

## STAGE 1 & 2 ROAD SAFETY AUDIT REPORT FOR SITE H30, PERTH ROAD, STANLEY, PERTHSHIRE.


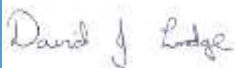



Report Ref 85820(1&2)

Issue Date 13-Feb-20

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Issue / Revision	Issue 1	Revision A	Revision B	Revision C
Remarks / Status	Final			
Prepared by	B. Wyllie			
Signature				
Checked by	D. Lodge			
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Issued by	B. Wyllie			
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Report No	85820(1,2)			
Date Issued	13/02/2020			

Site H30, Perth Road, Stanley, Perthshire.  
Road Safety Audit Stage 1&2

1. INTRODUCTION.

1.1. The objective of a Road Safety Audit (RSA) is to identify any aspects of a road design or construction scheme that could give rise to road safety concerns and, where possible, to suggest modifications that would improve the road safety of the resultant scheme. This report results from a Stage 1 & 2 RSA carried out on the design of a new junction on the B9099, Perth Road, Stanley and a pedestrian crossing point on Duchess Street Stanley, Perthshire. The audit was instructed by WSP and was carried out by Wyllie Lodge Ltd, Independent Road Safety Consultants.

1.2. The Audit Team members were;

Audit Team Leader	Blair Wyllie, I Eng, MCIHT, MSoRSA
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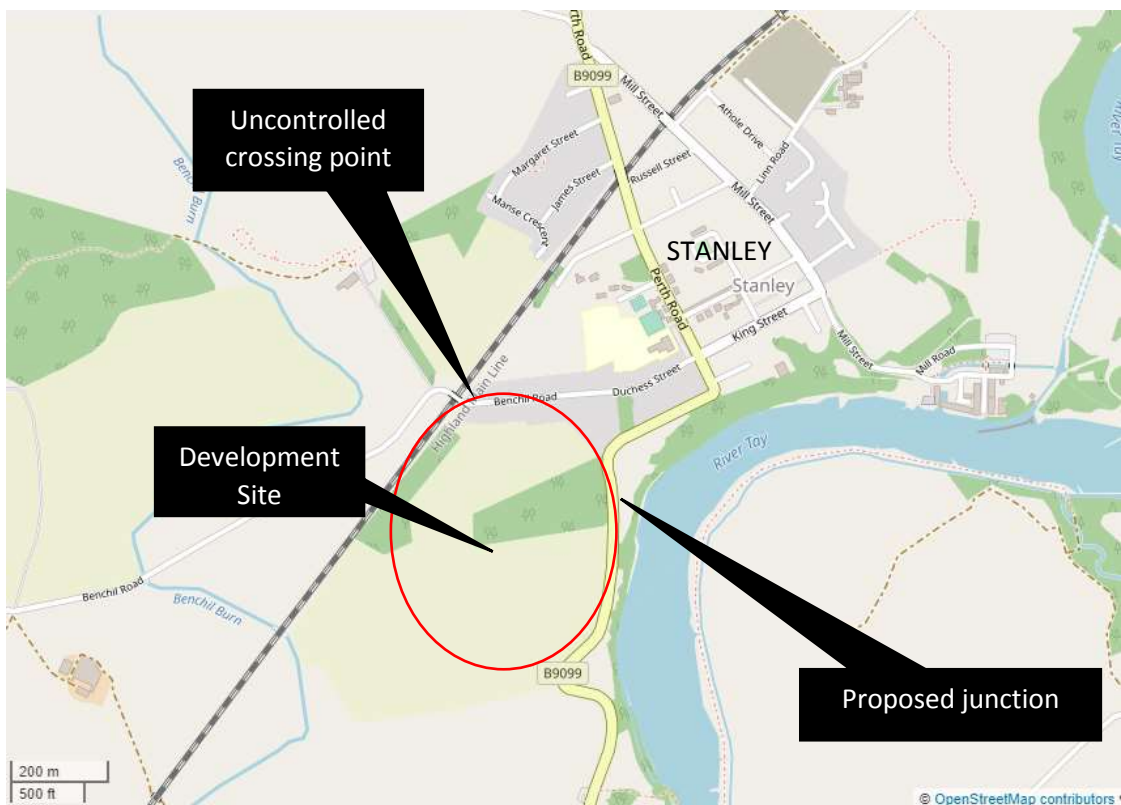
Audit Team Member	David Lodge, BSc, MSc, CMILT, MCIHT, MSoRSA.
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Site H30, Perth Road, Stanley, Perthshire.  
Road Safety Audit Stage 1&2

## 2. PROJECT DETAILS.

- 2.1. The project consists of the formation of a new priority T-junction with right turn ghost island, footways, a controlled pedestrian crossing and bus stops on the B9099, Perth Road, and also an uncontrolled pedestrian crossing on Duchess Street, both in Stanley Perthshire. The new junction is to access a proposed residential development of 183 units to be located on a green field site at the south boundary of Stanley and to the west of the B9099. The B9099 at this location is a 6m wide, two lane single carriageway road with detached residential properties and a footway along its east side, and a grass verge and fields along its west side. The junction is within the 30mph limits of Stanley and will have sightlines of 4.5m x 70m.

The uncontrolled pedestrian crossing on Duchess Street is at the western limit of the village, just where the 30mph speed limit terminates and the road crosses a railway bridge. Plans of the proposed junction are shown in appendix A.



Location Plan

Site H30, Perth Road, Stanley, Perthshire.  
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2.2. The information made available for the audit is listed below;

Drawing Ref.	Title
6148-PL-100-1001-P01	Duchess Street, General Arrangement.
6148-GA-103-P07	Perth Road Junction. General Arrangement.
6148-PL-100-2000-P08	Perth Road Junction Location Plan.
6148-PL-100-2001-P08	Perth Road Junction Adoptable Extents Layout, Sheet 1.
6148-PL-100-2101/P09	Perth Road Junction General Arrangements Layout, Sheet 1.
6148-PL-100-2201 P08	Perth Road Junction Proposed Levels and Contours Layout, Sheet 1.
6148-PL-100-2301 P08	Perth Road Junction Proposed Drainage Layout, Sheet 1.
6148-PL-100-2501 P09	Perth Road Junction Kerbing Layout, Sheet 1.
6148-PL-100-2601/P06	Perth Road Junction Road Markings, Sheet 1.

2.3. Road traffic collision information has also been retrieved from [Crashmap.co.uk](https://crashmap.co.uk) . See appendix B. This shows one collision near the proposed junction during the 5 year period 2014-18. This took place at 2:00pm on Friday 17<sup>th</sup> January 2017 as a consequence of a single vehicle losing control during frost or icy conditions. It resulted in a slight injury to the car driver.

### 3. PROCEDURE

- 3.1. The audit was carried out in accordance with procedures set out in GG 119 of the Design Manual for Roads and Bridges (DMRB) with the addition of comments, in section 6, to assist the designers where appropriate. The Road Safety Audit procedure is not an examination or verification of compliance to a design standard. Any notified departures from the design standard have been referenced within the report. The recommendations in this report are considered by the audit team to be appropriate and proportionate to the concerns and problems identified.
- 3.2. The audit was carried out between 4<sup>th</sup> September 2019 and 12<sup>th</sup> February 2020 at the offices of Wyllie Lodge and on site. A daytime site visits was carried out between 12:10 and 12:50 hours by both audit team members on Wednesday, 29 January 2020.
- 3.3. During the site visit traffic flows were moderate and flowed without interruption. The weather was raining, there was a slight covering of snow on the verges and the road surface was wet.
- 3.4. In accordance with GG 119, the Overseeing Organisation should consider the recommendations contained within this audit. In doing so, the Overseeing Organisation shall consult with the Design Team. The design team shall prepare a road safety audit response report that has been agreed with the Overseeing Organisation and signed by both parties indicating their agreement on the RSA actions.
- 3.5. For the purposes of this audit the following are defined as:

Organisation	Contact
Overseeing Organisation	Perth & Kinross Council.
3 <sup>rd</sup> Party Organisation /Project Promoter	Muir Homes.
Design Organisation	WSP.
Road Safety Audit Organisation	Wyllie Lodge Limited.

#### 4. PREVIOUS ROAD SAFETY AUDITS.

- 4.1. A previous stage 1 & 2 road safety audit of an earlier junction design was carried out in September 2019 by Wyllie Lodge Road Safety consultants, report reference 73019(1&2). This report raised two problems that have since been addressed by the designer, and the report was subsequently updated in October 2019, ref 73019(1&2)A. None of the problems raised in the previous report are still relevant within the context of the current design.

## 5. IDENTIFIED PROBLEMS

### Local Alignment.<sup>1</sup>

No local alignment road safety problems have been identified.

### General.

#### 5.1 PROBLEM

Location B9099, Perth Road.

Summary Risk of aquaplaning type collisions.

The carriageway is to be widened on its west side and a footway added. This will give a greater surface area to be drained. When heading north the road profile falls away from the new junction towards a tight right hand bend. The additional carriageway width could result in additional surface water crossing the carriageway towards the road gullies at the bend. During periods of heavy rainfall this could result in excessive surface water crossing the carriageway which may contribute to aquaplaning type collisions.

#### Recommendation

It is recommended that the additional carriageway width and footways are drained towards the development and not across the carriageway in advance of the bend.

### Junctions.

No junction roads safety problems have been identified.

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<sup>1</sup> DMRB GG-119 standard list



Walking, Cycling and Horse Riding.

## 5.2 PROBLEM

Location Duchess Street.

Summary Risk of pedestrian injury collisions.

Sightlines between eastbound approaching drivers and pedestrians at the uncontrolled crossing point are restricted by the concrete parapets of the adjacent railway bridge. The eastbound approach road alignment towards the bridge has a tight right hand bend which limits approaching speeds. Drivers however may not see, nor expect, pedestrians waiting to cross the road immediately on the west side of the bridge. This could result in a pedestrian stepping out into the path of an eastbound vehicle, resulting in a serious injury collision.



## Recommendation

It is recommended that;

1. The drop kerbs and tactile paving on the north kerblines are positioned to optimise sightlines between pedestrians and eastbound drivers.
2. A danger ahead warning sign (Diag 562) with a "Pedestrians Crossing" sub-plate is provided on the eastbound approach to the crossing point.

Traffic Signs, Carriageway Markings and Lighting.

5.3 PROBLEM

Location B9099, Perth Road.

Summary Risk of vehicle striking turning traffic or pedestrians.

A new junction and altered alignment will generate new turning manoeuvres that some drivers may not expect to encounter. There is a risk that approaching drivers who are not aware of the new junction or road alignment will not adjust their speed accordingly and this could lead to a loss of control type collision.

Recommendation

It is recommended that temporary New Road Layout Ahead signs (Diag 7014)<sup>2</sup> are provided on both approaches.

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<sup>2</sup> The Traffic Signs Regulations and General Directions 2016.

6. COMMENTS

The following comments identify issues that are not considered by the audit team to be road safety problems that are likely to cause a collision or increase the severity of an injury. The audit team does not consider it appropriate or proportionate to recommend actions in relation to these issues based solely on road safety concerns.

- 6.1. The road marking drawing for the Puffin crossing does not show zig-zag markings on the exit from the crossing. A minimum of 2 markings is required.

7. AUDIT TEAM STATEMENT


**AUDIT TEAM STATEMENT**


SITE H30 / B9099 PERTH ROAD JUNCTION, STANLEY, PERTHSHIRE.

SAFETY AUDIT STAGE 1&2

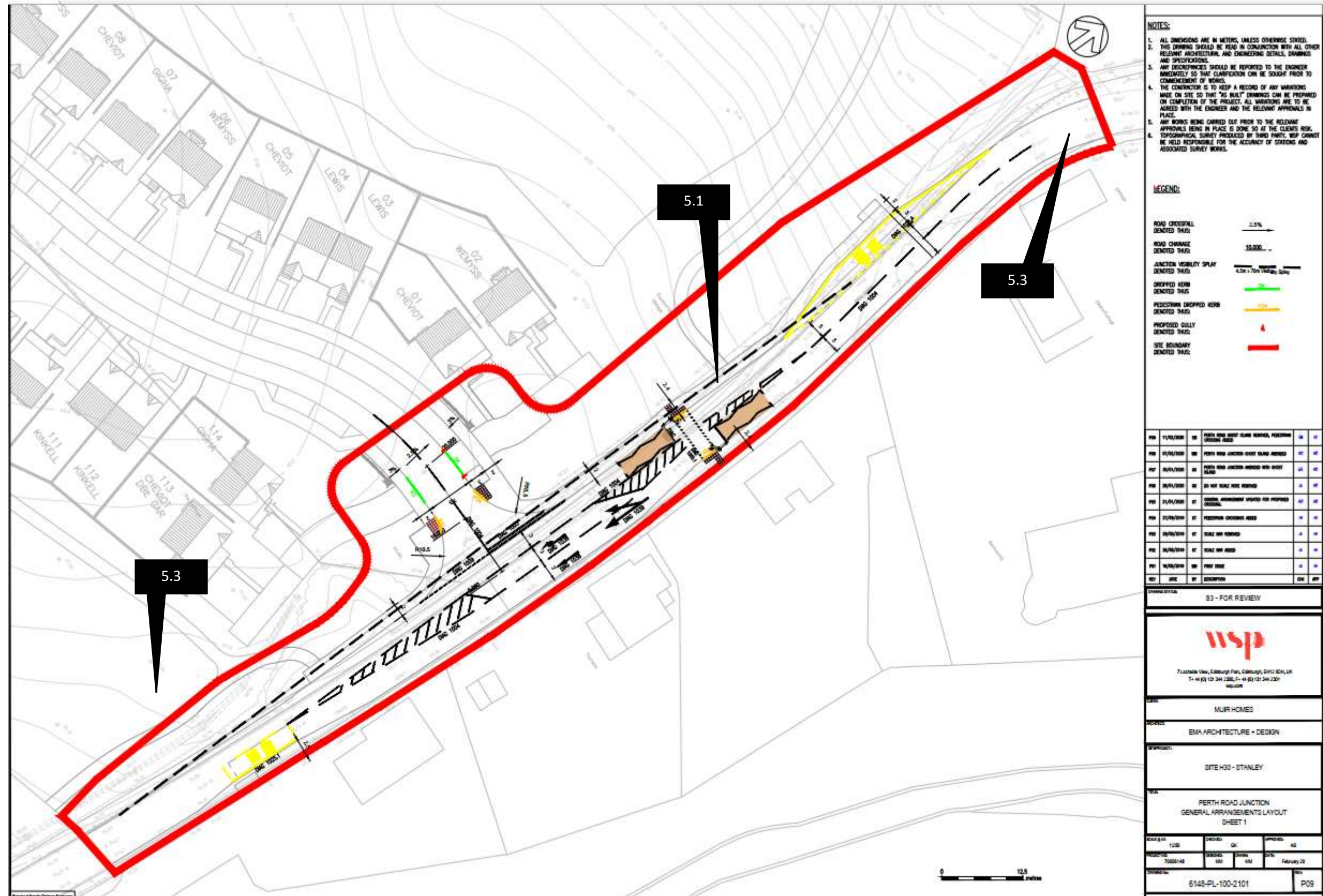
We certify that we have examined the works listed in this report. The examination has been carried out with the sole purpose of identifying any features of design or construction that can be modified in order to improve the safety of the scheme. The problems identified have been noted in this report together with recommendations, which should be studied for implementation.

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

Signed..........Audit Team Leader      Date    13 February 2020.  
Blair Wyllie I Eng, MCIHT, MSoRSA

Signed..........Audit Team Member      Date    13 February 2020.  
David Lodge, BSc, MSc, CMILT, MCIHT, MSoRSA.

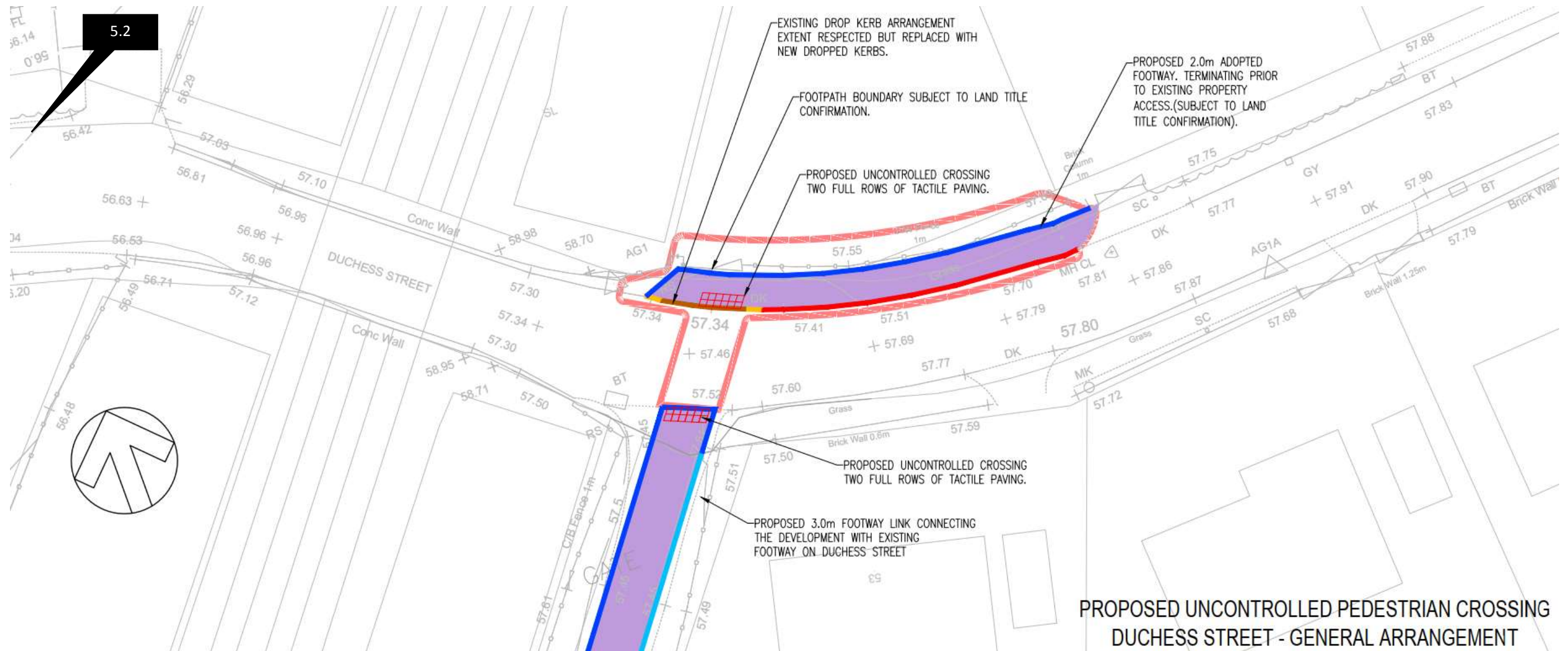
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Perth Road, Stanley.



Site H30, Perth Road, Stanley, Perthshire.  
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Duchess Street, Stanley.

Appendix B. Location of Recorded Collisions.

