1 Scheme Context and Consultation

The Link from the South to Manchester

1.1 For many who live and work in Greater Manchester it has always seemed strange that the motorway-building programme of the 1970’s and 1980’s did not include a motorway grade link from the M6 to the M56 for Manchester traffic. The two motorways cross at a major interchange (M6 J20 / M56 J9) but connections from northbound M6 to eastbound M56 and westbound M56 to southbound M6 were never provided. Instead, for decades the A556 has served as the link between the motorways, running from M6 J19 to M56 J7 and is now an established part of many drivers’ journeys. It is not ideal but it generally provides this strategic function, it is currently the only real option.

1.2 There is of course the motorway grade link into Manchester via the M6 / M62 and M602 so it is not the case that there is no motorway grade connection between Manchester and the south. It is also possible to make the M6 south to M56 east link at junction 20 but this requires travelling on a short and confusing section of the A50.

1.3 The Government’s transport department (which has changed its name many times and more latterly the Highways Agency) has had long-standing plans to replace the A556 with a motorway connection. They went a long way down the road of delivering the motorway connection during the mid 90’s when orders for the A556 (M) scheme were confirmed.

1.4 In 1997 the scheme formed part of the Labour Party’s roads review and was considered as part of the Midlands to Manchester (Midman) multi-modal study. The study concluded that the A556(M) was not the right approach for providing the link between the M6 and M56 and recommended providing connections at Junction 20 instead.

1.5 The Highways Agency were unhappy with this conclusion so in the early 2000’s they undertook a major Study on Options that provided northbound - to - eastbound and westbound - to - southbound slip roads at Junction 20 and compared these with the A556(M) scheme.

1.6 Numerous J20 options were considered with various combinations of proposals to widen the M6 between J19 and J20; widen the M56 between J9 and J7 and capacity constraints on the existing A556. Crucially all this work was undertaken on the assumption the M6 would be widened south of J19 all the way to Birmingham and M56 widened from J7 towards Manchester.

1.7 Not surprisingly in this context the study concluded that any option designed to take traffic away from the A556 to M6J20 required the M6 to be widened between J19 and J20 and the M56 to be widened between J9 and 7/8. This materially more than doubled the cost of the J20 schemes and therefore pushed the economic benefit down.

1.8 The report concluded that the A556(M) was the preferable option. The Secretary of State (SoS) however decided not to pursue either scheme. **A556(M) was cancelled because of the impact of building a road through open countryside.** The J20 scheme was cancelled because the SoS did not believe there was a solution that would provide a positive economic benefit. Instead the SoS asked the HA to look at on line improvements to the existing A556.
Between 2005 and 2007 a study of options to dual the A556 was undertaken. In 2007 a public consultation was held into route Options. The Highways Agency were now calling the options “environmental improvement schemes” thinking that focusing on potential environmental improvements in Mere and Bucklow Hill would help deliver a scheme.

Further consultations were carried out in 2009 and a preferred route announced in 2010. Further design development was undertaken in 2011 and the Highways Agency finally entered into this pre application consultation at the end of January 2012.

The further consultation in 2009 was required because until that time the Highways Agency were working under the assumption that there would be an improvement scheme at M6 J19 and in this context the 2007 options showed no change to the A556 on its approach to J19 as it was assumed these would be made under the J19 scheme. Once the M6 scheme was cancelled the Highways Agency had to modify the A556 scheme to show how it would provide a long term connection into J19. The need for a scheme at J19 is obvious and we consider this in a number of locations within this report. Without it the benefits of improving the A556 are significantly constrained and it is telling how little information is provided in the Consultation documentation about J19. Again we consider this in a number of locations within this report. If the necessary improvements were made to J19 this would of course add many tens of millions of pounds to the scheme cost. If the proposed Scheme is built as planned the need for the junction 19 improvements will become immediately more apparent and the HA will be obliged to do a second scheme which will be more expensive than one single project and makes the current consultation deficient and misleading.

If the scheme is so important why has it taken so long? The answer is that it is not that essential. The current A556 is generally providing its strategic function, not perfectly but well enough. More information on the need for the scheme is given in the next section of the report.

Ironically if this scheme gets built there still will not be a motorway connection between the M56 and the M6. The proposed scheme is not a motorway but an all-purpose two-lane dual carriage way. There will be no hard shoulders and drivers will still have to negotiate the M6J19 roundabout to get on and off the scheme. The proposed scheme is constructed through open countryside; a forerunner to it was thrown out because it was built through the same open countryside.

The Consultation Process

There has been no continuity to the process of promoting a scheme to improve the connection between the M6 and the M56. As a minimum a scheme has been around for 20 years and probably much longer than this. Even in its current “Environmental Improvement” form it has taken five years to get from a consultation on options to pre application consultation. It is impossible for the public to properly engage in such a drawn out process. The reality is that the process has been a series of individual events with very little link them together. The public and key consultees have inevitably lost focus on the process and have probably been lulled into thinking nothing will ever happen.
1.15 This pre-application Consultation is supposed to be the time the scheme promoter (the Highways Agency) tells the public in detail what it is they intend to build. In this case however the HA have used the process to undertake another consultation on options, options for the junction arrangements on the scheme. The process has been confusing, misleading and entirely unsatisfactory, not least because key consultees such as people living very close to the scheme and property owners do not know what is going to be built and will not get the chance to formerly comment on the scheme that is actually applied for before the HA lodge an application with the National Infrastructure Directorate. CBO Transport’s letter to the IPC dated 22\textsuperscript{nd} February 2012 and appended to this document provides more detail on the inadequacy of the consultation process.

1.16 In that letter we advise the Highways Agency of errors on one of the key consultation diagrams. The Highways Agency subsequently reissued the diagram although the correct version was only available for six of the twelve week consultation.

1.17 The Highways Agency has not been prompt in responding to requests for information. On 25\textsuperscript{th} January two days after the start of the Consultation we asked for the following information which we would consider to be core to the pre-application process:

**Preliminary Environmental Information**

- All figures and appendices;
- The Value Management Comparative Assessment Report (September 2010);
- The Future Development Assumptions Report (August 2010) and draft Addendum (June 2011);
- The Stage 2 Environmental Impact Assessment Report (March 2008); and
- The South End Options: Comparative Environmental Assessment (2009).

**DMRB Stage 3 Scheme Assessment**

- All figures and appendices;
- The Local Model Validation Report (including figures and appendices);
- The Traffic Forecasting Report (including figures and appendices); and
- The Economic Assessment Report (including figures and appendices)

**Junction Options Comparative Assessments**

- All figures and appendices

1.18 These documents were provided on a CD on 22\textsuperscript{nd} February which was four weeks after we made the request.

1.19 We also asked for the following on the 20\textsuperscript{th} February:

- The Non-Motorised Users Context Report (referred to in the Preliminary Environmental Information);
- The stage 1 road safety audit for the scheme or the comments made by the Highways Agency’s departures team in response to the design solution given the number of departures;
• Guessing they were not part of any of the reports we had requested, the DMRB merge / diverge diagrams / assessments for the scheme, together with the weave calculations.

1.20 The above was not provided until the 16th March. Further merge / diverge / weave assessments were then provided by email on 28th March after we had identified there was key information missing on the CD of the 16th March. On this basis we only received some of the key numerical analysis required to comment on the Scheme, three weeks before the end of the consultation.

1.21 During the Consultation the Prime Minister announced the Government’s intention to involve the private sector in the delivery of new road capacity. In light of this there needs to be a clear statement from the DfT about how this will affect the A556 Scheme.

The National Planning Policy Framework, March 2012

1.22 The National Planning Policy Framework (NPPF) came into force during the Consultation on March 27th 2012 and now sets the scene for all UK planning and transport policies. The Core Planning Principles include:

• “…. protecting the Green Belts …. recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it”
• “support the transition to a low carbon future in a changing climate ....”
• “contribute to conserving and enhancing the natural environment and reducing pollution ...”

1.23 It is not clear how the A556 scheme fits with these core policy principles. In light of this there needs to be a clear statement from the DfT about how this will affect the A556 Scheme.

Other Scheme Options

1.24 One of the many areas in which the Consultation is lacking is that it provides negligible information on other potential options for the scheme that is supposed to be a key element of a pre application consultation. In this case particularly which has been drawn out over so many years a revisit to potential other options should have been a prerequisite. There would appear to be 2 other approaches to providing an improved link between the M6 and M56, an online solution and links at junction 20.

1.25 When rejecting previous schemes the Secretary of State instructed the HA to consider an online solution. There is nothing in the Consultation on a purely online scheme. Given the evidence the Highways Agency has presented about traffic conditions on the existing A556 and that there are no significant delays even at peak times, we believe there is highly likely to be a solution which follows the existing alignment and focuses on improvements at junctions through possibly the provision of “G-turns”. A lot is made in the Consultation about non-motorised users and the difficulty they have crossing the existing road. This is a fair point but how difficult would it be to provide a bridge over the existing road? This could be done tomorrow.

1.26 In terms of links at J20 is clear from the above that options were discounted 10 years or so ago on the basis of assumptions on motorway widening (M6 widened south of J19 all the way to Birmingham and M56 widened from J7 towards Manchester) which are no longer valid but highly significant to any conclusions drawn.
1.27 If the M6 is only 3 lanes wide south of J19 (where it is accommodating all the Manchester (A556) traffic) it stands to reason that north of J19 it only needs to be three lanes wide if this traffic stays on the motorway rather than using the A556. In this context it is not necessary to widen the motorways for a Junction 20 scheme, so the cost plummets. The study work from the early 2000’s showed this cost was relatively small compared with other options even though the northbound to eastbound connection then proposed required significant bridge works along the then proposed alignment to the south east of the existing junction.

1.28 It is probably also possible to provide the northbound - to - eastbound connection within J20 itself as shown in Figure 1. This would make the provision of the links at J20 even more cost effective.

It is also clear however from previous modelling work that the extra distance involved in using J20 deters drivers from using it even if the capacity of the A556 is throttled back to a one lane in each direction single carriageway road.

1.29 Junction 20 is the obvious route for strategic traffic including goods traffic. The extra distance is inconsequential to these longer journeys and drivers will expect to and feel happier and more inclined to stay on motorways for the whole of their journey without having to exit and navigate any junction.

1.30 In light of the above there is a scheme which involves the provision of the J20 slip roads but no widening of motorways and keeps the A556 largely unchanged but with a much stronger focus on safety and environmental mitigation measures than is possible without an alternative route via J20. This could include at grade crossings for non-motorised users, a ban on HGVs and reallocation of road space at junctions to protect right turning traffic. These would have some impact on capacity but this would emphasise the J20 route.

1.31 Under such a scheme the signed route to and from Manchester would be by Junction 20, which would take some traffic off the A556. Managed motorway techniques could also be introduced to advise of peak time congestion on the A556 and reinforce the signed route via Junction 20. This would reduce flows further with noise and air quality benefits for those living along the existing road.

1.32 We believe this scheme should be thoroughly investigated by the HA including the proposal to provide the northbound to eastbound connection within J20 itself as shown in Figure 1. 10 years have passed since they last considered J20.

1.33 It simply does not follow that a previous SoS cancelled the A556(M) because of its impact on open countryside and that now the “solution” is yet again to promote building a road through the same open countryside. This seems even more the case when one considers the actual evidence for the need for the scheme which we deal with in the next section of this report.

1.34 These comments about scheme options are made without prejudice to the fact that we question whether there is a need for the scheme.
2 The Need for the Scheme

2.1 There appear to be three main factors which the Highways Agency believes drives the need for the scheme:

- Environmental
- Journey times
- Safety

2.2 Putting each of these in context and considering the evidence provided by the Highways Agency in the pre-application consultation we have the following comments.

Environment

2.3 The environment along the existing A556 is poor particularly in the context of air quality and noise. There is an Air Quality Management Area (AQMA) covering the route through Mere. It is not unusual for there to be poor air quality in close to proximity to motorways and trunk roads such that they are designated AQMAs. In the A556 AQMA there are however only 89 properties.

2.4 In term of noise there are only 117 properties lying within 100m of the existing road.

2.5 Many hundreds of thousands of people living close to busy roads throughout the country will experience poor environmental conditions caused by traffic. While the environment is poor along the A556 this only effects a very few people. The road in its current form predates the majority of these properties.

Journey Times and Congestion

2.6 The Highways Agency presents no evidence to show the road experiences long journey times and congestion or that they are relatively any more unreliable than other strategic roads.

2.7 The only information on journey times is in the Local Model Validation Report (LMVR) and is summarised in the tables below. The LMVR sets out information on how well the Highways Agency’s SATURN traffic model (the model being used to test the scheme) replicates existing conditions.

Table 1: Highways Agency 2009 Southbound Surveyed Journey Times M56 J6 – A556 – M6J19

<table>
<thead>
<tr>
<th></th>
<th>AM Peak</th>
<th>Inter Peak</th>
<th>PM Peak</th>
<th>CBO Free Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>M56 J6 to M56 J7</td>
<td>181</td>
<td>189</td>
<td>268</td>
<td>180</td>
</tr>
<tr>
<td>M56 J7 to J7 R’bout</td>
<td>104</td>
<td>92</td>
<td>86</td>
<td>60</td>
</tr>
<tr>
<td>J7 R’bout to Bucklow</td>
<td>166</td>
<td>172</td>
<td>200</td>
<td>180</td>
</tr>
<tr>
<td>Bucklow to A50</td>
<td>116</td>
<td>119</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>A50 to M6 J19</td>
<td>126</td>
<td>117</td>
<td>129</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>693</td>
<td>689</td>
<td>803</td>
<td>660</td>
</tr>
<tr>
<td>Total in mins</td>
<td>11.6 mins</td>
<td>11.5 mins</td>
<td>13.4 mins</td>
<td>11 mins</td>
</tr>
</tbody>
</table>

Time in seconds unless denoted otherwise.
Table 2: Highways Agency 2009 Northbound Surveyed Journey Times M6 J19 – A556 – M56 J6

<table>
<thead>
<tr>
<th></th>
<th>AM Peak</th>
<th>Inter Peak</th>
<th>PM Peak</th>
<th>CBO Free Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6J19 to A50</td>
<td>186</td>
<td>149</td>
<td>221</td>
<td>180</td>
</tr>
<tr>
<td>A50 to Bucklow</td>
<td>122</td>
<td>108</td>
<td>106</td>
<td>120</td>
</tr>
<tr>
<td>Bucklow to J7 R’bout</td>
<td>178</td>
<td>157</td>
<td>164</td>
<td>180</td>
</tr>
<tr>
<td>J7 R’bout to M56 J7</td>
<td>122</td>
<td>96</td>
<td>113</td>
<td>180 (1)</td>
</tr>
<tr>
<td>M56 J7 to M56 J6</td>
<td>213</td>
<td>188</td>
<td>224</td>
<td>240 (1)</td>
</tr>
<tr>
<td>Total</td>
<td>821</td>
<td>698</td>
<td>828</td>
<td>840</td>
</tr>
<tr>
<td>Total in mins</td>
<td>13.7 mins</td>
<td>11.6 mins</td>
<td>13.8 mins</td>
<td>14 mins</td>
</tr>
</tbody>
</table>

Time in seconds unless denoted otherwise

(1) – Flow breakdown at J7 Merge resulted in some delay

2.8 Our headline observations of the above data are set out below.

- The time differences between the peak and inter peak are small. Where is the evidence of congestion? Peak period journey times are remarkably similar to off peak journey times. On a lot of busy roads across the country the difference between peak and off peak journey times will be much greater than this.

- In the southbound direction the majority of additional time in the PM (evening) peak is on the M56 – the A556 scheme does nothing to address this; in fact it makes it worse as it will attract even more traffic to M56.

- In the northbound direction there is a little bit of extra time on the section between M6J19 and the A50 traffic signals in the peaks? This is to be expected as the A50 traffic signals act as a “throttle” to traffic entering the more environmentally sensitive section at Mere.

- The journey times between the A50 and the Bucklow Hill traffic signals are very consistent in both directions. There is no congestion on this section with frontage property.

- We observed flow breakdown at M56 J7 merge. Our understanding is this is typical of peak and at times off peak conditions. Why is it not reflected in the HA’s figures. We believe the Highways Agency may be being selective over the date they have used for the M56 J7 merge. The A556 scheme will of course make conditions at the merge worse as more traffic is attracted to the A556 and therefore the merging flow will be higher. In addition SATURN’s Achilles heel is its modelling of motorways and specifically motorway merges where it can rarely replicate the delay experienced by drivers on a day to day basis. If the journey times reflected what might be more typical delays at the M56 J7 merge then we doubt whether the model would validate.

- It is enlightening that the M6 J19 southbound merge (a notorious delay hotspot with ramp metering to deal with congestion) is not included in any of the journey time information presented by the HA in the LMVR. The A556 scheme will of course make conditions at the merge worse as more traffic is attracted to the A556 and therefore the merging flow will be higher and again we suspect SATURN would not be able to validate PM peak conditions at this merge.

- In promoting the A556 scheme is it vital that a proper picture of merging conditions is presented at M56J7 and M6J19. Excessive congestion in these locations will make the scheme wholly ineffective.
2.9 The Highways Agency presents no evidence to show journey times and congestion are a significant problem on the existing A556. Where we understand there is regular congestion at the M56J7 merge this is not reflected in the Highways Agency’s data. At the M6 J19 southbound merge (as mentioned a notorious delay hotspot with ramp metering to deal with congestion) no journey time information is presented by the HA. We suspect this is deliberate to hide congestion at these merges which are not being improved as part of the scheme but would experience higher traffic flow with the scheme in place.

Safety

2.10 The Consultation information states that 118 personal injury accidents (pia) occurred on the A556 between January 2005 and December 2009. No information is provided on the location or nature of the accidents and therefore whether the construction of a new road through open countryside is necessary to reduce accidents or whether in fact more modest measures such as G turns and NMU crossings associated with a potential online scheme would be effective at improving safety.

3 The Implications of the Scheme

Environment

3.1 As already stated the number of people affected by the poor environment of the existing A556 is very few. The environmental benefits of the scheme are reduced further when people who would be adversely affected by the scheme are brought into the equation.

3.2 In terms of air quality 89 properties would experience a reduction in the in concentration of Nitrous Dioxide, while 12 would experience an increase.

3.3 The scheme would increase carbon emissions from 23,000 tonnes per year to 32,000.

3.4 In noise terms the benefit of the scheme are even further reduced by the negative effects of the scheme. 67 properties currently experiencing a major noise impact would see a reduction but 16 properties would experience a major noise impact as a result of the scheme. 47 properties currently experiencing a moderate noise impact would see a reduction but 24 properties would experience a moderate noise impact as a result of the scheme. In noise terms therefore the net number of properties experiencing a noise major / moderate noise benefit is only 74.

3.5 These very small net benefits in air quality and noise have to be weighed up against the negative impacts of building a road through open countryside. Any analysis of this is hugely subjective and open to interpretation and is clearly dependant on the weight given to the built environment over the rural environment. There is a tendency in highway appraisal to weight the quantifiable noise and air quality impacts most relevant to the built environment more highly than the environmental impacts such as ecology and landscape most relevant to the rural environment which are purely subjective in their analysis.

3.6 Notwithstanding this there clearly is no compelling built or rural environmental case to justify the construction of the road, and indeed many will consider it has a negative environmental impact.

Journey Times and Traffic Flows

3.7 The Traffic Forecasting Report (TFR) sets out information on how the scheme has been coded into the model and what the outputs of the model are.

3.8 With regard to the network coding, there is too little detail provided in the TFR to permit proper comment and consultation. However, the following point stands out.
3.9 The proposed A556 road appears to have been coded with a free flow design speed of 65mph along its entire length between the M6J19 and the M56J7, including along the section where it runs ‘on line’ north of Mereside Farm and the connector link to the M56 eastbound. This is clearly incorrect as the HA state in their documents that a 50mph speed limit will need to be implemented on the section north of Mereside farm, including on the new M56 connector. As a result the “do something” model will overestimate the journey time savings associated with the scheme and this will influence the economic appraisal as well as journey time benefits being overestimated.

3.10 The TFR is also light on specific information as:

- It only provides details of changes in traffic flows, speeds and delays for a small area immediately surrounding the A556;

- It includes no ‘screenlines’ showing flows on the wider network (which are provided in the LMVR), it is therefore impossible to see what the wider traffic flow effects are of the scheme; and

- It only provides select link analysis in four locations, namely the M56 J6 Eastbound (2015 AM), M6 J18 Southbound (2015 AM), A556 Southbound between M6 J19 and A50 (2030 AM) and A556 Northbound between M6 J19 and A50 (2030 AM). Even this information is incomplete in that it does not identify the level of traffic coming from all the upstream links.

3.11 With regard to the traffic flows, speeds and delay, no information is provided in relation to the local roads linking to the scheme, e.g. Cherry Lane, Millington Hall Lane and Peacock Lane. It also doesn’t look at flows in the High Legh area where these local roads link to the A50 and M6 junction 20, only considers two motorway junctions (the M6 J19 and M56 J7) and doesn’t consider the effects on the key routes in the wider area (e.g. the A34) which the HA keep saying would be affected by a M6 J20 scheme. There are no junction capacity assessments presented of the impact of the scheme at the J19 roundabout or the proposed / modified roundabouts at the Millington junction and M56 J7. There are no weaving calculations presented for the scheme - although some but not all were eventually provided three weeks before the end of the consultation. Similarly there were no merge diverge assessments along the scheme - although again these were eventually provided three weeks before the end of the consultation. No merge or diverge information has ever been made available for M6 J19 and M56 J7 although from inspection it is possible to see many of these would be over capacity.

3.12 This seems to be a constrained area over which to determine whether or not a scheme of supposed strategic /national importance has a traffic benefit. We are inevitably drawn to the question, is this because model conditions on the wider area show the scheme has little / no benefit / are not supportive of the scheme?

3.13 Despite the fact traffic flow information is seriously lacking some telling observations can be made from the data:

- In both the morning and evening peak hours, traffic flows on the M56 east of J7 and M6 south of J19 are significantly in excess of capacity. On the M6 this applies to the interpeak traffic flow as well. This is not completely an effect of the scheme - although all these motorway flows increase with the scheme in place - but it is not being reflected in predicted journey times and delays. Why – because Saturn cannot model heavily trafficked links and merges. If the delays were being properly modelled it would likely significantly reduce the economic benefits;
- The merge on to the M56 eastbound from the A556 is significantly over capacity in both the morning and evening peak hours. This is more a function of the scheme than the link capacity issue discussed above as with the scheme in place merging traffic flows (traffic on the A556) are significantly higher. Again this is not reflected in predicted journey times and delays. Why - because Saturn cannot model heavily trafficked links and merges. If queues and delays were being properly modelled the impact on the economic assessment would be even greater as this would result in standing traffic on the A556 itself – traffic blocking back from the merge. **This is an existing issue – there are no proposals in the scheme to improve this merge.**

- The merge on to the M6 eastbound (southbound) from the A556 is significantly over capacity particularly in the evening peak hour. This slip road currently has ramp metering installed a clear indication that the capacity of the merge is already a problem. This is more a function of the scheme than the link capacity issue discussed above as with the scheme in place merging traffic flows (traffic on the A556) are higher. Again this is not reflected in predicted journey times and delays. Why - because Saturn cannot model heavily trafficked links and merges. If queues and delays were being properly modelled the impact on the economic assessment would be even greater as this would result in standing traffic on the A556 itself – traffic blocking back from the merge. **This is an existing issue – there are no proposals in the scheme to improve this merge.**

- In the peak hours particularly the scheme appears to be drawing traffic off the M56 eastbound to the west of J7. Without screen line information it is impossible to see where this traffic is coming from but on the face of it taking traffic from a motorway onto to an all-purpose road represents a significant dis-benefit in wider network terms (not a benefit as the HA imply in the TFR at para 8.3.5).

- The slip roads at the Tabley junction are very lightly trafficked. In the morning peak hour there are only 12 vehicles on the off slip road and all of these turn right onto the old A556 away from the A50. This is clearly incorrect and there is a problem with the model in this location. The likely use of these slip road connections is probably better reflected in the modelling of the scheme junction Option N5 which included slip road connections to the A50.

- There are significant increases particularly in the peak hours on the A556 to the north of J7 i.e. through Hale and Altrincham. This is a relatively sensitive road in terms of capacity and environmental impact.

3.14 Considering the select link analysis, this is where a link in the model is chosen and a plot produced showing where traffic on that link arrives from / travels to. The information provided is considered to be lacking – we would have expected as a minimum to see some PM peak analysis to accompany the AM peak analysis, together with analysis on other sections of the A556 and wider network. Again, is this lack of information due the other locations showing the scheme has little / no benefit?

3.15 Despite the fact select link information is seriously lacking some telling observations can be made from the data:

- The transfer of traffic from the M56 eastbound to the A556 scheme identified above is confirmed by the select links.

- On the M6 southbound there is very little difference in the amount of traffic coming from the A556 with the scheme in place despite its intended function of enhancing the strategic link to the south.
- On the A556 northbound there is proportionally a much bigger increase in traffic from the A556 to the west of J19 (from the Northwich area) than there is from the M6. Is this where the traffic transferring from the M56 eastbound is coming from. In this context is this a benefit as the Highways Agency imply?

**TFR Journey Time / Delay Information**

3.16 The key to any highway scheme from a traffic perspective is to improve journey times / reduce delay as these are what help show the scheme has a benefit to road users and the economy. For traffic using the A556, the Traffic Forecasting Report therefore focuses on the journey times and delay between the M6 J18 and the M56 J6, using both the A556 and M6 J20 routes. The results presented by the HA for the 2030 future year, when the scheme should have most benefit, are reproduced below.

**Table 3 : 2030 Journey Time Comparisons**

<table>
<thead>
<tr>
<th>Route</th>
<th>Journey Time (secs)</th>
<th>Delay (secs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D Min</td>
<td>D Som</td>
</tr>
<tr>
<td>AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via A556</td>
<td>1,802</td>
<td>1,497</td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via J20</td>
<td>1,874</td>
<td>1,850</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via A556</td>
<td>1,465</td>
<td>1,331</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via J20</td>
<td>1,908</td>
<td>1,841</td>
</tr>
<tr>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via A556</td>
<td>1,379</td>
<td>1,170</td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via J20</td>
<td>1,578</td>
<td>1,596</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via A556</td>
<td>1,317</td>
<td>1,151</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via J20</td>
<td>1,627</td>
<td>1,646</td>
</tr>
<tr>
<td>PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via A556</td>
<td>1,600</td>
<td>1,428</td>
</tr>
<tr>
<td>M6 J18 to M56 J6 via J20</td>
<td>1,801</td>
<td>1,848</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via A556</td>
<td>1,606</td>
<td>1,428</td>
</tr>
<tr>
<td>M56 J6 to M6 J18 via J20</td>
<td>1,846</td>
<td>1,884</td>
</tr>
</tbody>
</table>

3.17 Our headline observations of the above data are set out below.

- Even making no allowance for the over estimation of speeds on the new scheme as set out previously and the impact of traffic flows which exceed capacity on the M56 and M6 merges and links, the journey time savings offered by the scheme are very small in real terms. Travelling to Manchester in the morning peak, journey times would reduce by 5 minutes from 30 minutes to 25 minutes. Leaving in the evening peak they would reduce by 3 minutes from 27 minutes to 24 minutes. The difference between peak and off peak journey times is much less than is often experienced on truck roads around the Country. On the M61 in Greater Manchester the morning peak hour journey time between M61J6 and the M60, a shorter route than the M6J18 to M56J6 referenced above is 10 mins more than the evening peak and likely to be much longer than the inter-peak journey time.

- The changes on delay are even more negligible, with reductions of only 2 minutes travelling to Manchester in the morning peak and no change during the evening peak leaving Manchester. This suggests that the majority of the benefit is being derived from the increased speeds on the new link, (which as already noted are being overestimated) rather than the elimination of the traffic signal junctions at the A50 and Bucklow Hill.

- Outside the peak, i.e. for the majority of the day, the scheme would see even lower journey time savings in the order of 3 minutes.

- The “do minimum” journey time to Manchester during the morning peak is only 1 minute longer via the M6 J20 than via the A556. With a less convoluted route including the new
slip roads this could well be reduced to somewhere near the do something time via the new A556. Why therefore do the HA say the J20 scheme has significant reassignment effects to other routes such as the A34?

Delay at Motorway Junctions

3.18 The comments included earlier in this note relating to existing journey times indicate that we have observed flow breakdown at M56 J7 merge and that it is our understanding this is typical of peak and at times off peak conditions. We then go on to question why is it not reflected in the HA’s figures and point out that the scheme will make conditions at the merge worse as more traffic is attracted to the A556. These comments are supported by information included in the TFR as set out below.

3.19 The TFR provides details of the total delays at key junctions around the route. The delays relating to the M56 J7 and M6 J19 slip roads are reproduced below.

Table 4: Total Delay at Motorway Slip Roads

<table>
<thead>
<tr>
<th></th>
<th>AM</th>
<th>Int</th>
<th>PM</th>
<th>AM</th>
<th>Int</th>
<th>PM</th>
<th>AM</th>
<th>Int</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6 J19 WB</td>
<td>0.91</td>
<td>0.68</td>
<td>0.59</td>
<td>1.05</td>
<td>0.96</td>
<td>0.92</td>
<td>0.81</td>
<td>0.59</td>
<td>0.42</td>
</tr>
<tr>
<td>on slip</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M6 J19 EB</td>
<td>0.85</td>
<td>0.77</td>
<td>1.02</td>
<td>1.11</td>
<td>0.89</td>
<td>1.17</td>
<td>0.94</td>
<td>0.85</td>
<td>1.17</td>
</tr>
<tr>
<td>on slip</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M56 J7 EB</td>
<td>1.17</td>
<td>1.23</td>
<td>1.14</td>
<td>1.15</td>
<td>1.25</td>
<td>1.12</td>
<td>1.39</td>
<td>1.41</td>
<td>1.37</td>
</tr>
<tr>
<td>on slip</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M56 J8 WB</td>
<td>0.54</td>
<td>0.34</td>
<td>0.47</td>
<td>0.77</td>
<td>0.50</td>
<td>0.74</td>
<td>0.60</td>
<td>0.38</td>
<td>0.58</td>
</tr>
<tr>
<td>on slip</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

3.20 Our headline observations of the above data are set out below.

- These delays are far below what is known to occur, e.g. a 1.17sec delay at 2015 under the current road layout waiting to get on the M56 eastbound during the morning peak and 1.02sec delay getting on the M6 southbound during the evening peak. This supports the previous comment in relation to the LMVR that SATURN cannot accurately model the merges.

- Delay getting on to the M6 eastbound, M56 eastbound and M56 westbound increases in all periods with the scheme in place. If the do minimum delays were more in line with what is known to occur, these delays are likely to increase significantly.

- More accurate modelling of the delays at the motorway slips would impact on the previously discussed journey times and economic assessment.

3.21 No capacity assessment work is presented for the scheme roundabouts. These roundabouts should have been assessed using the ARCADY software. The TFR does however include information from SATURN on the delay at the roundabouts. At M6J19 there is a threefold increase in delay in the morning peak hour and a twofold in the evening peak. What this means in terms of traffic queues at the roundabout is impossible to tell with the studies provided but it does suggest there will be a significant impact at the roundabout which will affect the predicted journey times and the economic assessment.
Safety

3.22 The Highways Agency has prepared a stage 1 safety audit for the scheme. This highlights numerous locations where the scheme does not meet design standards and departures are required. We highlight just three of these below.

- Tabley junction – The Tabley junction is very close to the M6J19 roundabout, this distance known technically as the weaving length is significantly below standard. Short weaving lengths usually associated with poor accident records. As we have highlighted above the traffic model is not forecasting flows correctly on the slip roads at this junction – we would expect them to be much higher than the model is predicting. The higher the merging and diverging flow the greater the risk posed by the short weaving length. In their analysis of the junction options the HA identified one of the benefits of Option N5 (slip road connections to the A50) as eliminating the substandard weaving length at the Tabley junction.

- The online section south of M56 J7 – The Highways Agency admit that the driver for this section of the Scheme has been to reuse the existing M56 over bridge to avoid significant cost and programme implications associated with the provision of a new or widened structure. This is despite the fact that the vertical alignment of this section of the existing road represents a departure from standards that will necessitate a 50mph speed limit and the fact that merge / diverge and particularly weave calculations show this section of road needs to be three lanes wide. This is a total compromise driven by the need to do “something” within a given timescale and budget rather than delivering the right and safe solution.

- M56 Spur – the radius is too tight on the free flow lane from the new A556 to the M56 eastbound. The Highways Agency proposes a 50 mph speed limit on this radius and say - “Should motorist adhere to this mandatory speed limit, it is considered the proposed alignment and achieved visibility would be appropriate for vehicle speeds.” The Highways Agency is relying on people driving at the speed limit to make this section safe. Highway design standards are based on designing roads for speeds in excess of speed limits not on the assumption that all drivers adhere to the speed limit. We question whether the proposed 50mph speed limit is sufficient on the M56 spur.

3.23 In addition to the departures from standards the Scheme also relies on local road connections to access the Millington junction. These roads are narrow country lanes often with only the width for a single vehicle and are not suitable in safety or capacity terms as links to the strategic road network. These roads could be used by any type of vehicle including heavy goods vehicles.

3.24 The Highways Agency is not proposing any improvements to these roads to address safety or capacity issues.

3.25 Without properly understanding the nature and location of the existing accidents it is not possible to draw any conclusions from the safety analysis. The scheme will almost certainly have some safety benefits but the Highways Agency propose to construct it with some significant departures from standards so these may not be as great as stated in the Consultation.
4 Conclusion

4.1 The proposal for a scheme to connect the M6 and M56 for Manchester traffic has been around for decades. If the scheme is so important why has it taken so long? The answer is that it is not that essential. The current A556 is not ideal but it generally provides this strategic function, it is currently the only real option.

4.2 The Highways Agency needs to revisit scheme options. It is over 10 years ago since a M6 J20 was last looked at and this work was based on motorway widening proposals on the M6 and M56 that no longer form part of the highway improvement programme. We set out a potential proposal to provide a simpler northbound to eastbound connection at J20. We also suggest looking at a proposal that uses both the A556 and J20 rather than looking at an all or nothing solution using one or the other.

4.3 Information needs to be provided on an on line solution particularly one which specifically addresses safety and junction improvements.

4.4 The time frame associated with the scheme means there has been no continuity to the process of promoting a scheme. The pre application consultation has been on options not a specific scheme. The process has been confusing and misleading. There is a genuine concern that key consultees including property owners and people living close to the road will not have a chance to consider in detail the proposed scheme until the HA make an application to the National Infrastructure Directorate.

4.5 The need for the scheme has not been justified. The numbers of people affected by the poor environment on the existing A556 is very small. The HA presents no evidence of regular significant delay. No detail of the nature and location of accidents have been presented to justify building a new road in open countryside as the solution.

4.6 The environmental benefits of the scheme are minimal. There would be a net material improvement in air quality at 78 properties and only a net 74 properties would be relieved of a serious or moderate noise impact. This has to be weighed up against the negative impacts of building a road through open countryside. Any analysis of this is hugely subjective and open to interpretation. There clearly is no compelling environmental case to justify the construction of the road.

4.7 The predicted journey time benefits are modest and will be being overstated for the following reasons:

- The free flow traffic speeds on the proposed links which would be covered by a 50mph speed limit have been wrongly coded at 65mph.
- The regular delay at the M56J7 eastbound merge and the M6 J19 eastbound (southbound) merge is not being identified by the traffic model. These are existing issues on merges that will not be improved as part of the scheme. The scheme will attract more traffic to these merges which will exacerbate existing issues of delay.
- Traffic flows on the M56 and M6 will clearly be well above capacity in peak periods and potentially during the inter peak as well on the M6.
- No detailed modelling of the scheme roundabouts particularly the M6J19 roundabout has been undertaken. We expect this will show significant queues and delays not picked up in the SATURN modelling.

4.8 If the journey times cannot be relied upon then nor can the economic analysis, so the scheme will not have the economic return that the HA present.
4.9 There are many departures from standards within the proposed scheme. The three most significant are probably the close spacing of the Tabley junction to the M6J19 roundabout – the traffic model is under-predicting traffic flows on these slip roads as well; the online section south of M56 J7 which has a substandard vertical alignment and needs to be three lanes wide and the radius on the link between the A556 northbound and M56J7 eastbound merge. These will reduce the safety benefits of the proposed scheme.

4.10 It simply does not follow that a previous SoS cancelled the A556(M) because of its impact on open countryside and that now the “solution” is yet again to promote building a road through the same open countryside. The need for the scheme is not as great as the Highways Agency state in the Consultation and they have failed in this context to properly analyse the impact or alternatives such as J20, an online scheme or a combination of both.

4.11 We recommend that further analysis of the scheme and options is undertaken before an application is made. This should include a full and proper assessment of the implications of the existing merges at M56 J7 and M6 J19 and the existing roundabout at J19 on the operation of the Scheme and the cost benefit analysis. Following this work a further round of public consultation should be undertaken which relates to a specific scheme, not options.
Highways Agency Slip Road Alignment

Alternative Slip Road Alignment

Figure 1

M6 Junction 20 Alternative Slip Road Scheme
Our ref: CBO-0049-007

BY EMAIL & POST

Ms Katheryn Powell
The Infrastructure Planning Commission
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Dear Ms Powell

22nd February 2012

A556 KNUTSFORD TO BOWDEN ENVIRONMENTAL IMPROVEMENT

We wish to bring to your attention matters on the pre-application consultation that the Highways Agency is currently undertaking on the above scheme. We represent Millington Parish Council, the Millington and Tatton Estates and the A556 Lobby Group. The proposed scheme runs for some considerable length through land owned by the Millington and Tatton Estates and many people in Millington would be directly affected due to the proximity of their properties to the proposed road.

The pre-application was formerly commenced on 23rd January 2012 and is due to run for 12 weeks.

We appreciate at this stage in the process the IPC plays no part in the process of consulting on schemes. In this case it is for the Highways Agency to determine what is an appropriate level and form of pre-application public consultation and then demonstrate to you the adequacy of the consultation when they make the application for the scheme. We are in regular contact with the Highways Agency and as you will see have copied this letter to them and Cheshire East, the local planning authority. However, we believe it is important that you are made aware now of some of the details of the consultation process as at best it leaves much to be desired and at worst could be construed as deliberately misleading.

The amended preferred route for the scheme was announced in March 2010. This showed a road alignment similar to that which is now being proposed but indicated that there would only be one junction along the route, at its intersection with the A50. More details of the scheme emerged in the second half of last year which were shared with Millington Parish Council. The scheme now included two junctions along the route, one of which was at Millington, effectively in the heart of this ancient Parish.

The residents of Millington raised concerns over this change to the proposed scheme with their MP George Osborne and he asked the Highways Agency to look at options for different junction arrangements. Our Clients welcomed this intervention.

The Highways Agency is now using the pre-application public consultation process to present and consult on junction options with the wider public. Despite repeated requests, no attempt was made to discuss these junction option proposals first with people directly affected by them, such as our Clients. The Highways Agency has subsequently put forward 4 different junction options and, within
3 of these options, there are 3 sub options. The public is therefore being asked to consider and express a preference for one of 10 possible options. This we believe is unnecessarily complicated, potentially deliberately so.

It is clear from the information provided that a lot of detailed work has been undertaken on the scheme that includes the junction at Millington, which the Highways Agency are referring to as the baseline scheme. It is also clear that very little work has been undertaken on the other options. This is evidenced by the documents provided to date through the public consultation, with a 40 page Scheme Assessment Report and a 152 page Preliminary Environmental Report dedicated to the baseline scheme compared to only a 19 page Junction Options Comparative Assessment Report discussing all the 9 alternative junction options. It includes comments such as “this comparative assessment has been prepared in a short time, with limited opportunity to optimise the layouts of each alternative option” and “the assessment has also been carried out to a lesser standard of detail”. It would appear the Highways Agency was gearing up to consult on the baseline scheme before George Osborne asked them to look at other options. The pre-application process was then rapidly changed to be a consultation on options, and commenced before the work was close to completion.

By presenting so many potential options it is highly unlikely that the Highways Agency will be able to determine a preference within the wider public for one or other of the options. This we suspect will make it easier for them to conclude that the baseline scheme (the one they have done all the work on) is the one to pursue.

We question therefore whether this is a genuine Consultation on Options and whether in running the pre-application consultation in this way the Highways Agency are failing to properly consult on any scheme.

The information has been presented to the public in two forms. There is high level and relatively schematic information aimed at the wider public and more detailed information only available by attendance in person or by request – the Highways Agency are making a not insignificant charge for some of this information.

The diagrams in the high level information packs are misleading in the context of Millington. The locations of other villages are shown on the diagrams and the broad locations of buildings in these villages are also shown. This includes property which is on the existing route of the A556 – a major part of the Highways Agency’s case is the relief offered to these properties as a result of the scheme.

Millington however is not shown on the diagrams and there is no indication that there is any property in the vicinity of the scheme in this location. This is very misleading to anyone unfamiliar with the area and would obviously lead someone towards the conclusion that Millington was a good place to locate the road and a junction.

There are also inconsistencies between the engineering drawings and these schematic consultation plans in terms of the location of cuttings and embankments. On the south side of Millington the road is shown to be in cutting in the schematic consultation plans when in fact it is on embankment. For the audience these schematic plans are intended for, whether the road is in cutting or embankment is an absolutely key consideration. We have therefore enclosed a plan showing these discrepancies.

On the basis of the above we believe this high level consultation material is fundamentally flawed. Whilst the correct and accurate information is on display for the small minority who have the time, skills and inclination to look for it, only the high level material is being distributed widely including
local councils and the press and readers are being asked to support the scheme and identify a preferred option on the strength of the information included within it.

The detailed technical supporting information is also inadequate. There are key documents missing that are fundamental to professionals such as ourselves gaining a proper understanding of the impact of the road. These were requested from the Highways Agency during the first week of the Consultation (on the 25th January), however they were only made available this week, four and a half weeks into the consultation process. In addition, the documents that are provided state that the traffic modelling for the scheme is being updated, so they will quickly be superseded.

To date The Millington and Tatton Estates and to our knowledge the other adjoining land owners have not been consulted over the necessary Compulsory Purchase of their land. We had understood this should have happened before the commencement of the public consultation.

In summary therefore we consider the pre-application consultation process to be flawed and would ask that you make your own investigation now or as early as you are able within the process. Our clients may seek a legal opinion before the end of the Consultation.

Notwithstanding this, the outcome of the consultation and in due course your own opinion of the adequacy of the process is it clear that our clients, residents and landowners directly affected by the scheme, have not yet had the opportunity to properly understand or be advised on the impact of the scheme that is eventually proposed. In this context we cannot urge more strongly that the Highways Agency start to liaise closely with our clients post pre-application consultation right through to making the application itself. If they fail do so there should be no doubt that they will have failed to consult properly.

If you require any further information do not hesitate to contact us.

Yours sincerely

PAUL CORBETT MEng CEng MICE MIHT
Director
CBO Transport Ltd

On Behalf of:
Millington Parish Council
The Trustees of the Millington Estate
The Tatton Estate

Cc Jeremy Bloom: Highways Agency (email only)
Anna Pickering: Highways Agency (email only)
Mohammed Swapan: Highways Agency (email only)
Andrew Ross: Cheshire East Council
Henry Brooks: Millington Estate (email only)
Diane Flanagan: Millington Parish Council (email only)