



Dr Sarah-Jane Richards
HM Assistant Coroner

Please Ask For:

My Ref:

Your Ref:

Date: 9 January 2015

Dear Dr Richards

**Response in respect to Regulation 28 report to prevent future deaths -
Investigation into the death of Mr Marcus Szigetvari.**

I refer to your Regulation 28 Report dated the 14th November 2014 in respect to the above investigation and in particular note under section 6, the requirement of the Council to consider traffic lights to be installed at the junction of Llanwono Road and the A4233. In response to this requirement I submit the following comments;

Background

The Llanwono Road / A4233 priority junction is located on the Porth Relief Road which was first opened to traffic in December 2006 following the completion of the Porth Relief Road. Having only recently been constructed, it is subject to modern design standards consistent with the advice set out in the Design Manual for Roads and Bridges (DMRB), Geometric Design of Major/Minor Priority Junctions (Vol 6, Sec 2, Part 6 TD 42/95) and issued by the Department for Transport.

Design Considerations

Whilst the Design Manual for Roads and Bridges is predominantly used in the design of Trunk Roads, its standards are routinely adopted when designing new roads that may not form part of the Trunk Road network, especially roads such as the Porth Relief Road which forms part of Rhondda Cynon Taf's Principal Road network.

DMRB sets out the various types of priority junction that may be used and the factors that must be considered in order to determine the correct layout for the location. Whilst there are a wide range of factors that must be considered, a key consideration is major and minor arm traffic flow (traffic using the junction). Having taken account of these factors a Ghost Island Priority Junction was considered appropriate for this

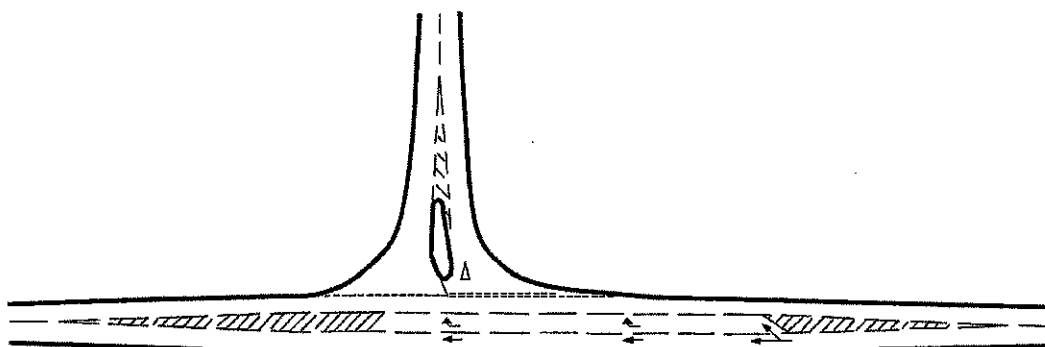


Figure 1 / 2 : Ghost Island Junction (para 1.15)

location. The general arrangement of a Ghost Island can be seen below in figure 1 / 2 which is an extract from DMRB and is consistent with the road layout currently in situ which is also shown below in the aerial photograph.

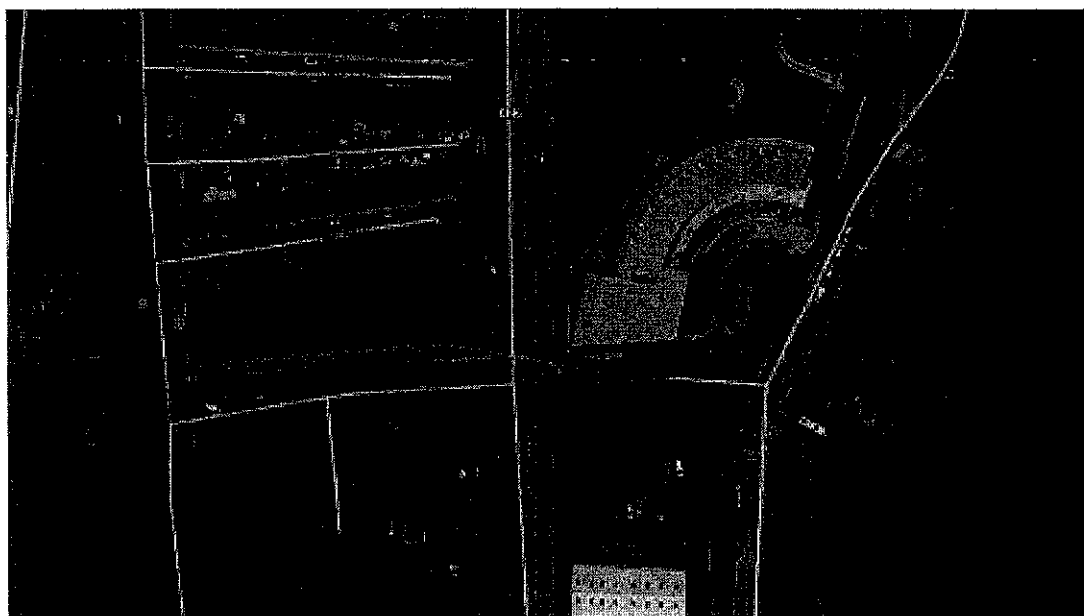


Figure 2/2 below, again an extract from the DMRB gives an indication why a Ghost Island junction is considered appropriate at this location. For example, whilst design year traffic flows (estimated from traffic models) would have been used to determine the correct junction layout to be used during the design process, recent traffic counts taken at this junction can be fed into the graph in fig. 2 /2 to assess the continued appropriateness of this junction arrangement.

With two way Annual Average Daily Traffic (AADT) flows of 8092 vehicles on the A4233 ('Major Road Flow') and two way Annual Average Traffic Flows of 2275 vehicles on Llanwono Road ('Minor Road Flow'), when plotted on the graph the point of intercept (*) clearly indicates that the use of a Ghost Island Priority junction is the most appropriate junction type for this location given its level of usage.

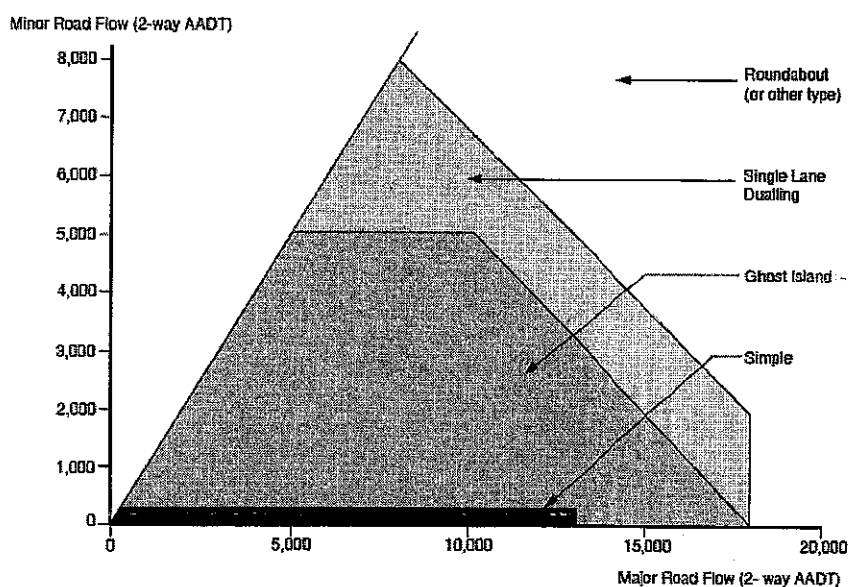


Figure 2/2 : Approximate Level of Provision of T-junctions on New Single Carriageway Roads for Various Major and Minor Road Design Year Traffic Flows (paras 2.2, 2.14)

Visibility at the junction has also recently been reviewed and is compliant with current design guidance as set out in Planning Policy Wales Technical Advice Note 18: Transport (Tan 18) and Manual for Streets which provide design guidance for roads other than Trunk Roads. Recent surveys have provided a known 85th percentile speed of vehicles travelling along the A4233 of approximately 46 and 47mph, which in accordance with the above guidance means unobstructed visibility for drivers attempting to exit Llanwono Road should be between 120 and 160metres. Measurements taken on site by officers indicate that unobstructed visibility both to the north and south for drivers exiting Llanwono Road onto the A4233 is well in excess of the 120 to 160 metres required.

As the collision in question occurred during the hours of darkness, the street lighting arrangement in the vicinity of the A4233 and Llanwono Road junction has been reviewed and found to be consistent with current design standards.

Point 5(2) of the Regulation 28 report indicates that 19 other collisions have taken place on this road since 2001, two of which were fatalities. There are a number of concerns associated with this statement and therefore it should be noted that the Porth Relief Road and in particular the section in question only opened to traffic in December 2006, and secondly the A4233 stretches for almost 19 km between Porth in the south and Aberdare to the north having crossed over the Maerdy Mountain. Neither is it indicated if the collisions referred to are in fact personal injury collision or incidents where only minor damage has occurred. The latter of these points is important as the Authority is only supplied with the details of recorded personal injury collisions by the police and the use of personal injury collision data and not damage only collision data in the assessment of highway and road safety issues is the industry norm.

Therefore for the purpose of this report, only the personal injury collision history of that section of the A4233 between the Porth roundabout and the Wattstown roundabout a distance of 2.3km, between which the Llanwono Road junction is situated will be considered. In addition, the concerns raised under the Regulation 28 Notice relate to the consideration of traffic signals at the highlighted junction only and not the extended route.

Therefore from its opening at the end of December 2006 up until 31st December 2013 (most recent data available to the Council) there have been ten recorded personal injury collisions along this 2.3km length of the A4233. Seven are considered as slight in severity, one as serious and two fatalities inclusive of the case in question.

It must be noted that the other fatality occurred in April 2013 at 05:40am and involved two vehicles. No highway concerns were attributed to the collision and the contributory factor has been recorded as Fatigue, driver impairment and therefore has no bearing on considerations related to the suitability of the junction.

In terms of those collisions directly related to the junction, there is only one previously recorded incident, the details of which are as follows;

The collision occurred in June 2009 during daylight hours in good weather and involved two vehicles. Vehicle 1 was travelling northbound on the A4233 away from Porth and on approach to the Llanwono junction indicated to turn left into the junction. Vehicle 2 which was waiting at the Llanwono junction to turn out onto the A4233 has pulled out of the junction anticipating vehicle 1 was about to turn, however vehicle 1 proceeded without turning and collided with the side of vehicle 2. The cause of the collision has been recorded by the Police as vehicle 1 displaying misleading signal and vehicle 2 failing to judge other persons path/speed, which is denoted as driver error.

For information, located approximately 30 metres north of the Llanwono junction on the A4233 is a layby which is used by the All Wales Casualty Reduction Partnership from which they undertake speed enforcement operations using camera vans. It has been indicated that enforcement operations are undertaken at least five times per month, with recorded incidents of speeding being fairly low.

Traffic signals would not be considered appropriate in the current circumstances, given the levels of recorded traffic flows and the standard of the junction available, and may introduce other safety risks such as the potential for rear shunts, red light running, etc.

Conclusion

Having reviewed the physical characteristics of the junction layout taking account of current design standards there is no evidence to suggest the current arrangement is unsafe in any way and is in fact compliant with current standards as set out in the DMRD and TAN 18 and therefore the most appropriate form of junction.

A review of the personal injury collisions that have occurred at this junction since the opening of the Porth Relief Road in December 2006 further suggests that the junction arrangement can and is safely negotiated at all times of the day despite prevailing weather conditions.

In discharging its duties as Highway Authority the Council has a duty of care to ensure the highway is safe and as in this instance, where concerns arise they are investigated and appropriate action taken when and where necessary.

Reflecting on the aforementioned evidence there is no justification at this time for the Authority to implement any changes to this junction as it is considered that;

- The junction complies with modern design standards,
- The nature of the junction is entirely appropriate for the volume and character of traffic using it;
- The layout of the junction was not a contributory factor in this collision;

From the evidence presented in the Regulation 28 report it appears that a number of factors contributed to collision taking place. Poor weather conditions, the speed of the motorcyclist, the perceptions and actions of the driver of the car pulling of the junction all played some part in the collision.

I therefore propose no further action in respect of this junction.

I trust the foregoing is of assistance and clearly addresses the concerns raised in the Regulation 28 Report. However should you require any further information or wish to discuss this matter further, please do not hesitate to contact me.

Yours sincerely

[REDACTED]

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Service Director Highways and Streetcare Services.

cc: Traffic Management
insurance - [REDACTED]