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EXCEPTION REPORT

On problems 2.1 and 2.2 of
the Stage 1 Road Safety Audit of

Turbo Roundabout, Clapham Road-Tavistock Street, Bedford

Report presented to

Glenn Barcham – Bedford Borough Council, Assistant Director Highways and
Transport
Borough Hall, Bedford

By

Allan Burls – Bedford Borough Council, Senior Project Engineer,
Borough Hall, Bedford

December 2013

**Bedford Borough Council,
Borough Hall,
Cauldwell Street,
Bedford
MK42 9AP**

Route No.

Scheme:

Road Safety Audit: Stage

1. Introduction

- 1.1 This Exception Report is in response to the Stage 1 Road Safety Audit Report (RSA) on *Turbo Roundabout, Clapham Road-Tavistock Street, Bedford*. The Audit Brief comprised a series of site visits by the Audit Team. The Audit Report was prepared and issued by the Audit Team Leader, *Mrs E Sands* of URS (*Associate Director*) on behalf of Bedford Borough Council in accordance with the URS/Bedford Borough Council Commission for the completion of road safety audits 2013 – 14.
- 1.2 The proposal is to convert this junction to a Turbo Roundabout, which is a concept developed in the Netherlands. The circulatory carriageway is altered such that raised markings are deployed to achieve a specific form of 'spiralisation' designed to eliminate circulatory collisions and entry exit conflicts. This is achieved by directing traffic into the correct lane before entry with the spiral lines guiding the vehicle around the circulatory carriageway, effectively reducing the number of conflict points from 16 to 10.
- 1.3 As Project Manager; I have carefully considered the Problems and Recommendations in the Audit Report and the Design Team's responses to each issue and, as a result, I propose that the Recommendations to Problems 2.1 and 2.2 should not be implemented. Therefore, I have produced this Exception Report for consideration by the Assistant Director of Highways and transport with the request that he signs the Exception Report and indicates his acceptance or rejection. If accepted and signed by the Assistant Director of Highways and Transport, the Exception Report will be copied and attached to every copy of the Audit Report.

2 Key Personnel

2.1 Overseeing Organisation

Project Director – Glenn Barcham (Assistant Director of Highways and Transport)

Senior Project Manager – Allan Burls (Bedford Borough Council)

2.2 Audit Team

Audit Team Leader – *Mrs E Sands* (URS – Associate Director)

Audit Team Member – *Mr C Brown* (URS – *Audit Team member*)

2.3 Design Organisation

Design Engineer – *Allan Burls* (Bedford Borough Council)



Turbo Roundabout, Clapham Road-Tavistock Street, Bedford

<p>Problem 2.1</p> <p>Location: A (Dwg. No. RSA1)</p> <p>Summary: Private Access crosses combined pedestrian/cycle route</p>	
<p>Details</p> <p>The proposal takes no account of the existing private drive to the property on the corner of Union Street and Clapham Road. This property is a large house converted to flats and has a number of parking places. Therefore it is likely that this access is well used. At present there dropped kerbs onto what is effectively the circulatory carriageway, the access is fairly conspicuous and its presence is highlighted by the change in surfacing from flagstones to tarmac. It is likely that there is some existing interaction between vehicles and pedestrians in this area, however the vehicle drivers will be aware of the presence of pedestrians and the pedestrians should be aware of the presence of the private access. By encouraging cyclists to use the footway in this area additional conflicts are introduced. It is likely that the cyclists will be travelling at higher speeds and therefore drivers entering or exiting the private access may not see the cyclist leading to potential collisions. No details have been provided of the proposed traffic signs for this scheme therefore it is not possible to comment on this aspect of the works.</p>	
<p>RECOMMENDATIONS</p> <p>It is recommended that the presence of the private access is highlighted with some form of road marking. If is felt that this is insufficient then it is recommended that this section of the cycle lane is removed and cyclists dismount signs are installed on this quadrant to ensure that cyclists are not travelling in this area at speed and are therefore not in conflict with any motor vehicles using the access.</p>	
<p>Design Team Response</p> <p>At this stage of the process it would be our intention to put in place a give way marking on the vehicle access at the back of the footpath to highlight to vehicles they should be stopping at this point to ensure the footpath is clear prior to pulling across</p>	



to access the carriageway. This could be further enforced by some form of warning sign highlighting the presence of cyclists.

Project Sponsor's Statement

Agree with Design Team Response, no cyclist dismount signs required as this would be in direct opposition of the schemes aims of improving the movement of cyclists through this junction.

Problem 2.2

Location: General (Dwg. No. RSA1)

Summary: Thermoplastic humps may cause problems to powered two wheeled users. Perception of roundabout may cause problems with all users.

Details

It is unclear as to the profile of the markings proposed. Powered two wheeled users may not be expecting the circulatory carriageway markings to be full profile and this may cause loss of control incidents.

RECOMMENDATIONS

Consider using rumble strip type profile markings rather than full profile markings until the concept is understood and accepted. Consider using Dutch style lane arrows and signs (approval will be required).

Design Team Response

As the design progresses we will be investigating appropriate hard delineations. The current proposal is for some form of bolt down trapezoidal section arrangement tall enough to prevent overrun. This is an integral part of the operation of the roundabout and by only putting in a half measure this will render the design concept void and allow the use of the roundabout as a regular roundabout. With regards to materials proposals will be discussed with the Motorcycle User Group Forum BBC already engage with to capture their thoughts. Talk are already underway with the DfT to find suitable acceptable road marking and signing proposals for this scheme and



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discussions are also underway relating to advertising the arrangement in local publications and educating the public in the correct way of using the roundabout.

Project Sponsor's Statement

Agree with Design Team's response

This Exception Report is presented to the Assistant Director of Transport and Highways for the final decision.

Allan Burls

Senior Project Manager

Signature *Allan B*

Date *12/12/2013*



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Assistant Director of Transport and Highways Comments and Final Decision

This Exception Report is / is not accepted (*delete as required*)

Glenn Barcham

Assistant Director of

Transport and Highways

Bedford Borough Council

Signature 

Date 

