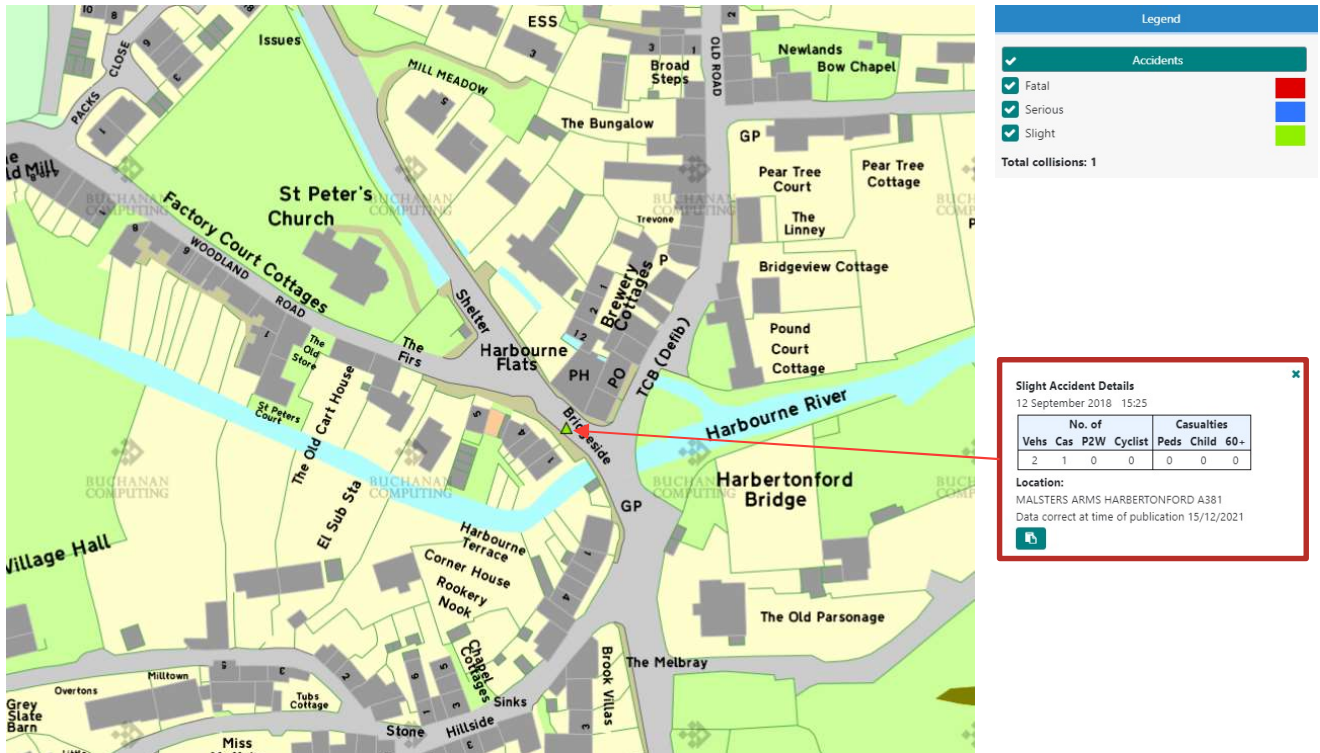
Disclaimer: <http://www.devon.gov.uk/email.shtml>



## APPENDIX B

DCC Collision Map from STATS19 Data – Collisions between 01/01/2016 and 31/12/2020

- 1no. collision recorded



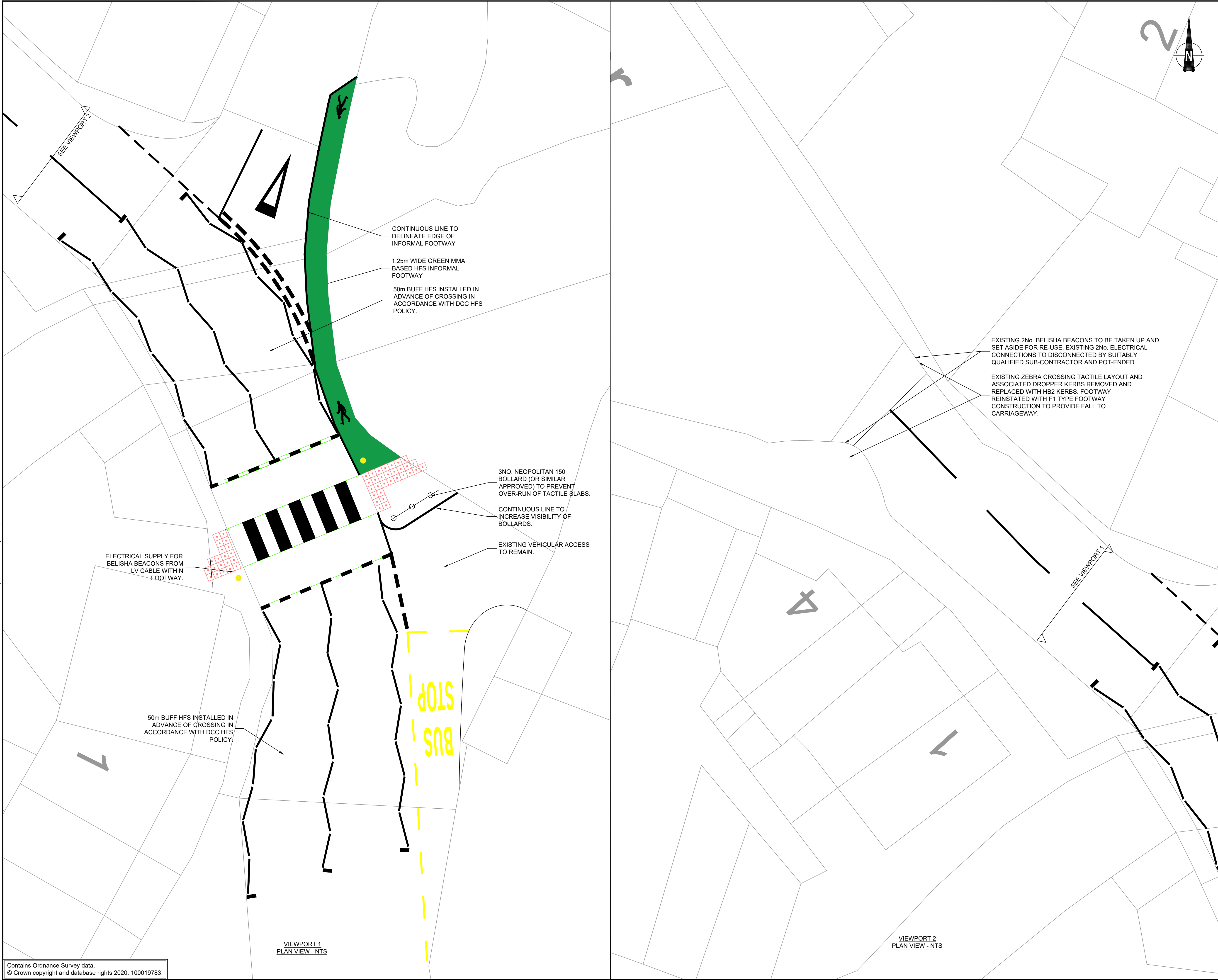


## APPENDIX C

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### **Alternative Crossing Proposal: Option 1 South of Harbourne Bridge**

- Drawing: 70074832-001 Rev P01
- RSA Team Lead Assessment



DO NOT SCALE

LOCATION PLAN  
SCALE 1:2000

NOTES:

1. DO NOT SCALE FROM THIS DRAWING.

2. ALL DIMENSIONS AND CHAINAGES ARE IN METRES UNLESS STATED OTHERWISE.

3. DRAWING TO BE PRINTED IN COLOUR.

4. EXISTING 2No. PEDESTRIAN CROSSING WARNING SIGNS TO BE RELOCATED AS PRESCRIBED IN TSRGD CHAPTER 4 - APPENDIX A.

5. EXISTING 2No. ILLUMINATED PEDESTRIAN CROSSING WARNING SIGNAGE TO BE ASSESSED FOR RELOCATION SUBJECT TO ELECTRICAL CONNECTION AVAILABILITY.

6. SITE POSTCODE: TQ9 7UH

DRAFT

P0117/09/2020J.C.1392 267 599wsp.com

REVBYDESCRIPTIONCHKAPP

S2 - FOR INFORMATION

DRAWING STATUS:

1st Floor Keble House, Southernhay Gardens, Southernhay East, Exeter, EX1 1NT, UK  
T+ 44 (0) 1392 267 599  
wsp.com

CLIENT:

SITE/PROJECT:

A381 - MAIN ROAD  
HARBERTONFORD

TITLE:

PROPOSED RELOCATION OF  
PEDESTRIAN CROSSING

SCALE @ A1:

NTS

CHECKED:

P.M.

APPROVED:

D.R.

PROJECT NO:

70070626

DESIGNED:

J.C.

DRAWN:

J.C.

DATE:

September 20

DRAWING No:

70074832-001-P01

REV:

P01

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File name: LUK WSPGROUP\CONCENTRAL DATA\PROJECTS\70074832\WORKING DRAWINGS\70074832-001-P01.DWG, printed on 23 September 2020 10:15:44, by C:\field, Jack

Contains Ordnance Survey data.

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[REDACTED]

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**From:**

**Sent:**

[REDACTED]  
29 September 2020 16:39

**To:**

**Cc:**

**Subject:**

[REDACTED]  
[REDACTED]  
RE: Informal Comment - Habertonford Zebra Crossing Relocation

[REDACTED]

I have been to site and looked at the proposals for the Zebra Crossing in Harbertonford, and in summary suggest that the proposed location is marginally better than the existing location in terms of road safety. Having said that neither location is ideal in terms of road safety and both could probably be considered non-compliant and therefore have road safety risks (but probably better than nothing!) and I have the following initial comments:

1. Has consideration been given to a traffic signal controlled crossing?
2. The visibility north from the west side of the road at the proposed crossing location is poor, particularly for shorter people (see photograph 1), is there anything that can be done about the wall (reduced the stone height and replace with railing?)





3. Visibility for southbound traffic to the new crossing location will be worse than existing (see photograph 2), the nearside beacon will not be visible and only half of the zebra road markings will be visible from a reasonable distance back, measures will need to be considered to improve this.





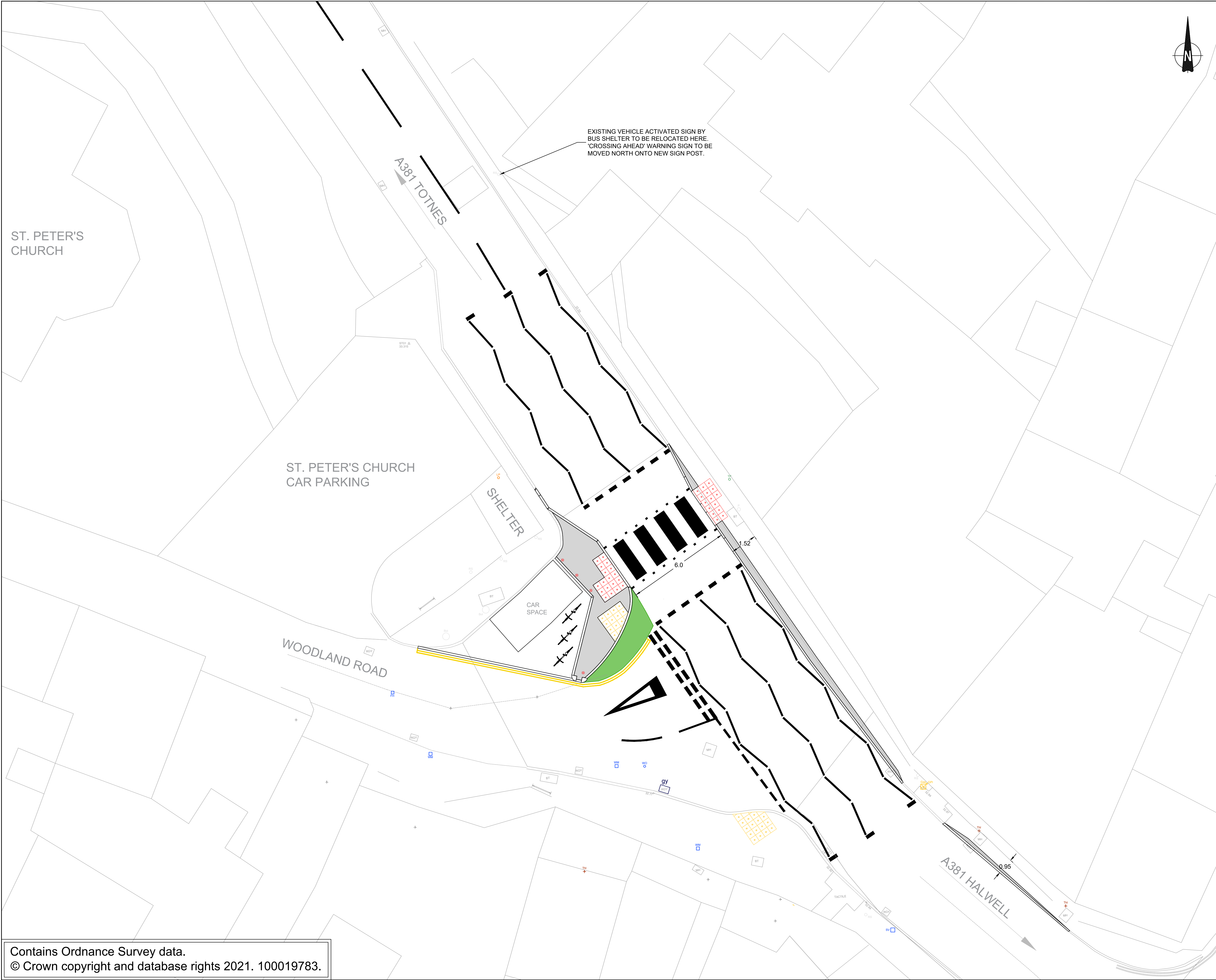
## APPENDIX D

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### **Alternative Crossing Proposal: Option 2 Adjacent Northbound Bus Stop**

- Drawing: 70074832-001 Rev P03
- RSA Stage 1 Response Document





DO NOT SCALE

EXISTING VAS 'CROSSING AHEAD' WARNING SIGN FOR NORTH BOUND APPROACH.

LOCATION PLAN  
SCALE 1:2000

NOTES:

1. DO NOT SCALE FROM THIS DRAWING.

2. ALL DIMENSIONS AND CHAINAGES ARE IN METRES UNLESS STATED OTHERWISE.

3. DRAWING TO BE PRINTED IN COLOUR.

4. EXISTING 2No. PEDESTRIAN CROSSING WARNING SIGNS TO BE RELOCATED AS PRESCRIBED IN TSRGD CHAPTER 4 - APPENDIX A.

5. EXISTING 2No. ILLUMINATED PEDESTRIAN CROSSING WARNING SIGNAGE TO BE ASSESSED FOR RELOCATION SUBJECT TO ELECTRICAL CONNECTION AVAILABILITY.

6. HIGH FRICTION SURFACING TO BE INSTALLED IN EACH LANE IN ADVANCE OF CROSSING LOCATION.

7. VAS FOR NORTHBOUND APPROACH TO CROSSING TO REMAIN IN PLACE.

KEY:

PROPOSED FOOTWAY BUILD OUT / WIDENING

PROPOSED TACTILE PAVING

PROPOSED GREEN MMA BASED HFS CONTRASTING SURFACE TREATMENT OR SIMILAR TO PROVIDE VEHICLE OVER RUN AREA FOR LARGE VEHICLES TURNING OUT OF WOODLAND ROAD

|     |            |      |                       |      |      |
|-----|------------|------|-----------------------|------|------|
| P03 | 23/03/2021 | P.M. | UPDATES FOLLOWING RSA | M.C. | P.P. |
| P02 | 12/01/2021 | P.M. | PRELIMINARY DESIGN    | M.C. | P.P. |
| P01 | 17/09/2020 | J.C. | FOR DISCUSSION        | P.M. | P.P. |
| REV | DATE       | BY   | DESCRIPTION           | CHK  | APP  |

S3 - FOR REVIEW

DRAWING STATUS:

1st Floor Kebble House, Southernhay Gardens, Southernhay East, Exeter, EX1 1NT, UK  
T+ 44 (0) 1392 267 599  
wsp.com

CLIENT:

Devon County Council

SITE/PROJECT:

A381 - MAIN ROAD  
HARBERTONFORD

TITLE:

PROPOSED RELOCATION OF  
PEDESTRIAN CROSSING

SCALE @ A1:

NTS

CHECKED:

M.C.

APPROVED:

D.R.

PROJECT NO:

70074832

DESIGNED:

P.M.

DRAWN:

E.D.

DATE:

December 21

DRAWING NO:

70074832-001

REV:

P03

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## **A381 Main Road, Harbertonford – Pedestrian Crossing Relocation**

Devon County Council

### **Stage 1 Road Safety Audit Response Document**

70074832/RSA1/1/1\_RD

16 March 2022

**A381 Main Road, Harbertonford – Pedestrian Crossing Relocation**  
Stage 1 Road Safety Audit Response Report

**A381 Main Road, Harbertonford – Pedestrian Crossing Relocation**

Document title: Stage 1 Road Safety Audit Response Document  
Document No.: 70074832/RSA1/1/1\_RD  
Revision: 1 - Final  
Date: 16 March 2022  
Client name: Devon County Council  
Author: Matthew Coleman

**Document history and status**

| Revision | Date       | Description                      | By        | Review   | Approved |
|----------|------------|----------------------------------|-----------|----------|----------|
| 0        | 20/12/2021 | Draft report for Client Approval | M Coleman | P Moffat | D Rufus  |
| 1        | 16/03/2022 | Final                            | M Coleman | P Moffat | D Rufus  |

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**Appendix A. – List of documents and drawings supplied for Road Safety Audit**

**Appendix B. – Problem location plan**

## 1. Introduction

This report results from a request for a Stage 1 Road Safety Audit for a proposed scheme to relocate the existing Zebra crossing on the A381 in Harbertonford approximately 20m to the north of the current location. The scheme works are as identified in the Road Safety Audit Brief (document reference: 70074832/RSA1 Rev 0), received on 6th April 2021, as follows:

- Provision of a new buildout in the northern side of the A381 / Woodland Road bell mouth;
- Provision of a new Zebra crossing on the A381 to the north of the junction with Woodland Road;
- Provision of two car parking spaces behind the proposed buildout;
- Proposed optional cycle parking within the proposed buildout;
- Removal of the existing Zebra crossing located to the south of the junction with Woodland Road.

The crossing is being relocated due to safety concerns raised by the Parish Clerk.

Personal Injury Collision (PIC) data obtained from Devon County Council for the 5-year period 01/01/2016 to 31/12/2020 shows that no PICs took place in the vicinity of the proposed pedestrian crossing. At the existing Zebra crossing, a slight injury PIC was recorded on a wet road surface to the south of the existing zebra crossing involving a rear shunt between two vehicles, the stationary vehicle had stopped for the zebra crossing.

| Aspect                           | Detail   |
|----------------------------------|--|
| Road Safety Audit Team:          | <u>Team Leader:</u><br>James Perkins MCIHT MSoRSA, Senior Technician, Devon County Council (WSP)<br><u>Team Member:</u><br>Adam Walton, Principal Transport Planner, Devon County Council (WSP)  |
| Road Safety Audit Brief:         | Audit requested by: Peter Moffat, Engineer, Devon County Council (WSP)<br>Audit brief approved by: Peter Moffat, Engineer, Devon County Council (WSP)<br>Audit team approved by Nigel Flower, Safer Travel Strategic & Programme Officer, Devon County Council   |
| Documents and drawings received: | A list of drawings provided for audit is included in Appendix A for reference purposes.  |
| Site visit details (Daylight)    | The Road Safety Audit Team undertook a site visit together on Tuesday 20th April 2021 between 10:45 am and 11:30 am. During the site visit, the weather was fine and the road surface was dry. Traffic flow was constant in both directions and several HGVs and agricultural vehicles were observed travelling along the A381 through the village. One pedestrian was observed using the existing Zebra crossing to the south of the junction with Woodland Road, a further 3 pedestrians were observed waiting for a bus at the A381 northbound bus stop and a further 3 pedestrians were observed walking south on Woodland Road and continuing south along the western side of the A381 during the 45-minute period of the site visit. |
| Site visit details (Darkness)    | N/A – A darkness site inspection is not required by the Road Safety Audit process at this stage.   |

**Table 1-1      Audit Details**

## **A381 Main Road, Harbertonford – Pedestrian Crossing Relocation**

### **Stage 1 Road Safety Audit Response Report**

The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges (DMRB) document HD 19/03, and in accordance with Devon County Council's locally approved relaxations.

Both members of the Road Safety Audit Team have the relevant training, skills and experience recommended for Road Safety Audit Team Leader and Road Safety Audit Team Member in accordance with the guidance stated in HD 19/03. The Road Safety Auditors have examined and reported only on the road safety implications of the proposed highway works, and they have not examined or verified the compliance of the design to any other criteria.

This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Road Safety Audits, Highway Design, Collision Investigation and Road Safety Engineering. No member of the Road Safety Audit Team has had any previous input into the design of the scheme.

## 2. Responses to Items Raised at Stage 1 Road Safety Audit

### 2.1 Problem A: General – High Friction Surfacing

|   |   |
|---|---|
| <b>Location</b>                         | <b>Proposed Zebra crossing on the A381 north of Woodlands Road – see Appendix B for location.</b>   |
| <b>Summary</b>                          | Inadequate provision of High Friction Surfacing (HFS) on the approaches to the relocated Zebra crossing could lead to a vehicle overshooting the give way line, failing to stop before the crossing and colliding with a pedestrian on the crossing.  |
| <b>Description</b>                      | It is proposed to relocate the existing zebra crossing 20m further north along the A381. Drawing number 70074832-001 revision P02 does not show whether HFS will be provided on the approaches to the crossing. If HFS is not provided on the approaches to the crossing, a vehicle could potentially overshoot the crossing stop line and collide with a pedestrian on the crossing. It was noted that vehicle speeds appeared in excess of the posted speed limit on the approach and several HGVs and agricultural vehicles observed. This could lead to increased stopping distances on the approach to the crossing. |
| <b>Recommendation</b>                   | It is recommended that HFS is provided on the approaches to the proposed Zebra crossing and a section of HFS of a similar colour to carriageway surface (i.e. charcoal coloured rather than buff) is also provided between the give way line and the crossing studs.  |
| <b>Design Organisation Response</b>     | Agreed – HFS will be included for both approaches to the crossing on any detailed design as recommended.  |
| <b>Overseeing Organisation Response</b> | Agree with the problem and the designer's response.   |
| <b>Agreed RSA action</b>                | – HFS will be included for both approaches to the crossing on any detailed design as recommended.   |

### 2.2 Problem B: General – Bus stops

|                 |  |
|-----------------|--|
| <b>Location</b> | <b>Existing northbound bus stop on the A381, Harbertonford – see Appendix B for location.</b>  |
| <b>Summary</b>  | Position of the bus stop lay-by could lead to a stopped bus obstructing the mainline carriageway which could lead to head on collisions as vehicles utilise the opposite traffic lane to negotiate around a stopped bus. |

## A381 Main Road, Harbertonford – Pedestrian Crossing Relocation

### Stage 1 Road Safety Audit Response Report

|                       |   |
|-----------------------|---|
| <b>Description</b>    | <p>It is proposed to provide a new buildout in the bell mouth of Woodlands Road to provide a zebra crossing and a bus stop lay-by. The bus stop lay-by is proposed to be 11m long at the back of the lay-by, 19m long along the front of the lay-by and approximately 2m wide. Swept vehicle path analysis provided to the Road Safety Audit team shows that a double decker bus would be unable to stop in the lay-by without obstructing the northbound mainline carriageway. The partially obstructed northbound carriageway could encourage vehicles to drive onto the opposing carriageway to pass a stationary bus which could potentially lead to collisions with oncoming vehicles. It was observed (see photograph below) that a bus stopped at the existing bus stop partially obstructs the northbound carriageway lane.</p> <p>Furthermore, the swept vehicle path analysis provided does not show a bus exiting the lay-by, therefore, it is unclear whether a bus can drive into and out of the lay-by whilst getting close enough to the footway to allow appropriate passenger access. This could result in a bus not being able to stop adjacent to the kerb which could increase the risk of bus passengers tripping over full height kerbs or falling from the bus whilst trying to reach the footway.</p>  <p><b>Photograph 1: Looking south towards the northbound bus stop</b></p> |
| <b>Recommendation</b> | <p>It is recommended that the bus stop lay-by is designed to allow a bus to stop fully within the extents of the bus lay-by. The geometry should also allow bus drivers to stop immediately adjacent to the footway for the purposes of safe access and egress of bus passengers.</p>   |

## A381 Main Road, Harbertonford – Pedestrian Crossing Relocation

### Stage 1 Road Safety Audit Response Report

|   |   |
|---|---|
| <b>Design Organisation Response</b>     | <p>There is already a need for buses to partially encroach the northbound lane when parked at the bus stop. It is considered the bus stop is more akin to an online bus stop layout which the proposal will maintain as a speed reducing feature. It is considered that this layout will provide better visibility of the route ahead for both north and south bound vehicles to pass the bus over a fully online bus stop. Although the proposed layout may require a small increase of encroachment, it is considered this will not increase any risk. There have been no collisions in the last 5 years with the existing use of the bus stop.</p> <p>Vehicle tracking has been undertaken on the proposal with its new approach taper for the existing bay. This supports that a bus can park suitably parallel adjacent to the kerb to allow passengers to reach the footway when disembarking and vice versa.</p> |
| <b>Overseeing Organisation Response</b> | Agree With the designer's response.   |
| <b>Agreed RSA action</b>                | Continue with the design.   |

## 2.3 Problem C: Walking, Cycling and Horse Riding – Visibility

|                       |   |
|-----------------------|---|
| <b>Location</b>       | <b>Existing northbound bus stop on the A381, Harbertonford – see Appendix B for location.</b>   |
| <b>Summary</b>        | A bus stopped at the bus stop could reduce intervisibility between pedestrians and southbound vehicles.   |
| <b>Description</b>    | A new buildout is proposed in the bell mouth of Woodlands Road to provide a zebra crossing and a bus stop lay-by. The bus stop lay-by is proposed to be 11m long at the back of the lay-by, 19m long along the front of the lay-by and approximately 2m wide. Swept vehicle path analysis provided to the Road Safety Audit team shows that a double decker bus would be unable to stop in the lay-by without obstructing the northbound mainline carriageway. This would reduce intervisibility between pedestrians at the western crossing point and southbound vehicles on the A381 to approximately 11m. This could increase the risk of a pedestrian stepping into the carriageway from behind a stationary bus and walking into the path of a southbound vehicle. |
| <b>Recommendation</b> | It is recommended that the bus stop should be repositioned to ensure that suitable visibility is provided from/to the crossing points. The intervisibility provided should be as per the requirement for the 85 <sup>th</sup> percentile approach speed of southbound vehicles in line with DMRB document CD 143.   |



## A381 Main Road, Harbertonford – Pedestrian Crossing Relocation

### Stage 1 Road Safety Audit Response Report

#### Design Organisation Response

It is agreed that intervisibility to the crossing is impaired between pedestrians on the west side of the crossing and vehicles travelling southbound when a bus is at the stop.

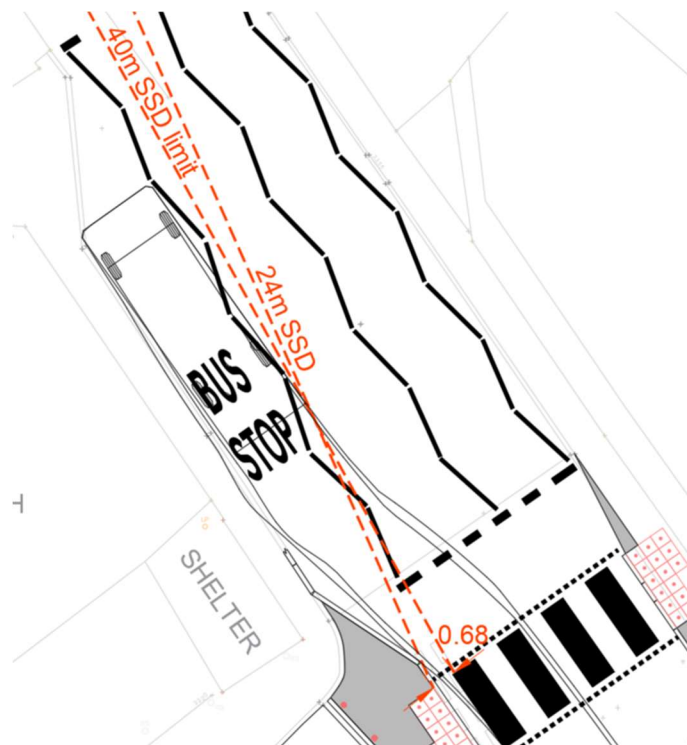
A lay by that could fully accommodate the width of a bus was considered, however due to the limited length between the junction of Woodlands Road and the watercourse to the north that runs along the east extent of the church, a suitable depth lay by with taper on the approach and exit could not be achieved that would enable a bus to use this as intended.

It was therefore considered that having a crossing with limited periods of impaired intervisibility is considered less of a risk than the permanent restricted visibility of the existing crossing.

The existing crossing requires at all times for pedestrians to step in front of live traffic to activate the crossing which has a restricted visibility of 23m where a 40m stopping sight distance is required.

The proposed crossing will provide at least 40m stopping sight distance for vehicles in both directions in normal traffic when the bus stop is not in use.

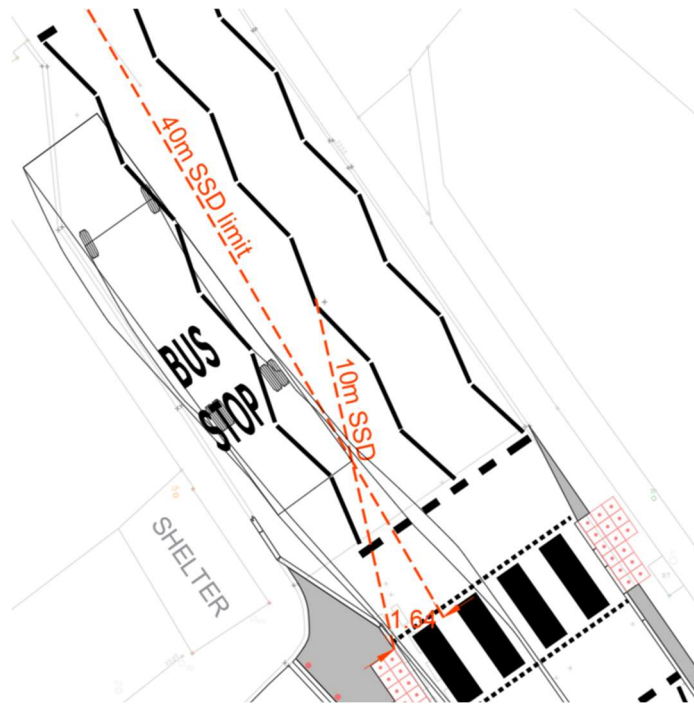
The bus stop is currently and primarily used by a 7.5m hopper bus service. If the bus is still stopped at the bus stop when pedestrians wish to cross from the west to the east side, visibility to southbound vehicles is restricted temporarily by the bus to approximately 24m. However, the significant difference is that pedestrians would not be stepping in front of a vehicles path with a stopping sight distance of less than 40m. A pedestrian crossing from the west side would activate the crossing by stepping into the crossing in front of north bound vehicles that will have an SSD of at least 40m. At approximately 0.7m into the crossing, still within the north bound lane and protection of the bus at the stop, visibility for south bound vehicles will improve to 40m before continuing into the southbound lane.



**Figure 2.31 – Intervisibility from 7.5m bus**

For a larger 12m bus, restricted visibility would reduce further from approximately 24m to 10m from the western footway, however 40m of visibility would again be achieved for south bound vehicles 1.7m into the north bound lane and again still

within the protection of the bus. Under its current use, this occurrence would be much less frequent.



**Figure 2.32 – Intervisibility from 12m bus**

The other option is to do nothing and leave the existing zebra crossing in situ. However, there is anecdotal evidence from the community of the fear of using the existing crossing and near misses. A significant aspect of these concerns is associated with the poor visibility to the south. Therefore, it is proposed that the design proposal will best alleviate this problem whilst still in a location that is accessible and convenient.

|   |   |
|---|---|
| <b>Overseeing Organisation Response</b> | This scheme comes from concerns raised by the local Parish with regard to the current position of the Zebra crossing. It is accepted that when a bus is in situ there will be a reduced inter-visibility, it is felt overall the proposed design is an improvement on the current Zebra crossing. |
| <b>Agreed RSA action</b>                | Design to continue with the Zebra crossing and bus stop in the proposed locations.  |

## 2.4 Problem D: Walking, Cycling and Horse Riding – Zebra crossing

|                    |  |
|--------------------|--|
| <b>Location</b>    | <b>Proposed Zebra crossing on the A381 north of Woodlands Road– see Appendix B for location.</b>   |
| <b>Summary</b>     | Insufficient carriageway width could lead to a large vehicle overrunning the buildout where they could collide with a pedestrian.  |
| <b>Description</b> | <p>It is proposed to provide a buildout in the junction bell mouth of Woodland Road to provide a Zebra crossing. The proposed buildout will result in a carriageway width of less than 5.4m.</p> <p>The existing carriageway width between the northbound bus stop and the A381 junction with Mill Meadow is less than 6m wide. During the site visit it was observed that several HGVs and agricultural vehicles were travelling along the A381 and were stopping in the vicinity of the bus stop or in the bell mouth of Mill Meadow to allow another HGV or agricultural vehicle approaching in the opposite direction to pass.</p> |

## A381 Main Road, Harbertonford – Pedestrian Crossing Relocation

### Stage 1 Road Safety Audit Response Report

|   |   |
|---|---|
|   | A carriageway width of less than 5.4m wide would further reduce the carriageway width. This could lead to vehicles overrunning the buildout where they could collide with a pedestrian waiting at the crossing. |
| <b>Recommendation</b>                   | It is recommended that an appropriate carriageway width is provided, and bollards are located either side of the western crossing point on the buildout to discourage overrunning.                              |
| <b>Design Organisation Response</b>     | Agreed – An appropriate carriageway width with further bollard protection will be used to prevent HGVs over running the proposed build out within Woodland Road.  |
| <b>Overseeing Organisation Response</b> | Agree with the problem raised and the designer's response.  |
| <b>Agreed RSA action</b>                | An appropriate carriageway width with further bollard protection will be used to prevent HGVs over running the proposed build out within Woodland Road.   |

## 2.5 Problem E: Junctions – Swept Vehicle Path

|   |   |
|---|---|
| <b>Location</b>                         | <b>Proposed junction buildout in Woodlands Road– see Appendix B for location.</b>   |
| <b>Summary</b>                          | Insufficient swept vehicle path of vehicles turning into and out of Woodlands Road could lead to vehicles overrunning the centreline and colliding with an oncoming vehicle or overrunning the kerb and colliding with a pedestrian.  |
| <b>Description</b>                      | The swept vehicle path analysis provided to the Road Safety Audit team shows that cars, 7.5t rigid vehicle and refuse vehicle turning left out of Woodlands Road would overrun the centreline of the carriageway, where they could collide with an oncoming vehicle. Vehicles may also overrun the nearside footway where they could collide with a pedestrian waiting at a pedestrian crossing point.                  |
| <b>Recommendation</b>                   | It is recommended that the junction bell mouth is modified to ensure that all expected vehicles can negotiate turns into and out of Woodlands Road whilst not encroaching into opposing carriageways or overrunning footways.   |
| <b>Design Organisation Response</b>     | The problem is accepted, and the design will set to avoid a 7.5tn rigid vehicle needing to cross into the opposing lane. However, it will be highly unlikely that the refuse vehicle can avoid using the opposing lane without significant changes. However, the design will set to avoid over run on the opposing footway.<br><br>It is considered that this manoeuvre will only occur once a week limiting this risk. |
| <b>Overseeing Organisation Response</b> | It is thought reasonable to design for a 7.5tn rigid vehicle as Woodlands is a narrow single carriageway with very limited large vehicles requiring access. It is accepted that a refuse may overrun the centre line, this is a common practise at many junctions in Devon.   |
| <b>Agreed RSA action</b>                | Design for a 7.5tn rigid vehicle to avoid overrunning the centre line.  |

## 2.6 Problem F: Traffic Signs, Road Markings and Street Lighting – Warning Signs

|                 |   |
|-----------------|---|
| <b>Location</b> | <b>A381 southbound approach to the proposed Zebra Crossing – see Appendix B for location.</b> |
|-----------------|---|

## A381 Main Road, Harbertonford – Pedestrian Crossing Relocation

### Stage 1 Road Safety Audit Response Report

|   |   |
|---|---|
| <b>Summary</b>                          | Insufficient advance warning of the crossing facility could lead to a motorist failing to observe the crossing and potentially collide with a pedestrian on the crossing.   |
| <b>Description</b>                      | <p>Existing advance warning signs, 'Slow' road markings and Vehicle Activated Signs (VAS) are provided on the approaches to the existing zebra crossing, as shown in the Photograph below (southbound). The relocated zebra crossing would result in the southbound signs being located between 5 and 10m in advance of the crossing. This could result in a vehicle failing to anticipate the crossing facility, overshoot the crossing and collide with a pedestrian on the crossing.</p>  <p>The photograph shows a southbound view of a road with a zebra crossing. On the left side of the road, there is a stone wall. A signpost on the left side of the road displays three signs: a pedestrian crossing warning sign, a 'Slow' road marking sign, and a 'Max speed 20' sign. A silver car and a truck are visible on the road, approaching the crossing. The road has 'SLOW' painted on it. The background shows houses and trees under a blue sky with clouds.</p> <p><b>Photograph 2: Looking South at the existing Advance Warning Signs on the approach to the existing Zebra crossing.</b></p> |
| <b>Recommendation</b>                   | It is recommended that advance warning signs, road markings and VAS are relocated to the required distances from the crossing in line with Chapter 3 of the Traffic Signs Manual. It is also recommended that additional 'Slow' road markings are provided adjacent to the warning signs.   |
| <b>Design Organisation Response</b>     | Agreed – Road markings, advanced warning signs and the VAS will be relocated to appropriately serve a new crossing location.  |
| <b>Overseeing Organisation Response</b> | Agree with the problem and the designer's response.   |
| <b>Agreed RSA action</b>                | Road markings, advanced warning signs and the VAS will be relocated to appropriately serve a new crossing location.   |

### 3. Design Organisation and Overseeing Organisation Statement

On behalf of the design organisation, I certify that the RSA actions identified to the road safety audit problems in this road safety audit have been discussed and agreed with the overseeing organisation.

Signed on behalf of WSP:

**Design Organisation Member**

Name: Matthew Coleman

Position: Senior Engineer

Organisation: WSP

Address: Keble House, Southernhay Gardens, Southernhay East,  
Exeter, EX1 1NT

Signed:



Digitally signed by  
Matthew Coleman  
Reason: I agree to the  
terms defined by the  
placement of my  
signature on this  
document  
Date: 2022.03.16  
11:46:08

Date:

On behalf of the Overseeing Organisation, I certify that the RSA actions identified in the response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation and the agreed RSA actions will be progressed.

Signed on behalf of DCC:

**Overseeing Organisation Member**

Name: Nigel Flower

Position: Safer Travel Programme and Strategy Officer

Organisation: DCC

Address: County Hall, Topsham Rd, Exeter EX2 4QD

Signed:



Date: 10/03/2022

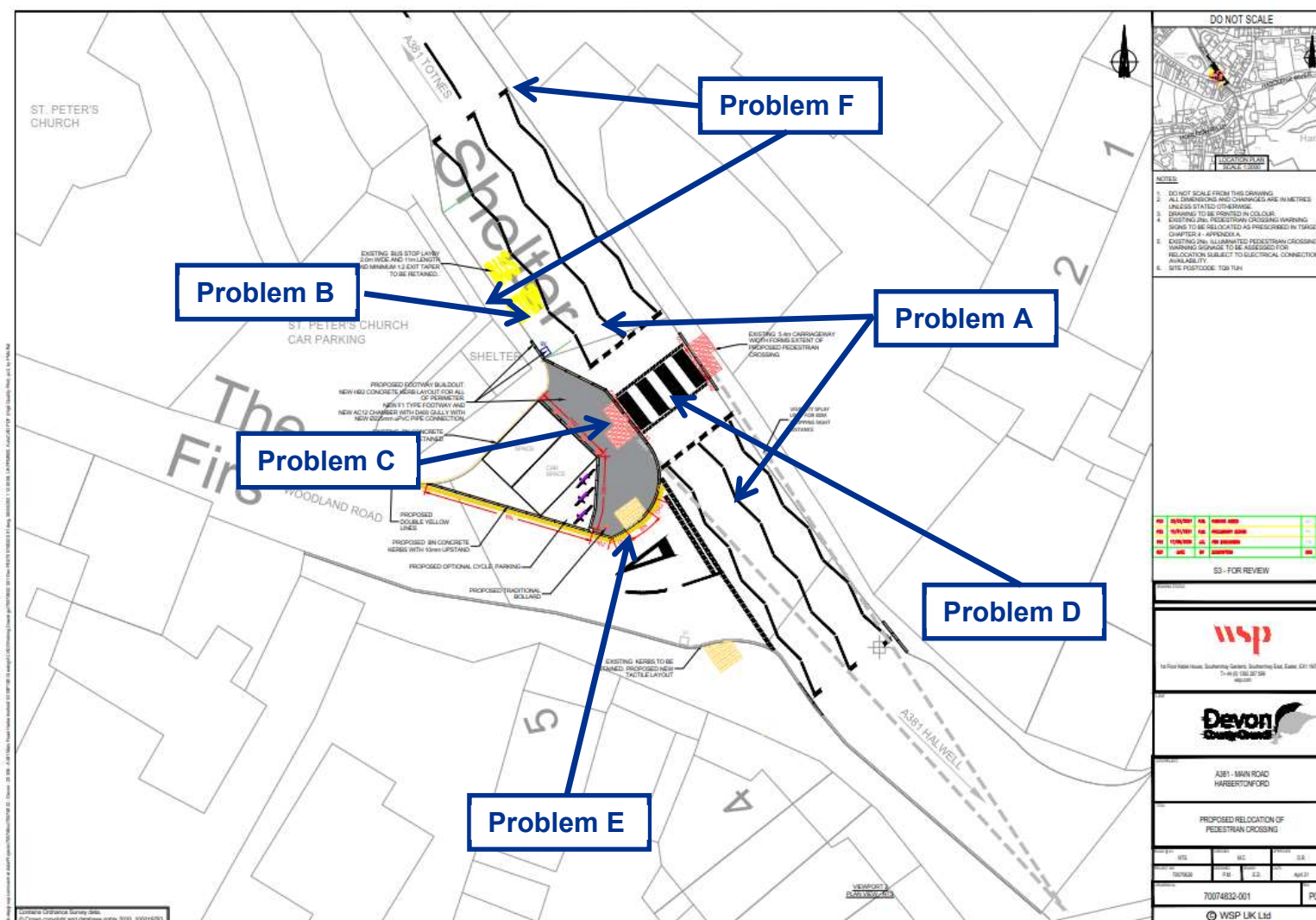


## **Appendix A. – List of documents and drawings supplied for Road Safety Audit**

| <b>Document Number</b> | <b>Title</b>   | <b>Date</b> |
|------------------------|--|-------------|
| 7007N/A4832/RSA1 Rev 0 | Safety Audit of Highway Schemes – Request Form (Safety Audit Brief): A381 Main Road Harbertonford. | 01/04/2021  |
|                        | Signalised Pedestrian Crossing Memo  | 09/03/2021  |
| N/A                    | Personal Injury Collision Data 01/01/2016 to 31/12/2020  | 22/04/2021  |
|                        | <b>---Last Item---</b>   |             |

| <b>Drawing Number</b> | <b>Title</b>                               | <b>Revision</b> |
|-----------------------|--|-----------------|
| 70077832-001          | Proposed Relocation of Pedestrian Crossing | P02             |
|                       | <b>---Last Item---</b>                     |                 |

## Appendix B. – Problem location plan





## **APPENDIX E**

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- Police Operations Manager for Safety Camera Unit response to traffic speed concerns



**From:** WILLIAMSON Gary 58359 <[Gary.WILLIAMSON@devonandcornwall.pnn.police.uk](mailto:Gary.WILLIAMSON@devonandcornwall.pnn.police.uk)>

**Sent:** 09 September 2021 14:51

**To:** [REDACTED]

**Subject:** CSW - Harbertonford

Dear [REDACTED]

I have been forwarded your email regarding speeding through Harbertonford by the Community Speed Watch Coordinator, Elaine HARTLEY.

If I may introduce myself my name is Gary WILLIAMSON and I am the Operations manager for the Safety Camera Unit, responsible for mobile and fixed speed detection.

Please permit me to explain the role of the Safety Camera Unit and our main activity which is speed camera enforcement, which I believe may be useful.

The overarching purpose of safety camera enforcement is to reduce casualties or the likelihood of casualties arising and to change road user behaviour so that compliance with traffic regulations is improved. This in turn should reduce harm, and the fear from harm for all road users and communities.

Safety camera enforcement should be primarily data-led and balanced with the needs of the communities and the authorities that serve them.

The use of safety cameras should be evidence based, proportionate and justifiable, with a clear purpose to bring about a change in behaviour which in turn leads to a corresponding reduction in injury collisions.

Data sources maybe many and varied, and the severity of the problem to be solved will also vary, as such the appropriate intervention should be tailored to suit the analysis of the problem being tackled.

In basic terms this provides four basic enforcement site types:

- 1.Casualty Reduction (Core) site – Where analysis of collision data identifies locations, routes or areas where there are high priority sites or there are patterns within the collisions which are likely to be reduced by safety camera enforcement.
- 2.Community concern site – Where there are community concerns associated with observed levels of traffic violation which give rise to a reasonable concern for potential harm or fear of harm.
- 3.Traffic Management site - Where analysis identifies that traffic management is required to mitigate objectively identified increased risks of harm for road users where a highway is being modified in design or use. This may include HADECS sites on smart motorways.
- 4.Operational site - Where intelligence led analysis identifies the potential to address an offender type rather than a site or location issue. The aim may be to maximise the deterrent effect on “determined offenders”.

From a casualty reduction perspective Harbertonford has had zero serious collisions within the last 5 years; this figure is the standard time period measurement within the speed enforcement community.

Additionally there have only been 2 minor collisions (one in 2017 one in 2018) which whilst undoubtedly traumatic for those involved these are not considered when reviewing collision data. The reason for this is these can include bruising from seatbelts or other very minor injuries resulting from what would otherwise be a non-injury damage only minor collision.

We use [www.crashmap.co.uk](http://www.crashmap.co.uk) as a useful tool to review all road traffic collision data. The data on which this site is based is the HM Government national data, based on what is known as STATS19 returns from all police forces nationally. The only difference from the official Government data is that all the personal information is removed for public access.

Which such a low collision and injury rate I am pleased to be able to confirm the area of Harbertonford is clearly not a type 1 site, and the same obviously applies to a type 3 and 4 sites.

We are then left with a type 2, community concern site, the key phrase being observed levels of traffic violation, and it is the interpretation of this observed speed data that we now need to consider.

In an ideal world we would seek to have 100% compliance with the speed limit however this will never happen without a huge cultural shift or the full implementation of autonomous vehicle controlled entirely by artificial intelligence.

Operationally the national speed enforcement industry as a whole accepts that a small percentage of speeding vehicles will occur, and so for enforcement purposes we use a percentage of all the vehicles measured. That percentage point is the measure at which we gauge the requirement for enforcement and is referred to as the 85'th percentile, which in its simplest terms is the speed at which 85% of all vehicles using that stretch of road are travelling at or below.

For Harbertonford the 85% is 30mph, ie. 85% of all vehicles traveling through Hartford are travelling at 30mph or less. These results were calculated from data taken in 2019 measuring the speed of almost 10,000 vehicles per day for which their average speed was 24mph.

Devon has over 8000 miles of road, and so I have to allocate my resources where the data shows the greatest need and the data is not indicating there is an issue with speed in Harbertonford. If I may refer you back to the start of my email I stated the use of safety cameras should be evidence based, proportional and justifiable. With an 85% of 30mph and an effective collision rate of zero the criteria for enforcement is not met.

I hope this explains our position around enforcement, if you have any further questions please do not hesitate to contact me.

Kind regards

Gary



**Gary WILLIAMSON BEng (Hons)**

Operations Manager



**Safety Camera Unit**

Crownhill Police Station, Budshead way, Plymouth PL6 5HT