

**Proposed Development north of Gosport Road, Fareham
Proposed Junction Improvement – Traffic Signals Option**



Road Safety Audit Stage 1

on behalf of Pegasus Group

Andy Paul BEng (Hons); MCIHT
HE RSA Cert Comp
Road Safety and Highway
Engineering Consultant

Gosport Road / Newgate Lane, Fareham – Junction Improvement

Road Safety Audit Stage 1

1 Introduction

1.1 This report describes a Stage 1 Road Safety Audit carried out on proposed improvements to an existing priority junction, in association with a proposed development off Newgate Lane, Fareham, on behalf of Pegasus Group. The audit was carried out on 22nd February 2020 in the office of Mr Paul.

1.2 The Audit Team members were as follows:

Andy Paul - BEng (Hons), MCIHT
HE Approved Certificate of Competence
Road Safety and Highway Engineering Consultant

Kevin Seymour, BSc, PG Dip TS, MCIHT, MSoRSA
HE Approved Certificate of Competence
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1.3 The audit comprised an examination of the drawings and other information relating to the scheme supplied by the design office, which is listed in **Appendix A**. The site was visited by the Audit Team together on 13th February 2020 at 1pm. The weather was dry and bright. Traffic flows were moderate, and pedestrian and cycle flows were very low.

1.4 The terms of reference of the audit are as described in Standard GG 119 (previously HD 19/15). The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.5 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence.

1.6 The scheme consists of the signalisation of the existing junction between Gosport Road and Newgate Lane, Fareham, Hampshire.

2 Items resulting from this Stage 1 Audit

2.1 PROBLEM

Location – Junction right-turn lane

Summary: Potential collisions between northbound vehicles on Gosport Road and vehicles turning right into Newgate Lane

The traffic signal staging diagram doesn't appear to show the Gosport Road southbound right-turn phase operating within a signal stage. DMRB CD123 states that, where the 85th percentile approach speed is greater than 72 kph (45 mph), there is an increased risk of collisions between right-turning vehicles seeking gaps and on-coming vehicles travelling at speed. DMRB also states that where the 85th percentile approach speed is greater than 72 kph (45 mph), right-turns should be separately signalled.

Higher northbound vehicle speeds on Gosport Road (particularly in off-peak traffic conditions) may mean that gap acceptance by the drivers of right turning vehicles could lead to right-turn collisions or to sudden braking and shunt type collisions.

RECOMMENDATION

At detailed design stage, signal staging / phasing should incorporate a separately signalled right-turn into Newgate Lane. It would be appropriate to measure northbound vehicle speeds to design signal staging and phasing arrangements accordingly.

OBSERVATIONS

- On the southbound Gosport Road approach to the junction, the drawing shows lane widths of 4.5m for the straight ahead lane and 3.0m for the right-turn lane. At detailed design stage, it may be more balanced to decrease the straight ahead lane to 4.0m, and increase the right-turn lane width accordingly.

- Currently, there is a traffic island protecting the right-turn lane from southbound vehicles on Gosport Road, as shown below. It is unclear from the drawings whether this island will remain in place, or be replaced by a similar traffic island. It may be prudent to retain a traffic island at a suitable position in the final scheme design.

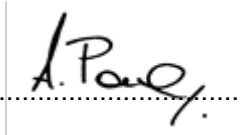


3 Audit Team Statement

We certify that the terms of reference of the audit are as described in Standard GG 119.

Audit Team Leader

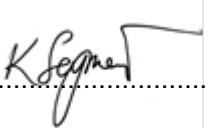
Andy Paul - BEng (Hons), MCIHT
HE Approved Certificate of Competence
Road Safety and Highway Engineering Consultant

Signed 

Date 23rd February 2020

Audit Team Member

Kevin Seymour, BSc, PG Dip TS, MCIHT, MSoRSA
HE Approved Certificate of Competence
Road Safety Consulting Ltd

Signed 

Date 23rd February 2020

APPENDIX A

Information Provided

List of Drawings Examined:

Drawing No. BRS 4989 Figure 16 Rev A

Location Plan

Other Information Provided:

Transport Assessment

Transport Technical Note

Traffic Modelling Data