

Pedestrian Crossing, A3052 Newton Poppleford Coroner's Inquest

Report of the Director of Climate Change, Environment and Transport

Please note that the following recommendation is subject to consideration and determination by the Committee before taking effect.

Recommendation: Following investigation, it is recommended that no changes be made to the existing street lighting at the 'Puffin' crossing while it remains in its current layout.

The current trial of adjusted timings is assessed by feedback from the community and used to inform any future permanent timings.

Note: Assessment of the impact of changing the puffin to a zebra crossing, requests for additional crossings and wig wag signals in the village is subject of separate report CET/22/41.

1. Summary

This report addresses item number 25 from the East Devon Highways and Traffic Orders Committee on 14th February 2022, namely:

- (a) that the request from the Assistant Coroner that consideration be given to allowing additional time for pedestrians to cross and to improve any existing lighting at the pedestrian crossing be noted; and
- (b) that a full report be presented to the next meeting of the Committee.

2. Introduction

On 23 December 2020, a pedestrian was struck by a vehicle while using the 'Puffin' crossing on the A3052 Station Road, Newton Poppleford (adjacent to the Post Office). The pedestrian suffered a significant head injury and sadly passed away 3 days later.

On 20 December 2021, the Assistant Coroner for Exeter and East Devon wrote to DCC in relation to the collision. The letter explained how an inquest had been held into the death on 10 December 2021, with the conclusion being that it was caused by a Road Traffic Collision.

The Assistant Coroner explained that while it is possible that factors such as reduced visibility due to poor weather and the LED lights of a waiting vehicle may have contributed to the collision, a number of witnesses to the incident have stated that:

- (a) the crossing is poorly illuminated;

- (b) there appears to be insufficient time for pedestrians to cross the road before the lights change to green, indicating to waiting vehicles that it is safe for them to drive across.

Having considered witness statements, the Assistant Coroner highlighted excerpts from Devon and Cornwall Police's Forensic Collision Report and evidence from the County Council's Traffic Signals and Streetlighting Team Manager, which stated that the signals were operating correctly at the time of the collision.

The Assistant Coroner requested that the evidence be taken into account and consideration be given to allowing additional time for pedestrians to cross and to improve any existing lighting at the crossing.

At the time of the last HATOC, officers were considering the evidence and investigating the Assistant Coroner's request in light of national guidance and specifications. Since then, a full response has been sent to the Assistant Coroner, along with a similar letter to the bereaved family.

This report will summarise the findings which have been collated from a combination of information, data and experience from DCC Officers.

3. History of the Crossing

A pedestrian crossing has been installed in this location since 1987 and was most recently refurbished in 2017. The new Puffin control equipment was manufactured with timings and ranges built-in as described in the Traffic Signs Regulations and General Directions 2016 (TSRGD). The Puffin timings for the crossing were compiled using guidance from LTN 2/95 The Design of Pedestrian Crossings Third impression 2005 and TAL 1/01 Puffin pedestrian crossing. The pedestrian detection equipment meets the detection specifications of TSRGD (activated for 1.6 seconds from the detection of movement above 0.5 metres per second). The crossing was inspected and tested on 14th January 2021 and the above equipment was found to be working correctly.

4. Timings of Crossing Phases

The timings of each phase of the crossing have been designed in accordance with the recommendations of LTN 2/95 The Design of Pedestrian Crossings (which remains consistent with the current Chapter 6 of the Traffic Signs Manual). The recommended 5 seconds of 'Green Man' time was increased to 7 seconds on 8th June 2020 to support social distancing and promote priority for pedestrians during the Covid-19 lockdown.

Following the 'Green Man' there is a fixed 2 second 'clearance period' followed by a variable 'clearance period' of between 0 and 7 seconds. This variable period is determined by the detectors recognising a pedestrian on the crossing. As such the maximum crossing time available for pedestrians is $7 + 2 + (0 \text{ to } 7)$ so varies between 9 and 16 seconds.

In addition to the crossing time, drivers have a further 2 seconds of red and amber taking the wait time to 18 seconds. The risk of increasing this wait time for drivers is

the red signal begins to lose credibility and is abused by drivers or they become frustrated and drive at inappropriate speeds.

Evidence provided to the Coroner by a number of witnesses raises concern that the lights quickly return to green just as pedestrians cross the road. This is likely due to the variable 'clearance period' described above which minimises the cycle time.

Based on the above consideration the Service has temporarily amended the clearance periods to provide more priority for pedestrians to clear the crossing. The Parish Council will be consulted following the summer to assess whether any benefits have been realised or negative driver behaviour has been observed.

The operating specification for the signals is in Appendix 1.

5. Streetlighting at the Crossing

With regards to the lighting at the crossing, DCC have a streetlight installed on a telegraph pole directly adjacent to the northern side of the crossing. The current LED light was installed in 2017. Modelling and calculation show that the lighting levels (both average and minimum) at the crossing itself are above those specified in British Standard BS EN 13201-2:2015 (Road Lighting – Performance Requirements). Looking at the wider approaches to the crossing, the lighting levels meet the average requirements although there are some isolated areas to the rear of the footway where the lux levels are just below the minimum requirement. However, by having the crossing lit to one class higher than the approaches should help make it more conspicuous to drivers.

Based on the above consideration the Service does not intend to change the current streetlighting arrangement.

The specification of the streetlighting can be found in Appendix 2.

6. Financial Considerations

The proposal will not alter existing expenditure at the crossing.

7. Legal and Environmental Impacts

Any changes to the surrounding lighting and/or the crossing timings would have impacts:

- (a) The timings of the crossing – It is not thought that the current timings of the crossing are a barrier to pedestrian use so it is unlikely that a change would encourage additional pedestrian movements in Newton Poppleford and therefore reduce emissions. However, an increase in delays to motorists, would have a minor negative environmental impact.

From a legal perspective, it is also important to note that the current timings are in accordance with national guidance.

- (b) Streetlighting at the Crossing – Any increase in streetlighting provision would result in increased carbon emissions (energy usage, installation, maintenance etc.) and would equally require ecological assessment.

8. Summary

Following consideration, it is recommended that no additional time be given to allowing for pedestrians to cross and no changes be made to the existing lighting at the ‘Puffin’ crossing whilst it remains in its current layout. This view is based on the current equipment being consistent with that across the rest of the county and inline with national guidance.

The assessment of the impact of changing the puffin to a zebra crossing, requests for additional crossings and wig wag signals in the village is the subject of separate report CET/22/41.

Meg Booth
Director of Climate Change, Environment and Transport

Local Government Act 1972: List of Background Papers

Contact for Enquiries: Alex Crump/Ian James

Tel No: 01392 383000

Background Paper	Date	File Reference
Letter from Assistant Coroner	Dec 2021	Case ref: 3806212

ac180722edh
sc/cr/Pedestrian Crossing A3052 Newton Poppleford Coroners Inquest
02 190722

Operating Specification for the Puffin Crossing

Nearside Puffin Crossing

Name of Site	P97128
Road Name	High Street
Town/City	Newton Poppleford
County	Devon

TAL 5/05 – Table 2

Period	Period	Stream 1 Timings (Seconds)	Stream 2 Timings (Seconds)
Fixed Vehicle Running	1	20	
VA Minimum	1	7	
VA Maximum/Pre-Timed Max	1	20	
Vehicle extension	1	0.6	
Leaving amber	2	3	
All Red (Max change)	3	1	
All Red (Gap change)	3	1	
Green Man	4	7 (5)	
Fixed Minimum pedestrian all red	5	2	
Variable Maximum pedestrian all red	6	7	
Max change all red	7	0	
Gap change all red	8	0	
Red and Amber	9	2	
Pedestrian Demand Delay Time		0	
Registered demand extension time		1	
Kerbside detector extension time		1	
On Crossing extension		1	

Number of push button inputs				2
Number of on crossing detectors				1
Number of vehicle detector units				2
Number of kerbside detector inputs				2
Number of SD/SA detector inputs				-
Type of speed unit (Double/Triple/Speed assessor)				-
SD/SA Loop spacing				-
DFM Time for Detector Inputs	Active	30 minutes	Inactive	18 hours
DFM Time for Push Button Units	Active	30 minutes	Inactive	Switched off

Stream 1 Period 6 – Variable $\left[\left(\frac{L}{1.2} + Pc \right) - P5 \right]$ $\left[\left(\frac{7.5}{1.2} + 2 \right) - 2 \right]$ all red is:

Therefore P6 = 6.25 seconds
= **7s**

L=crossing length in metres=7.5m Pc = pedestrian comfort time in seconds = 2s P5 = period 5 = 2 See Puffin Good practise guide

Mode of operation: The controller is to be capable of switching between VA and PTM modes via timetable event, but is to be initially set up to operate a 20 second VA all day.

Include timetable: See above

Audible Bleepers to be switched off between 22:30 and 06:00

Note green man temp change from 5 to 7 seconds for covid social distancing
08/06/2020

Lighting Report for the Puffin Crossing

DATE: 24 January 2022
DESIGNER: Andy Ware
PROJECT No: 000000
PROJECT NAME: Unnamed



TOUCAN CROSSING HIGH STREET
NEWTON POPPLEFORD
48LED 500mA 5139 URBIS AMPERA

Outdoor Lighting Report

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PREPARED BY: Streetlighting Team
Devon County Council
Great Moor House
Bittern Road
Sowton Industrial Estate
Exeter
EX2 7NL
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Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	30858.426	89739.21	9.79	15.84	1.40	1.44

Luminaires

Luminaire A Data

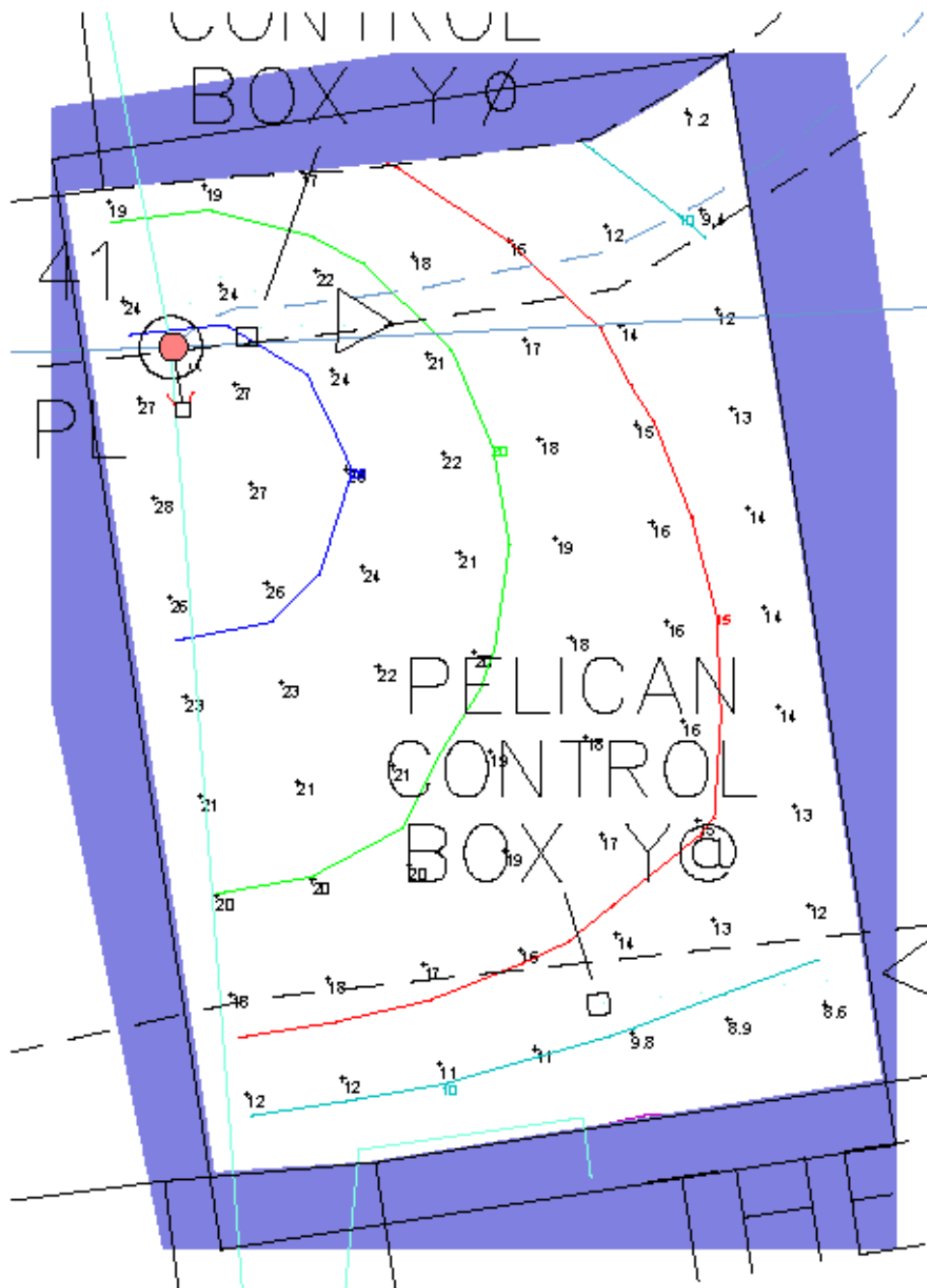
Supplier	
Type	AMPERA MED15192 - 43 Class XPG2 500 mA, MV 230V, E14, Class E
Lamp(s)	43 Class XPG2500mA, MV 230V
Lamp Flux (klm)	9.78
File Name	AMPERA MED1519243 Class XPG2 500mA, MV 230V, E14 Class E14 Class E14 Class E14
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	5925, 1097, 0.0
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cast	Out-reach	Target X	Target Y	Target Z
1	A	308583.57	89752.17	8.00	279.00	0.00	0.00	0.90			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	17.83
Emin	7.15
E _{max}	27.63
E _{min} /E _{max}	0.26
E _{min} /E _{av}	0.40