

BRIEFING PAPER FOR

Chair and Members of the Petitions Committee

NATIONAL ASSEMBLY OF WALES

NEED FOR DINAS POWYS BY-PASS

Roger Pattenden BSc MICE & Rod Harrod

March 2017

For Petitioners:- Rod Harrod, Cllr Andy Robertson, Cllr Vince Driscoll

INDEX

1. Introduction
2. The need for a By-Pass
3. Vale Council Proposals
4. The Effects of Worsening Traffic Congestion
5. Adequacy of Strategic Highway Network
6. Proposals

1. Introduction

A Dinas Powys By-Pass is no longer a need but a necessity. Refusal to build it now will be seen by people across the Vale of Glamorgan and beyond as a blow against the future growth of the South East Wales economy, a danger to health and safety and working against the public interest.

This vital infrastructure (sometimes referred to as the Barry Waterfront to Cardiff Link Road) has been proposed for nearly 90 years. Escalating developments recently, including 10,000 extra homes planned in the Vale of Glamorgan in the next five years, has made the by-pass essential.

Numerous surveys and studies have been carried out for the Vale of Glamorgan Council during the last five years. All identified escalating traffic congestion along the Dinas Powys corridor. Some intimated towards a by-pass but none were briefed to consider the benefits this road could give. Neither has any concrete proposal or alternative been put into action to alleviate this problem.

The Dinas Powys Transport Network is currently the subject of a Stage 1 Study being carried out by Arcadis for the Vale of Glamorgan Council and initiated by Cabinet Secretary for the Economy and Infrastructure Ken Skates A.M. It is scheduled to go before the Vale Cabinet after the local elections to seek permission for more detailed investigation of the chosen options.

Ken Skates requested his Department and the Council to work jointly to find a solution to what he called the ‘unique’ transport situation in Dinas Powys and come up with a solution that would be fully funded.

It’s been agreed the study will consider the advantages of a by-pass, but it is difficult to understand why the by-pass wasn’t included as part of the Vale’s LDP, that has still not been signed off.

The Council’s Local Transport Plan 2015–2030 identifies a number of Strategic Transport Corridors (STCs) in the Vale. These are shown in Figure 1 in yellow. As their name suggests these routes are considered important to the effective functioning of economic activity in the area.

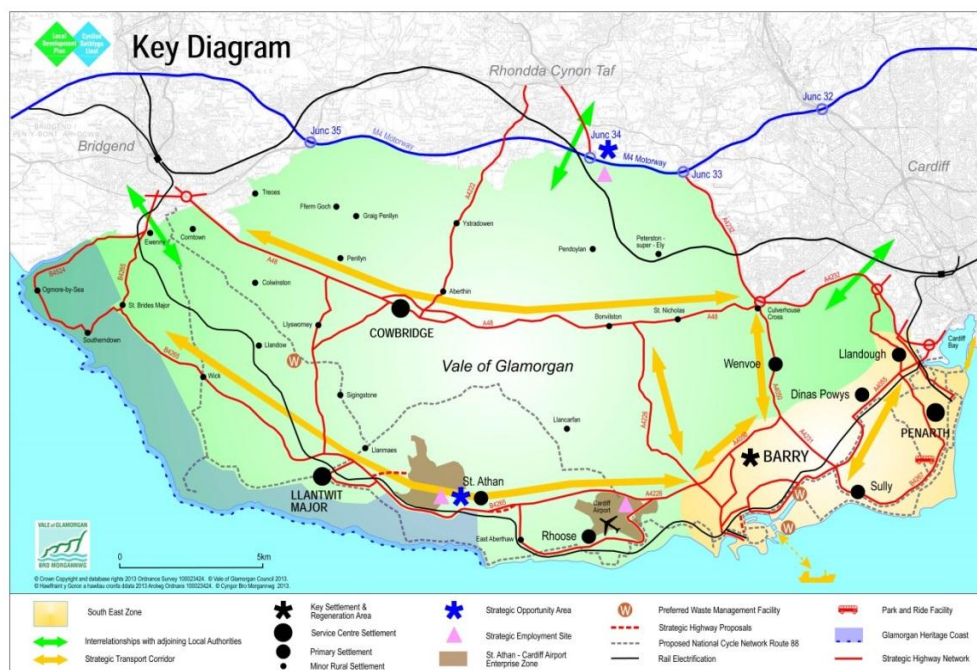


Fig 1 Vale of Glamorgan Strategic Transport Corridors

FACT

The Strategic Transport Corridor (STC) through Dinas Powys is the only STC in the Vale not to by-pass the major settlement on its route. Dinas Powys is the largest village in

Wales next to the largest town (Barry) on one side and the largest city (Cardiff) on the other. Currently, all vehicles travelling along the Dinas Powys (DP) corridor have to pass through instead of around the village.

RESULT

Severe traffic congestion has increased drastically since the first 2,000 homes of a 4,000 home project were built at the Barry Waterfront.

The Vale of Glamorgan Council states in its Deposit Local Development Plan (LDP):–

5.77 The provision of a strategic highway network is vital to the efficient movement of people and goods throughout the Vale of Glamorgan. The Council will continue to press for improvements to the strategic highway network, with particular emphasis on providing improvements in access to Barry, the Airport and St Athan from the M4. Likewise, all new developments that have an impact on the strategic highway network will be carefully assessed in terms of the need to improve strategic access.

2. The Need for a By-Pass

2.1 Traffic Congestion

The Vale Council's 2013 Highway Impact Assessment (HIA) by Capita Symonds identified that most main road junctions along the DP corridor, at times over capacity in 2012, would be worse by 2026 with the Merrie Harrier junction predicted to be up to 400% over capacity by then.

For example, predicted 2026 queue lengths at the traffic lights on the A4055 in Dinas Powys are:–

- Murch Road Up to 1080 metres. Despite developers' claims otherwise!
- Millbrook Rd Up to 1336 metres. That would tail back along Millbrook Rd, up Mill Rd and through the old village on Station Rd to rejoin the A4055 eastbound traffic. Total grid-lock!

2.2 Limited Road Route Options

At the Cardiff end of the DP corridor, traffic has just two routes into Cardiff – on the A4055 via Barons Court or on the B4267 via Leckwith Hill.

The A4055 through Dinas Powys is congested at each major junction, particularly the Merrie Harrier. The B4267 through Llandough branches off the A4055 at the Merrie Harrier but its capacity is restricted by vehicle parking permitted along both sides of the road and a 20mph speed limit.

Thus, most traffic heading for Leckwith Hill leaves the A4055 at the entry to Dinas Powys, rat runs through the narrow old village centre to use the unclassified, in part single lane, Pen-Y-Turnpike road to join Leckwith road.

2.3 Planned new housing developments in DP corridor

- a) 235 homes planned at top of Murch Crescent (300 in LDP).
- b) 70 homes for the rear of Caerleon Road exiting onto Murch Road.
- c) 50 homes at Cross Common Road.
- d) St Joseph's School land, Sully Road – 70 houses nearing completion.
- e) Sully – 500 houses on Cog Road and 576 houses at Cosmeston.
- f) 4,000 homes at Barry Waterfront and other Barry developments

2.4 No proposals for significant additional road capacity up to 2026

The Council excluded a by-pass around Dinas Powys from its LDP. The LDP proposes improvements to the main junctions on the A4055 in the DP corridor but doesn't specify their extent or objective.

There appears to be no firm plan on the table for infrastructure improvements to reduce worsening traffic congestion along the DP corridor.

2.5 Figures reveal extent of problem

The scale of the worsening traffic congestion situation has not been sufficiently prioritised for major action.

An example is the planned development at Caerleon Road in Dinas Powys. The developer's consultant produced a Traffic Assessment in February 2015 which stated:-

*'Overall, it is considered that traffic generated by the proposed development can be accommodated within the existing highway network **without** significantly increasing delays to existing road users.'*

The key word here is 'significantly.' This and the larger development at the old St Cyres school site **would** significantly increase congestion at the Murch Road junction with Cardiff Road. The developers Traffic Assessment shows it's just within capacity in 2015 but up to 124% over capacity by 2028. In fact the Council's 2013 HIA made a similar prediction but rising to 166% over capacity by 2026.

The consultants representing the potential developer of the St Cyres School site requested the Council to be excused providing an Environmental Impact Assessment (EIA) stating:

*'... it is not felt that there are likely to be **any significant**, adverse impact on the local highway network that would trigger the need for an EIA...' '...Therefore, in the context of the Regulations, an EIA is **not felt** to be required.'*

Despite objections, Officers, acting under delegated powers, decided that an EIA was not necessary.

3. Vale Council Proposals

The Council supports more people using sustainable means of transport and the LDP concentrates on proposals to encourage 'modal shift'. We support this objective. However, Ken Skates AM, speaking recently about the M4 Relief Road, while supporting alternative transport, stated that it would only make a small dent in travel figures. Equally, to change people's travel habits to the extent needed to significantly reduce congestion within the Vale Council's LDP period is considered unrealistic, particularly in the DP corridor, as explained below:-

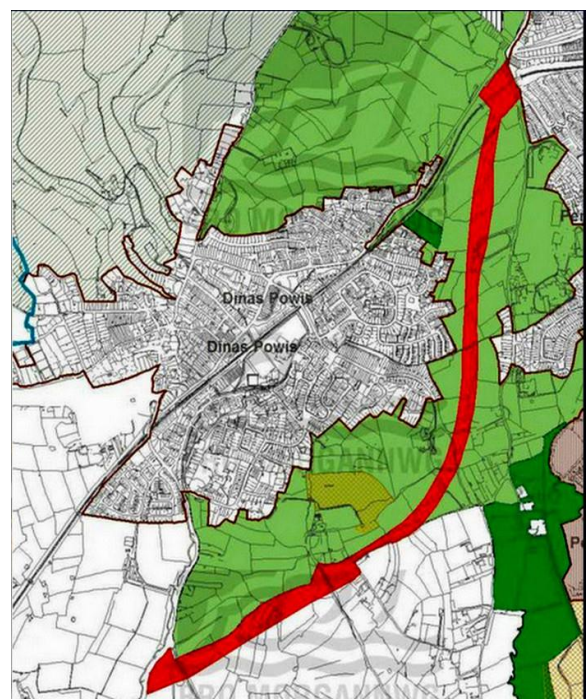
3.1 Roads

The Vale Council's 2013 Highway Impact Assessment (HIA) showed the traffic situation on the main highway network in 2012, predicting the effect of the extra 10,000 houses on traffic and resulting congestion by 2026. But the consultant used the same road network model to analyse 2012 and 2026. The HIA didn't analyse the effect any junction improvements or a by-pass would have on traffic flows.

The Council does recognise increasing traffic problems and benefits of a by-pass in its 2016 Deposit LDP:-

*5.78 The South East Wales Transport Alliance (Sewta) Highway Strategy Study (2008) identifies the A4055 through Dinas Powys as a key problem area of the regional road network as a consequence of the scale of traffic and associated congestion. **Barry Waterfront to Cardiff Link Road (Dinas Powys By-Pass) was viewed as having dual benefits, helping to alleviate traffic congestion and improve road safety on the A4055 through Dinas Powys, while having the potential to improve access to the wider road network.***

*5.79 The Regional Transport Plan (RTP) (2010) states that the scheme offers positive outcomes and should be subject to further development and evaluation within the investment programme. **Whilst the Council supports this scheme in principle, it is considered unlikely that it will come to fruition during the Plan period, given the***



current economic climate and the Welsh Government's preference to make better use of the existing transport system and highway network via the enhancement of public transport routes and provision of new facilities for walking, cycling and rail. Accordingly, the proposed link road / bypass is not included within the LDP.'

Fig 2 Dinas Powys By-Pass Corridor as shown on map on wall in Vale Planning Office and referred to for property searches for over 50 years.

Statements by Ken Skates AM and by the Council do not appear to match up as shown below:-

Ken Skates' statement	Council's Position	Petitioners' View
<p>We understand that the local authority's view is that provision of a by-pass would not address the primary issues that cause traffic congestion.</p> <p><i>Source: 16 March 2017 letter to chair of Petitions Committee</i></p>	<p>Recognises benefit of a by-pass but identifies Merrie Harrier as main bottleneck and reason for omitting it from LDP without considering ways to increase capacity.</p> <p><i>Source: Council's Deposit LDP</i></p>	<p>Merrie Harrier capacity could be increased. By-pass is needed to relieve A4055 through Dinas Powys of adverse effects from severe congestion. <i>By-Pass Steering Group</i></p>

It is hoped that the Council's current Stage 1 Study will identify the need to analyse:-

- a) How the capacity of the Merrie Harrier junction could be increased
- b) The benefits which a by-pass could bring.

3.2 Trains

The LDP says little about train travel other than a proposal for electrification of the Vale of Glamorgan line. The Council has recently signed up to the Capital Region City Deal at a cost of £10.2 million.

The line from Barry to Cardiff passes along the DP corridor with stations at Dinas Powys and Eastbrook. At the former there is no car or cycle parking facilities and no safe lay-by for vehicles to drop off passengers. Many potential passengers, including elderly and infirm, live over one mile from either station. At Eastbrook there is a small car park but no undercover cycle parking facilities.

Combined with limited train capacity and frequency, rush hour trains arrive at Dinas Powys from Barry are often full, limiting the number of people who can commute to and from Cardiff by train.

Network Rail's 2016 Welsh Route Study indicates that the Metro Phase 3 work to implement capacity improvements on the Barry to Cardiff line will not start until **after 2020**.

3.3 Buses

The Cardiff bus route along the DP corridor is on the A4055. Penarth buses travel via Cross Common and the Murch but stop before 6.00p.m. and don't run on Sundays. The LDP seeks to increase bus usage through Dinas Powys, but buses are currently delayed by congested traffic –a disincentive to its use.

There is no space for a dedicated bus lane. A relatively short section of bus priority lane from the Eastern edge of Dinas Powys to the Merrie Harrier helps but the only way that present delays to buses can be reduced is by removing much of the traffic. This would require a by-pass.

3.4 Cycling and Walking

The LDP wishes to increase active travel and proposes new cycle ways and footpaths including between Biglis roundabout on the east side of Barry and Dinas Powys. No funding package is in place to negotiate with ten different land owners along the road so it may be years before this becomes reality.

In the same way that buses through Dinas Powys are delayed by traffic congestion, so are cyclists as the A4055 road is too narrow for them to safely overtake congested traffic. The alternative route for cyclists commuting to Cardiff via Pen-y-Turnpike to Leckwith Hill is hilly and unsafe with narrow blind corners which deter most from using it.

To suggest there will be suitable safe facilities for cycling and walking in place during the next five years to take appreciable numbers of people out of their cars is, we suggest, unrealistic.

4 The Effects of Worsening Traffic Congestion

As the planned housing developments are inhabited, traffic in the DP corridor will increase with the following impacts:-

- Adverse effect on the economy.
- Delays to emergency vehicles with potentially life threatening consequences – Llandough Hospital tripled in size in last 4 years.
- Deteriorating health and safety of children at the Infant and Primary school adjoining the A4055.

- Increased pollution particularly from lorries heading for the Barry incinerator and from the extra HGVs heading towards Barry and beyond following the completion of the A4232 into Cardiff Bay.
- Increased accident risk particularly to children being taken to and from the school.
- Disincentive to potential house buyers due to the increasing traffic delays.

5 Adequacy of Strategic Highway Network

In a particular area or along a particular corridor, the majority of traffic should be carried on the main roads and without undue delay. The road network within the DP corridor fails on both counts.

The biggest bottleneck causing delay on the A4055 is at the Merrie Harrier junction where traffic on Redlands Road from Penarth joins the A4055. Partly because of this bottleneck, a large proportion of traffic heading east from Barry doesn't stay on the A4055 but, at peak times on weekday mornings and afternoon rat runs through Dinas Powys village onto the unclassified Pen-y-Turnpike road to reach Leckwith Hill.

6 Proposals

Proposal 1 Despite minimal commitments in the LDP, the Council have given no indication where they will spend money on strategic highway infrastructure. This will potentially incur a huge cost to the economy by letting traffic congestion and its adverse effects escalate.

Our first proposal is for the council to estimate the cost to the local economy of not increasing the strategic highway network capacity in the DP corridor. This can then be used in the cost benefit assessments of improvement proposals.

Proposal 2 To reduce pinch point congestion at the Merrie Harrier by increasing junction capacity, we suggest a double roundabout arrangement as outlined in Figure 3 opposite. This would not require the demolition of any building.

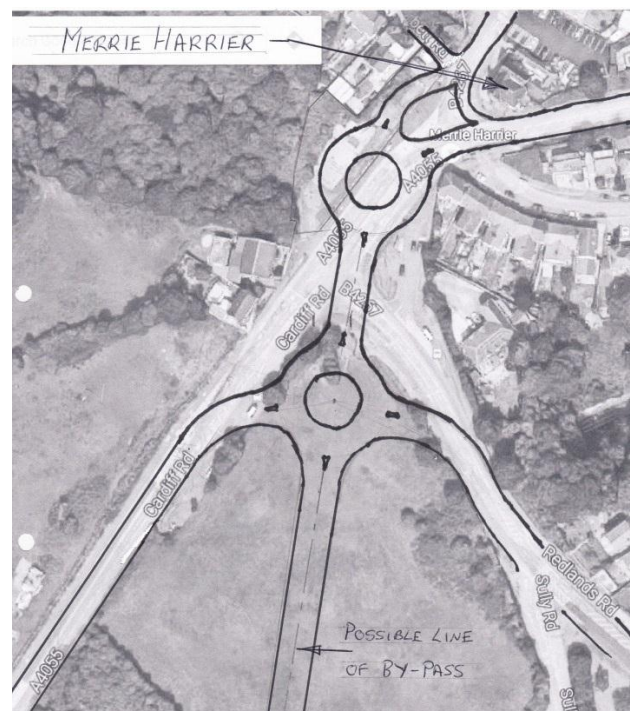


Fig 3 Merrie Harrier layout idea. N.B. NHS seek to dispose of land on left side of top roundabout.

Proposal 3 A Dinas Powys By-pass from Barry Road, Dinas Powys to the Merrie Harrier would reduce traffic volume on the A4055 through the built-up part of Dinas Powys. A spur onto the by-pass from Cog Road, Sully could alleviate pressure from 1,000 new houses on Lower Penarth. A junction on the by-pass connected to the top of Murch Road would provide a second way for Murch traffic, including the new developments, to access the strategic highway network.

Additional benefits of our proposals are:-

- Economic benefits from shorter journey times.
- Less delay for buses travelling along the A4055 through Dinas Powys, encouraging extra use.
- Improved health and safety in Dinas Powys along A4055 including reduction of pollution.
- Better access for the proposed developments and existing residents of Sully and the Murch.

We'd be happy to discuss any aspect of this Briefing Paper.

Contact: Rod Harrod, (Chair) Dinas Powys By-Pass Steering Group.