62822

Davidson Mains Roundabout

I would be grateful if you could inform me of the evidence which led to the council identifying the roundabout at Davidson Mains as being so dangerous to the identified stakeholders as to require an investment of public money to resolve this "significant" issue.

Specifically I would like you to inform me of the metrics you used to reach the conclusion that this particular roundabout causes a "significant" danger (more than normal at all roundabouts) and what changes to these metrics you are aiming to achieve by investing (what I suspect is a significant sum) in a project to reduce the risks you have identified to the stakeholders you have specified. Further I would like to be informed of how you intend to collect, collate and report data on these metrics to ensure the benefits are achieved after the work is completed.

In the period about 2016, the Road Safety Team undertook Accident Investigation and Prevention (AIP) analysis into all streets within the City of Edinburgh Council area using collision details supplied by Lothian and Borders Police (now Police Scotland).

As historical collision data is reviewed, it is important to determine what time frame / dates to apply when searching and guidance from the Royal Society for Prevention of Accidents (RoSPA), in their Road Safety Engineering Course, is generally adopted in setting Accident Investigation Prevention protocols and advises that a period for investigating and defining 'accident problems' is set at 3, 4 or 5 years. This provides a compromise between statistical and practical factors.

In the City of Edinburgh Council, a period of three years is chosen for AIP work; if there are three, or more, similar collisions within that period, the location will be given consideration for an appropriate intervention.

In 2016 the front-end software then used for the Council's Collison Database enabled the collision database to be analysed and information therefrom to be presented in a variety of formats. The focus was on collision clusters and the software provided a 'long list ' or 2016 Preliminary List (attached as Appendix A) of potential sites, which was then investigated further to determine any patterns or identifiable concerns.

A subsequent 2016 Detailed Investigation List (attached as Appendix B) subsequently provided 69 potential sites, one of which was "East Barnton Gardens @ Main Street, Davidson's Mains" which became a scheme to be progressed as AIP 2016-68 Davidson Main's Rbt.

Information about this process is detailed in Appendix C and Appendix D.

The analysis work then developed into a Design Brief - D'Mains Rbt - Signalised Junction WORD document and subsequently to an initial sketch design DWG file (Zebra Crossings) that was the initial draft outline design that informed the current layout being constructed. In widening the existing footways and simplifying the crossings to a single phase, the project prioritises pedestrian movements at the junctions. (Attached as Appendix E).

I would also be grateful if you could share the data you used to inform you about the effects this change to the roads would have on the smooth flow of traffic through the area ensuring that the roundabout is not turned into a significant congestions point especially at peak times and the risk analysis you have done to show this does not cause more risks than currently exist with the existing infrastructure.

The City of Edinburgh Council's Road Safety Team organised turning count traffic surveys at the existing Quality Street/Davidson's Mains roundabout on Tuesday 23rd & Wednesday 24th October 2018. Spreadsheets of these counts are provided.

It should be noted that the approaches to the roundabout are marked as a single lane and although some drivers may choose to align 2 abreast where on-street parking and vehicle size permits, previous surveys results are not based on fully utilising available road space at all times.

The alternative proposal for signal-controlled layout was modelled in LinSig V3, using the counts from Wednesday 24th October. LinSig is an industry standard traffic signals modelling package, widely used across the UK for evaluating proposed traffic signals designs. AM and PM peaks were modelled, to check operation at the busiest times of the day.

Ultimately, CEC's Road Safety team decided against pursuing the signalised junction option for the following reasons:

Traffic modelling has been undertaken to investigate the removal of the mini roundabout and introduce a signalised junction however, pedestrian average waiting times are likely to be longer as they will no longer be able to cross the road on demand as with the current uncontrolled Zebra crossings. This will be particularly felt during the PM peak period which would have a 2-minute wait for pedestrians. The introduction of double yellow lines between Main Street and Quality Street Lane would be required to support a signalised junction and may also negatively impact trade for businesses in the area. It would also be required to moving the listed structures, including the wall, from East Barnton Gardens and would add significant cost to the project and would not be guaranteed. The existing footways would also have to be narrowed slightly to accommodate the junction. Due to the negative impact on pedestrians and cost, a signalised junction will not be progressed at this time.

I would also appreciate if you could let me know what the estimated cost of this project is and what the outcome of your return on investment analysis within the

Business Case you prepared was, which ensures this investment provides tax payers with the “value for money” you are required to deliver for them.

The information has been withheld based on commercial confidentiality.