

Reply to Audit Request – Road Safety Audit Report

DONCASTER M B C - MEMORANDUM

From: Andy Stewart
Safer Roads

To: Major Infrastructure-Projects

Date: February 2016

Ref: 29645

Tel. Ext: 36948

Ref:

F.A.O. Paul Carey

HERTEN WAY – HIGHWAY IMPROVEMENTS

**PROVISION OF NEW ROAD LAYOUT (ONE WAY TO TWO WAY) TO INCLUDE
SIGNALLISED JUNCTION FACILITY AT GLIWICE WAY**

PROJECT No. 29645

STAGE 2 ROAD SAFETY AUDIT

Please find attached Road Safety Audit report. Please contact me if you need any clarification of the issues raised.

In accordance with the current Audit procedure, please send me your written response in due course.

ROAD SAFETY AUDIT REPORT

HERTEN WAY DONCASTER PROJECT No. 29645

STAGE 2 ROAD SAFETY AUDIT

1.0 Introduction

- 1.1 This report results from a Road Safety Audit for the scheme and stage as given above, as requested by Nigel Raven – Senior Engineer (Road Safety) on 25th November 2015.

The Audit Team comprised:-

Andy Stewart (Audit Team Leader for this audit)	Engineer – Road Safety, Safer Roads, Regeneration and Environment, Doncaster Metropolitan Borough Council
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Nicola Armstrong (Audit Team Member for this audit)	Assistant Engineer – Road Safety, Safer Roads, Regeneration and Environment, Doncaster Metropolitan Borough Council
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Ralph Marshall (Audit Team Member for this audit)	Engineer – Traffic Signals, Safer Roads, Regeneration and Environment, Doncaster Metropolitan Borough Council
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- 1.2 The Audit was undertaken in accordance with the current Doncaster Metropolitan Borough Council Road Safety Audit Standard and comprised an examination of the documents provided, details of these documents are listed in Appendix A.
- 1.3 The Audit Team has examined and reported on the road safety implications for the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.4 All comments and recommendations are referenced to the detailed design drawings supplied and the problem locations plans included at Appendix B.
- 1.5 The Stage 1/2 Audit was carried out on: 20th January 2015.

2.0 Scheme Description

- 2.1 The primary aim of the scheme is to convert the existing one way carriageway layout, currently running in a north easterly direction to a two way layout.

Initially the proposal was to include 2 new access points leading into a proposed new development on eastern side of Herten Way. However, at the time of the audit being carried out there was no confirmation of the actual development going ahead and therefore the possibility of the 2 new access points not being constructed. It was felt that the main comments be based on the design drawing 29645/GA submitted, although comments have been included within this audit under item 5.12 and 5.13 based on this possibility.

The scheme is also to include a shared footway/cycleway and the signalisation of the existing junction at Gliwice Way, with facilities for pedestrians & cyclists.

No specific Audit Brief was enclosed with the Audit request.

3.0 Items Raised at the Previous Audit Stage

- 3.1 No previous audit

4.0 Unresolved Issues at Current Stage

- 4.1 N/A

5.0 ITEMS IDENTIFIED IN THIS AUDIT

SPECIFIC PROBLEMS

- 5.1 PROBLEM

Location: Gliwice Way (Southbound) junction Herten Way.

Summary: Red/Amber light running.

There is approx. 23 metres between the Southbound signals (Phase B) and the Pedestrian crossing area (Phase F) which will result in a large inter green and may in-turn lead to driver impatience and Red/Amber light running.

RECOMMENDATION

Redesign phasing/staging to alleviate excessive intergreen times, if possible.

5.2 PROBLEM

Location: Exit Slip & Right Turn Filter Lane, Gliwice Way junction Herten Way.

Summary: Potential conflict between road users.

Due to the current alignment of Herten Way itself to both the entering and exiting slips on Gliwice Way, there is the potential for road users to travel the wrong side of the splitter island when exiting Herten Way in either direction.

RECOMMENDATION

Replace N144 'plain face', to 'keep right', this will aid in guiding right turning road users exiting Herten Way towards to correct egress slip. It is also recommended that a 'No Entry' marking to diagram 1046 be included adjacent to the proposed Stop line situated within the right hand turning lane.

Response: Sign to be replaced as recommended

5.3 PROBLEM

Location: Gliwice Way junction Herten Way (Central Reserve Crossing Point, adjacent poles 15 & 16)

Summary: Lack of offset stagger.

There is no 3 metre offset between the Left/Right stagger on the central reserve island between poles 15 and 16, LTN 2/95 recommends;

Areas where pedestrians are waiting to cross should be of a sufficient size. The area should cater both for those waiting and any wishing to pass by. The central refuge of a staggered crossing should be:- long enough to indicate the segregation of the crossings. A minimum of 3 metres between crossing limits is recommended; wide enough to allow pedestrians to pass each other between the crossings. A recommended minimum width of 3 metres will give 2 metres between guard railing; of sufficient capacity to accommodate pedestrians waiting to cross.

RECOMMENDATION

Create offset stagger as per LTN 2/95

Response: There is ample space in the central reserve for pedestrians waiting and those wishing to pass as well as for wheelchair users, pushchairs and cyclists. Distance between poles (which is the pinch point) is over 4.4m. Whilst it would be ideal to have more stagger, as recommended in LTN 2/95 it is not always practical, especially when the staggered crossing forms part of a larger signalised junction rather than a standalone crossing. Indeed any increase in stagger would exasperate the problem referred to in 5.1.

As the stagger is a left hand stagger and all round visibility is good it is the Designer's opinion that the layout is appropriate. There are many installations in Doncaster with staggers of this nature which are well-used without problems.

5.4 PROBLEM

Location: Herten Way junction Gliwice Way

Summary: Insufficient clearance to signal pole.

There appears to be less than the recommended 2 metres clear footway width adjacent to pole No.6

RECOMMENDATION

Ensure that the recommended clearance is achieved.

Response: Footpath will be aligned to give minimum 2m clear footway

5.5 PROBLEM

Location: Herten Way junction Gliwice Way Signals

Summary: Stage Diagrams, incorrect indicative signal arrow, (Stage 3/Phase D)

This phase shows a Right-Turn only arrow, this should be a Left & Right Turn Arrow.

RECOMMENDATION

Ensure correct signal indicative arrow is installed.

5.6 PROBLEM

Location: Herten Way junction Gliwice Way Signals

Summary: Stage Diagrams, transposition of phases, (phases E & F)

The phases E & F appear to have been transposed in the stage diagrams, from what is shown in the design drawing.

RECOMMENDATION

Correct the design drawing or stage diagram so that both match-up.

Response: Agreed

5.7 PROBLEM

Location: Raised Table, Herten Way

Summary: Vehicles striking raised table.

There are no indications shown of any advanced warning for the proposed full width raised table across Herten Way which could result in vehicles in striking the raised feature, as Herten Way is subjected to a speed limit of 30mph advanced warning should be put in place.

RECOMMENDATION

Introduced advanced warning signs to diagram 557.1 with additional appropriate supplementary distance plate below for both approaches to the proposed feature. It is recommended that these be positioned to ensure vehicles exiting the existing leisure complex car parks are given advanced notification of the raised table.

Response: The raised plateaux is intended as an aid to pedestrians crossing the carriageway rather than a traffic calming feature such as a road hump. As such the approach and exit ramps will be installed with a shallow gradient <1:20. The ramp areas will also be treated with red coloured surfacing and a set of warning triangles which the Designers feels would be sufficient warning to approaching drivers and would highlight the presence of pedestrians. The crossing point will be well lit.

5.8 PROBLEM

Location: Herten Way

Summary: Potential conflict between cyclists and pedestrians.

There seems to be no indications of any signage to support the proposed shared footway/cycleway facility running along Herten Way to highlight to pedestrians and cyclists that they are utilising a shared area. This could result in confusion and conflict between pedestrian and cyclist.

RECOMMENDATION

Introduce signing to diagram 956 at appropriate locations along the shared area.

Response: Following consultation with the Council's cycling Transport Planners it has been decided that the length of footway along Herten Way will not be shared with cyclists at this time. Tactile provision will be amended accordingly. At such time as further development occurs in the area the cycling facilities will be reconsidered.

5.9 PROBLEM

Location: Herten Way (Raised Table Area)

Summary: Potential conflict between cyclists and pedestrians.

In connection with item 5.8 there seems to be no indications of appropriate signing nor tactile paving to warn footway users crossing over the raised table (west to east) from the existing leisure complex that they about to enter a shared area once they have crossed. This again, could result in confusion and conflict between pedestrian and cyclist.

RECOMMENDATION

Introduce appropriate signing and associated tactile paving.

Response: Refer to 5.8.

5.10 PROBLEM

Location: Various points within scheme limits.

Summary: Correct style of Tactile Paving.

It is unclear from viewing the design drawing of the type of tactile paving that is to be used for indicating the starting points for the shared surface. Incorrect paving i.e. profile type could lead to incorrect message being given to visually impaired pedestrians.

RECOMMENDATION

Ensure that correct profile type/style & pattern is used as per DfT 'Guidance on the use of Tactile Paving', which states that the recommended Profile is; Raised, Flat Topped Bars.

Response: The correct profile and layout has been specified. The DfT 'Guidance on the use of Tactile Paving' requires Raised Flat Topped Bars where there is segregation and Raised Round Topped (hazard) bars where there is shared usage. Each type has its own layout which will be applied as appropriate.

5.11 Location: Herten Way, Access/Egress Points from Existing Leisure Complex (e.g. VUE & Doncaster Bowl).

Summary: Warning to road users of changed carriageway layout.

There does not appear to be any indication shown that Herten Way is to become two-way for vehicular traffic exiting the existing leisure complex.

RECOMMENDATION

Temporary traffic sign, variant of Diagram 7014 (white on red) should be provided to inform road users exiting the existing complex that Herten Way is now a Two-way carriageway.

Response: Temporary signs to Diagram 7014 (white on red) will be provided for a period of three months after opening.

5.12 PROBLEM

Location: Herten Way, additional access points to proposed development site.

Summary: Potential conflict between all road users.

As stated under item 2.1; initially the proposal was to include 2 new access points leading into a proposed new development on eastern side of Herten Way. If these were to be introduced/constructed at the locations indicated (directly opposite the existing access points on the western side) the audit team feels that this design is not in accordance with current design practice and would give rise to concerns regarding the safety of a crossroads layout.

RECOMMENDATION

Recommendation is to review the current design and relocate the developments access points.

Response: The South Yorkshire Residential Design Guide allows for crossroads of this type when the minor arms are designed as 20mph and the usage is relatively low, as in this case.

Alternative locations for the new junctions are quite restricted. To stagger them the recommended 20m would bring them into conflict with existing junctions or the proposed pedestrian crossing point.

Following discussions with Highways Development Control the Designer considers the junction locations as satisfactory.

5.13 PROBLEM

Location: Herten Way, additional access points to proposed development site.

Summary: Potential conflict between all road users

The audit team were given the indication, via having seeing plans for the proposed development that the 'New' access points were labelled as '**vehicle and pedestrian**

access points'. There is the possibility that it cannot be expected that all pedestrian traffic will automatically use the Raised Table Area to cross Herten Way when utilising both the existing complex and the proposed new site. With this in mind and if this were to be the case there is no indication shown on any of the design drawings of any footway areas being proposed/constructed on the western side of Herten Way i.e. adjacent the existing access points to the existing leisure complex. If no official footway areas or crossing points are introduced the only option open to pedestrians is to cross either onto the existing verge areas or into the access/egress areas themselves, the latter being the only option for wheelchair users thus resulting in potential conflict with motorised vehicles exiting/entering the existing complex site.

RECOMMENDATION

Convert existing verge areas on the western side of Herten Way to suitable footway including appropriate crossing points.

Response: A pedestrian crossing point is being provided at the Southern end of Herten Way with existing links into the leisure complex. The proposed plateau provides a pedestrian crossing facility between the site accesses.

It is agreed that there is a lack of crossing facility or footway at the northern end of Herten Way, close to the roundabout.

Any development on the new site will inevitably result in increased pedestrian usage. As the proposed development's planning application has elapsed and needs to be fully re-submitted then the provision of a crossing point and a footway link will be considered as part of this application.

6.0 Audit Team Statement

I certify that this Audit has been carried out in accordance with the current Doncaster Metropolitan Borough Council Road Safety Audit Standard.

AUDIT TEAM LEADER FOR THIS AUDIT:

Andy Stewart

Signed...



Dated.....12th February 2016

Appendix A:- DOCUMENTS SUPPLIED:-

- Drawing No. 29645/GA
- Drawing No. 29645/PRELIM

Appendix B:-

