



J000420-RSADR01a
August 2024

Class E Food Store (Lidl) with
Associated Access, Car Parking,
Servicing and Landscaping

Land off Barnard Road, Bowthorpe,
Norwich, NR5 9JB

Stage 1 Road Safety Audit - Designer's Response

Prepared on behalf of:

Honeyview Investments Ltd.

1.0 INTRODUCTION

- 1.1 This Technical Note has been prepared by Focus Transport Planning (Focus TP) as a formal Designer's Response to the independent Stage 1 Road Safety Audit (RSA1) report prepared by Highway Associates (Report Ref: 2024/F/2213). This independent audit was commissioned by Focus TP, as the preliminary design organisation, to consider the proposed provision of controlled pedestrian and cyclist crossing facilities within a recently implemented bus gate facility and signal-controlled junction at the A1074 Dereham Road, Norwich. These crossing proposals are being promoted as part of the proposals for the redevelopment of land to the south of Dereham Road, and north of Barnard Road, to deliver a new foodstore (Planning App Ref: 23/01616/F).
- 1.2 The proposed crossing facilities are designed to ensure connectivity between the proposed new foodstore to the south of Dereham Road, and the residential areas to the north. The proposals have been designed taking into account recent upgrades to the Dereham Road route undertaken by Norfolk County Council (NCC) to deliver a bus corridor, as well as Local Transport Note (LTN) 1/20 - Cycle Infrastructure Design (July 2020).
- 1.3 The recent works undertaken by NCC include the conversion of a one-way section of Three Mile Lane, which lies to the immediate north of Dereham Road, into a bus gate facility, and the creation of a 3-arm signalised junction on Dereham Road with the remaining two-way section of Three Mile Lane. The scheme also includes the conversion of the existing nearside traffic lane the eastbound side of Dereham Road into a bus lane. The crossing proposals would link the footway/cycleway route on the north side of Three Mile Lane to the proposed foodstore in two stages - firstly via the crossing of the one-way bus gate section of Three Mile Lane, and secondly via the crossing of Dereham Road at the new signalised junction. To the south of Dereham Road the foodstore redevelopment scheme includes for the implementation of a new ramped and stepped footway/cycleway access link to the foodstore.
- 1.4 The RSA1 was carried out with reference to the following package of information, and followed the procedures set out in GG119 of the Design Manual for Roads and Bridges (DMRB).

- Drawing J000420-SK001A - Pedestrian/Cycle Crossing Integration into NCC Travel Hub Western Bus Gate Scheme;
- Dereham Road Travel Hub Details
- J000420-TA01b - Transport Assessment

1.5 The remainder of this Technical Note reviews **any potential** problems identified in the RSA1 report and sets out the Design Organisation's agreement or otherwise with the issues raised and, where relevant, details of design measures proposed to address these matters.

2.0 SITE LOCATION AND EXISTING HIGHWAY NETWORK CONDITIONS

2.1 RSA1 PROBLEM REFERENCE 3.1.1

2.2 Location - Proposed crossings

Summary - Risk of VRU to vehicular conflicts due to type of crossings

Concern is expressed that by having two different types of controlled crossings adjacent to one another could confuse VRUs as to the nature and priority of each crossing leading to injudicious crossing movements which may result in conflicts with passing vehicular traffic.

Recommendation - The proposed tiger crossing should be upgraded to a toucan facility.

2.3 Design Organisation Response: **NOT ACCEPTED**

With regard to the proposed crossing facility of Three Mile Lane, it is considered that the implementation of a signalised crossing facility would be inappropriate given the relatively limited level of traffic demand that would utilise this section of route, which is strictly limited to buses only passing through the recently implemented bus gate. Indeed, it is considered that with such a low level of traffic demand on this section of carriageway, the implementation of a signalised crossing would be inappropriate as pedestrians and cyclists would likely become apathetic towards having to call the crossing and wait until the traffic signals change. As a result it is likely that pedestrians and cyclists would be more likely to simply cross the carriageway without engaging the crossing facility's signal control. Consequently it is therefore felt that the implementation of a parallel crossing represents the most appropriate use case in this specific instance.

Whilst it is acknowledged that there would be a clear difference in crossing types between the parallel crossing of Three Mile Lane and the Toucan crossing of Dereham Road, it is considered that the distinctly different nature of the traffic demand on each route (i.e. much greater on Dereham Road), the presence of other vehicular traffic signal control, and the fact that those crossing north-south would

face the direction of traffic on Dereham Road, is such that it is highly unlikely that there would be any resulting confusion on the part of pedestrians and cyclists negotiating between the crossing types. It is therefore considered that there would be no highway safety risks associated with the two proposed types of crossing.

2.4 **RSA1 PROBLEM REFERENCE 3.1.2**

2.5 Location - Proposed crossings

Summary - Risk of VRU to vehicular conflicts due to stagger

Concern is expressed that VRUs crossing in a northbound direction will approach the proposed tiger crossing with their back to approaching traffic which could encourage injudicious crossing and increase the potential for VRU to vehicular conflict on the crossing.

Recommendation - An alternative crossing layout should be sought. For example providing a single stage straight through crossing arrangement paying credence to the recommendation given in Problem 3.1.1.

2.6 Design Organisation Response: **NOT ACCEPTED**

Whilst it is acknowledged that those crossing south-north would be facing away from any traffic travelling along Three Mile Lane as they approach the proposed parallel crossing, as outlined above the traffic demand on this link is extremely low. Moreover, the crossing stagger ensures that those travelling in a north-south direction face eastbound traffic on Dereham Road, which would be at a far greater level of demand.

A straight-through crossing including Three Mile Lane would likely have implications on the operation of the signalised junction in terms of intergreen times etc. Accordingly it is considered that the arrangement proposed provides the most efficient crossing arrangement for pedestrians and cyclists, and would not give rise to any highway safety risks for crossing the routes of both Three Mile Lane and Dereham Road.

2.7 **RSA1 PROBLEM REFERENCE 3.2.1**

2.8 Location - Proposed steps/ramp.

Summary - Risk of cyclist incursion

By having the proposed steps/ramp in-line with the south side of the toucan crossing, concern is expressed that southbound crossing cyclists who may be travelling at speed could be at increased risk of unintentional incursion onto the steps/ramp resulting in loss of control.

Recommendation - The steps and ramp should be suitably offset from the crossing.

2.9 Design Organisation Response: **ACCEPTED**

The proposed footpath connection to the south, which incorporates both a ramped connection and adjacent steps, has been relocated further to the west to ensure that the connection is offset from the proposed crossing landing area. **Drawing J000420-SK001B** now includes for this revised southern footpath link location.