

## **A556 Knutsford to Bowdon Improvement Scheme Local Impact Report Executive Summary**

**Prepared by Cheshire East Council August 2013**

**IPC Reference Number TR010002**

**Registration ID 10019006**

### **INTRODUCTION**

1.1 The report has been prepared by Cheshire East Council (CEC) as the planning authority for the site, in accordance with advice and requirements as set out in the Planning Act 2008, the Localism Act 2011 and Advice Note one: Local Impact Reports (version 2, April 2012, The Planning Inspectorate). The plan in Appendix A shows the relevant study area including the currently proposed alignment for the scheme.

1.2 The Planning Inspectorate's Advice Note states that a Local Impact Report is a 'report in writing giving details of the likely impact of the proposed development on the authority's area'.

### **Site description, surroundings/ location and details of the proposal**

2.1 The site is located approximately four kilometres north west of Knutsford, Cheshire, in a predominantly rural area. The scheme passes close to a number of small villages and hamlets including Bucklow Hill, High Legh, Hoo Green, Hulse Heath, Mere, Millington and Tabley.

2.2 The A556 is a major strategic route, heavily used by traffic travelling between south Manchester and northern Cheshire going to the West Midlands via the M6. It is the only non-motorway section on the route between Manchester and Birmingham. The A556 carries approximately 51,500 vehicles daily, with HGVs contributing approximately 11% of this figure.

2.3 The Highways Agency (HA) intends to improve the A556 trunk road between Junction 19 of the M6 motorway, near Knutsford, and Junction 7 of the M56 motorway, near Bowdon with 7.5km of new (offline) or improved (online) road. Most of the scheme would be built to the standard of an all-purpose dual carriageway trunk road, with a short section (approximately 300m long) at the north end to which motorway regulations would apply. Nearside verges throughout would be a minimum of 2.5m wide, grassed and with no footways.

2.4 There would be six junctions along the line of the improvements, as outlined in detail in the full report.

2.5 Both the “de-trunked” road and the new road are situated entirely within the administrative area of Cheshire East Council.

#### **Side roads / other CEC roads**

The CEC roads that will be affected by the scheme include.

<b>Road name</b>	<b>Proposal / issue</b>	<b>Impact and mitigation</b>
Old Hall Lane	Stopped up and alternative alignment via new A556 junction at Tabley	Longer route for non motorised users, so underpass provided on original alignment
A50 west of Mere	New overbridge over new A556 and roundabout with link to new A556 northbound	Relieves A5034 Mereside Road
Bucklow Hill Lane	Stopped up at new A556	Access provided by other lanes to north and south
Chapel Lane	New bridge over new A556	None
Millington Hall Lane	Stopped up at new A556	Access provided by other lanes to north and south
Millington Lane	New bridge over new A556	None (access to trunk road via A56, A50 or Chester Road)
Cherry Tree Lane	New roundabout to connect from de-trunked A556 only	Issues re proposed alignment and speed management measures.

#### **De-Trunking of the existing A556 Chester Road**

2.6 Where the improvement is off-line, the existing Chester Road would cease to be a trunk road. A programme of ‘de-trunking’ works would be required before it could be handed over to CEC (the local highway authority) as part of the CEC network. These works have been designed after extensive and repeated consultation with CEC through multiple face-to-face meetings and correspondence, and the proposals include the following :

- a reduction from four lanes to two along the length of Chester Road principally within the two southbound lanes of the existing A556 ;
- changes at junctions with side roads;
- changes to traffic signs and signals and road markings;
- changes and removal of lighting, where it is present;
- changes to provision for pedestrians, cyclists and horse riders; and,
- removal and changes of speed control measures, safety barriers and CCTV/security cameras.

2.7 As a result of consultation it is intended to use part of the redundant width of the former northbound lanes along the de-trunked Chester Road to provide segregated facilities for pedestrians, cyclists and horse riders. The existing

continuous footway would be retained, while the nearside lane would be used to provide a track for cyclists and horse riders along the whole length of the de-trunked road. The redundant outside lane would be perforated and replaced with a low earth mound. The mound is likely to be around 1-1.2m high, and would be planted with grass and scattered shrubs; it would be designed to ensure inter-visibility between the road and the track, to alleviate potential concerns about safety for users of the track arising from a lack of surveillance.

2.8 The impact on junctions on the de-trunked road is considered in section 4.

2.9 The process of “de-trunking” is subject to an agreement over a commuted payment to CEC to cover future maintenance liabilities on the de-trunked road. This is included in detail in section 5 of the main report.

### **SECTION 3 RELEVANT DEVELOPMENT PLAN POLICIES**

3.1 No specific planning issues have been flagged up after a comprehensive review of local and national policies. A number of environmental policies may potentially be impacted (landscape and green belt).

### **SECTION 4 HIGHWAY JUSTIFICATIONS / TRAFFIC IMPACT ON LOCAL ROADS**

#### **Local transport patterns and issues**

4.1 CEC has actively engaged and challenged the Highways Agency on the alternative options for the scheme including the proposals for the M6 J20. CEC are generally supportive of the scheme as it improves strategic access to the Motorway network for both CEC residents and businesses as it relieves significant congestion issues along the A556 between the M6 at junction 19 and junction 7 of the M56. However CEC have some concerns over the impact on the local road network that the new road may have, that as yet have not been resolved and are identified in detail in the full report.

4.2 The following table includes a summary of the main impacts both positive and negative on CEC roads and potential mitigation. Where a beneficial impact is forecast no mitigation is listed. This table includes potential impacts on the minor road network as presented in the A556 Consultation Report and an analysis of accident statistics for the 5 years 2008 to 2012. It should be noted that traffic on the section of the existing A556 to be de-trunked falls from around 50,000 vehicles per day to 5,000 vehicles per day (Bucklow Hill to Millington Lane).

4.3 Post opening monitoring will be undertaken on the local road network to allow CEC officers to understand the actual impacts of the scheme and to identify the nature and extent of mitigation measures that might be required (as considered in the table and in section 5, commuted sums).

<b>Road name</b>	<b>Impact / potential issue</b>	<b>Potential mitigation required</b>
Existing Chester Road (A556) Mere and Bucklow	Reduced traffic levels from around 50,000 vehicles per day (vpd) to around 5,000 , even with access traffic to Tatton Park events	None
A5034 Mereside Road	Reduced traffic levels from 9,000 vpd to 5,000, may increase vehicle speeds	Speed control measures
A50 through High Legh	Increase in traffic flow compared to the do minimum (from 9,000 vpd to 13,000)	To be addressed by speed control measures, "Gateway features" etc..
A556 south of M6 junction 19	Increased traffic flows (+1500 vehs AADT) forecast with scheme compared to do minimum impact on air quality	Discussions on going between CEC and HA
Millington Lane	Increase in traffic flow compared to do minimum with potential issue at junction with Boothbank Lane and Reddy Lane.	"Gateway" feature at de-trunked A556 junction. Possible improvements to layout / signage at junction.
Millington Hall Lane	Reduced traffic flow due to closure of through route	"Gateway" feature at de-trunked A556 junction
Rosetherne Lane	Reduced traffic, less attractive as "rat run"	"Gateway" feature at de-trunked A556 junction
Cicely Mill Lane	Reduced traffic	Weight restrictions
Chapel Lane	Reduced traffic,	"Gateway" feature at de-trunked A556 junction
Peacock Lane	Reduced traffic,	None
Wrenshot Lane	Increase in traffic flow compared to the do minimum	To be addressed by speed control measures, "Gateway features" etc..
Pickmere Lane	Increase in traffic flow compared to the do minimum	Junction improvements at Budworth Road junction
Old Hall Lane	Potential for rat running	Weight restrictions and speed control measures
Tabley Hill Lane / Tabley Road	Reduced traffic forecast may increase vehicle speeds	Speed control measures
Ashley Road	Reduced traffic forecast	Speed control measures

No issues were identified for the following roads:-

Cherry Tree Lane, Birkinheath Lane, Reddy Lane, Boothbank Lane, Marsh Lane, Back Lane / Thowler Lane, Agden Lane, Bucklowhill Lane, Hulseheath Lane, Moss Lane, Whitley Lane, Budworth Road, Green Lane, Mereheath Lane, Sugarpit Lane and Clamhunger Lane.

4.4 The traffic model used for the final scheme layout simulates a significant proportion of the national road network, and is primarily designed to accurately model longer distance journeys, and is therefore the appropriate tool for modelling a scheme with strategic importance, such as the A556. However flows forecast along local roads are likely to be less robust with the narrower country lanes likely to be less attractive than the model predicts. Because of this the model will tend to over-estimate the amount of traffic on local roads. The output from the model is therefore considered to be conservative (i.e. a worst case).

4.5 CEC accepts that the model has these limitations and that the flows under normal conditions (average day without incidents on the Motorway / strategic network or events at Tatton Park) will be likely to be close to those presented.

### **Tatton Park**

4.6 Tatton Park has been involved in discussions with the HA and its contractors in providing input to the options and giving views on issues as Tatton sees them in relation to the scheme and its impacts. It was agreed that the HA's contractors would work on event traffic management issues and devise an agreed traffic management plan, most notably concentrating on the RHS Show and see if any areas could be reviewed and improved in light of this with agreed plans being worked through before construction starts.

4.7 Tatton Park has also agreed to work with the HA, CEC Highways and other Local Authorities on a unified Brown and White signing strategy for the new road and link roads to Tatton Park.

4.8 Tatton Park have also raised concerns around the A50 / de-trunked A556 junction that are addressed in para 4.17 below.

### **Revised and new junction designs**

4.9 A50 / new A556 junction – CEC have concerns over the design of this new junction that have not yet been resolved. Initial assessments by CEC using flows supplied by the HA indicate that significant queues would be generated in the morning peak on the southbound A50 approach to the roundabout in the 2032 design year – this is without additional traffic stress caused by Motorway incidents. A revised design is presented in Appendix C

4.10 There are two existing signalised junctions within the section of Chester Road that is to be de-trunked – with the A50 at Mere Crossroads and with the A5034 at Bucklow Hill Junction. Both junctions would be modified, see Appendix D for further details of Mere crossroads and Appendix E for Bucklow Hill. Initial designs were considered by CEC and suggested amendments to the designs were made to address concerns (as presented in the appendices).

4.11 At the A50 / de-trunked A556 junction in Mere (Mere Crossroads) in the current proposals the A50 would become the main through route. The initially proposed junction arrangement may not be adequate. The de-trunked Chester Road would be realigned at the junction to form two T-junctions onto the A50, offset from each other. CEC are looking for network resilience to cater for additional traffic that might be generated by events at Tatton Park and during incidents on the M6 that force traffic to divert onto the A50 / de-trunked A556. Existing restrictions on right-turning movements would be lifted, so that all turns would be possible. CEC are working with the HA to devise an alternative design and alternative signal timings to be instigated when incidents occur on the M6, that may be able to address these concerns. The junction would continue to be partially controlled by traffic light signals. Signals would be retained at the southern junction to include provision for pedestrians, horse-riders and cyclists crossing the A50.

4.12 At Bucklow Hill Junction the existing traffic light signals would be modified to remove signal controls from Chapel Lane and alter the phasing of the remaining lights to reflect the new dominant flow of vehicular traffic (i.e. southbound traffic leaving the A556 at Millington and turning left at Bucklow Hill onto the A5034). Provision will be made for non motorised users through the junction, including crossing facilities and new segregated routes.

4.13 At the new Millington Junction (Appendix B), a crossing for pedestrians, cyclists and horse-riders would be provided just south of the junction, incorporating corrals for horseriders, but without signal controls. A crossing without signals would also be provided on the de-trunked road just to the north of the roundabout. A revised junction design for the roundabout has been presented by the HA to CEC that needs to be agreed by the end of the examination in public.

#### **Road Safety issues on the local road network.**

4.14 There were 98 personal injury accidents on the A556 (including relevant parts of its junctions with the M6, A50, A5034 and M56) in the period January 2007 to December 2011, including 1 fatality and 13 serious injuries.

4.15 Full agreement on some aspects of the treatment of road safety issues on the rest of the local road network has not yet been reached – discussions are ongoing on the outstanding points. It is agreed that a commuted sum will be agreed between the HA and CEC prior to the closure of the examination of the scheme so that it can be included in the inspectors report.

### **SECTION 5 COMMUTED SUMS FUND FROM THE HIGHWAYS AGENCY TO CEC**

5.1 This section outlines CEC's requirements for commuted sums funds for

future maintenance of the de-trunked A556, to mitigate for the potential (as yet unforeseen) impacts of the scheme on safety and the environment (particularly air quality).

## **Maintenance**

5.2 Commuted sums are required to pay for the future maintenance of the de-trunked A556 road. The condition of existing assets and proposals for lighting and so on need to be agreed. A "walk over" survey was undertaken on 15th August, with relevant CEC officers and the scheme designers to help establish the condition of the existing assets.

5.3 A number of assumptions have been made with regard to maintenance of the de-trunked A556 road surface, footways, NMU route, vegetation maintenance and lighting. Each element to be requested will be listed in a table.

5.4 Agreement on the level of commuted sums payable to CEC is required as soon as possible and in any event prior to the closure of the examination.

## **Complementary schemes funding package to cover unforeseen issues on the local road network**

5.5 In the analysis of impacts on local roads, various potential issues were identified that may arise when the new A556 has opened. Commuted sums need to be agreed to pay for any of these issues. Some of these issues are associated with forecast traffic volumes on the minor / local roads which may be higher or lower than forecast, as the model is strategic in nature and may not accurately model traffic on more minor roads in the network. .

5.6 There may also be environmental impacts associated with traffic increases to the south of the M6 between the M6 and the CEC boundary.

5.7 Agreement on the level of commuted sums payable to CEC is required as soon as possible and in any event prior to the closure of the examination.

## **SECTION 6 AIR QUALITY**

6.1 The existing A556 between the south of Junction 19 of the M6 and to the north of Junction 8 of the M56 is designated as an Air Quality Management Area (AQMA) as concentrations of nitrogen dioxide (NO<sub>2</sub>) exceed European Limit Values.

6.2 Assurance will be required that potential issues during construction such as dust are contained within a Construction Management Plan (CEMP).

6.3 During the operational phase of the road, it is noted that the modelled changes in air quality will achieve the primary objective of air quality

improvements in Bucklow Hill and Mere where there are predicted to be large reductions in NO<sub>2</sub> concentrations at properties on the existing A556. It is likely this will result in the revocation of a large proportion of the AQMA. This is a significant beneficial impact.

6.10 It is noted that there will still be a number of properties along the “online” part of the new route, most notably at the north end of Millington and in Over Tabley south of the M6, which will continue to be in exceedance of the NO<sub>2</sub> air quality objective during the operational phase of the road. It is predicted that levels of NO<sub>2</sub> will slightly reduce in these areas. As such this is considered to be a negative local impact.

6.11 In addition, there are some implications wider afield most notably along the Southbound M6 where a small increase in traffic levels is predicted. The assessment confirms that levels of NO<sub>2</sub> may breach the objective in this location and as such Cheshire East may be required to declare a further AQMA in this area. This is considered a negative local impact.

6.12 There will be a number of properties close to the new road which would experience a worsening of air quality; however the model does not predict any exceedances of the air quality objectives. This is considered neutral in terms of overall impact.

6.13 The scheme overall is in compliance with the Air Quality Action Plan (2011) and the broader aims of the Cheshire East Air Quality Strategy. Mitigation will be sought (as outlined in section 5 and table 3) in order to offset the negative local impacts outlined above.

## **SECTION 7 CULTURAL HISTORY and ARCHAEOLOGY**

7.1 There are potential issues concerning built heritage that include the impacts of the new road on two grade II listed properties and a historic parkland of local significance. Mitigation measures are proposed that address these issues.

7.2 In CEC’s opinion, the HA have outlined an appropriate scheme of works with regard to archaeology which is in accordance with current national and local planning guidance and the procedures outlined in the current edition of the DMRB.

## **SECTION 8 ECOLOGY AND NATURE CONSERVATION**

8.1 There is a moderate adverse impact on ecology at opening and a slight/neutral adverse impact at design year, locally significant adverse impacts are anticipated on otter, bats, barn owls and running water.

8.2 In the opinion of CEC tree and scrub planting is inappropriate and inadequate



mitigation for the potential adverse impacts of the development upon breeding and wintering birds associated with open habitats.

8.3 In, the view of the CEC Principal Nature Conservation Officer the proposed development cannot at this time be considered to be fully sustainable in terms of ecology. Residual adverse impacts could potentially be off set and secured by legal agreement, with a commuted sum agreed to fund habitat creation / enhancement works.

## **SECTION 9 VISUAL IMPACT**

### **Landscape and Visual**

9.1 Despite mitigation measures, it is considered that the proposals will have a significant landscape and visual impact within this area of Green Belt, Designated Area of Special County Value (ASCV) and may well have significant impacts upon the visual amenity in the surrounding area.

## **SECTION 10 NOISE AND VIBRATION**

10.1 During construction there will be adverse noise impacts at sensitive receptors close to the proposed new route. Proposed working methods should minimise noise and vibration impacts.

10.2 When the scheme is operational as more properties are predicted to experience a beneficial rather than an adverse change the scheme is considered to be overall beneficial in terms of noise and vibration impacts.

10.3 Mitigation measures have been proposed along the route some of which have the effect of providing noise mitigation. These include low noise road surface, road cuttings, earth bunding and acoustic fencing.

## **SECTION 11 PEDESTRIAN/CYCLE INTERESTS (Non-Motorised Users)**

11.1 The PROW unit of the Council is generally supportive of the proposed scheme, subject to the final detailed scheme design and accommodation works arrangements, in particular in relation to NMU facilities on affected PROW and at junctions, overbridges and the underpass.

11.2 The PROW unit would seek to be consulted on the final draft text relating to PROW and the Rights of Way and Access Plans prior to any Development Consent Order being made.

## **SECTION 12 WATER**

### **Flood Risk and Drainage**

12.1 It is evident from the scoping documents associated with this scheme that the importance of assessing potential flood risk impacts has been captured.

12.2 Proposals for the detailed drainage design will need to be discussed with Cheshire East Flood Risk Management at the appropriate stage.

## **SECTION 13 GEOLOGY/SOILS**

### **Materials**

13.1 The proposals are not expected to have any geology or soils issues though reassurance will be sought that suitable mitigation measures are planned to protect watercourses from damage / pollution. A Phase 1 report will be required to ensure that contamination, rainwater run off and balancing ponds are fully considered.

## **SECTION 14 ECONOMIC AND SOCIAL IMPACT (Socio-economic and community matters)**

14.1 The scheme is expected to have impacts on the local economy both positive and negative, along with associated community impacts.

14.2 In the local study area, CEC agree that the impacts on community severance from the scheme are generally expected to be positive, for example, by improving access to community facilities, and the overall balance of impacts is beneficial. The impacts on community facilities and commuting in the local area are expected to be beneficial. The impacts on community facilities, community land and private properties are expected to be neutral. The impacts on commercial properties are mixed but generally beneficial but not significant. There is some loss of commercial land and impacts on agriculture and farms that are judged to be adverse but insignificant. For tourism and recreation there is expected to be a mix of impacts on Tatton Park, generally beneficial but potentially adverse during event days. Regarding development land, there is expected to be a beneficial insignificant impact on the potential BeWILDerwood development at Tatton Park.

14.3 In the local authority level study area the impacts on employment, tourism and recreation and the economy are all expected to be beneficial. With regard to commuting, a mix of impacts is expected. There are significant beneficial impacts and some adverse impacts that are insignificant in their overall effect.

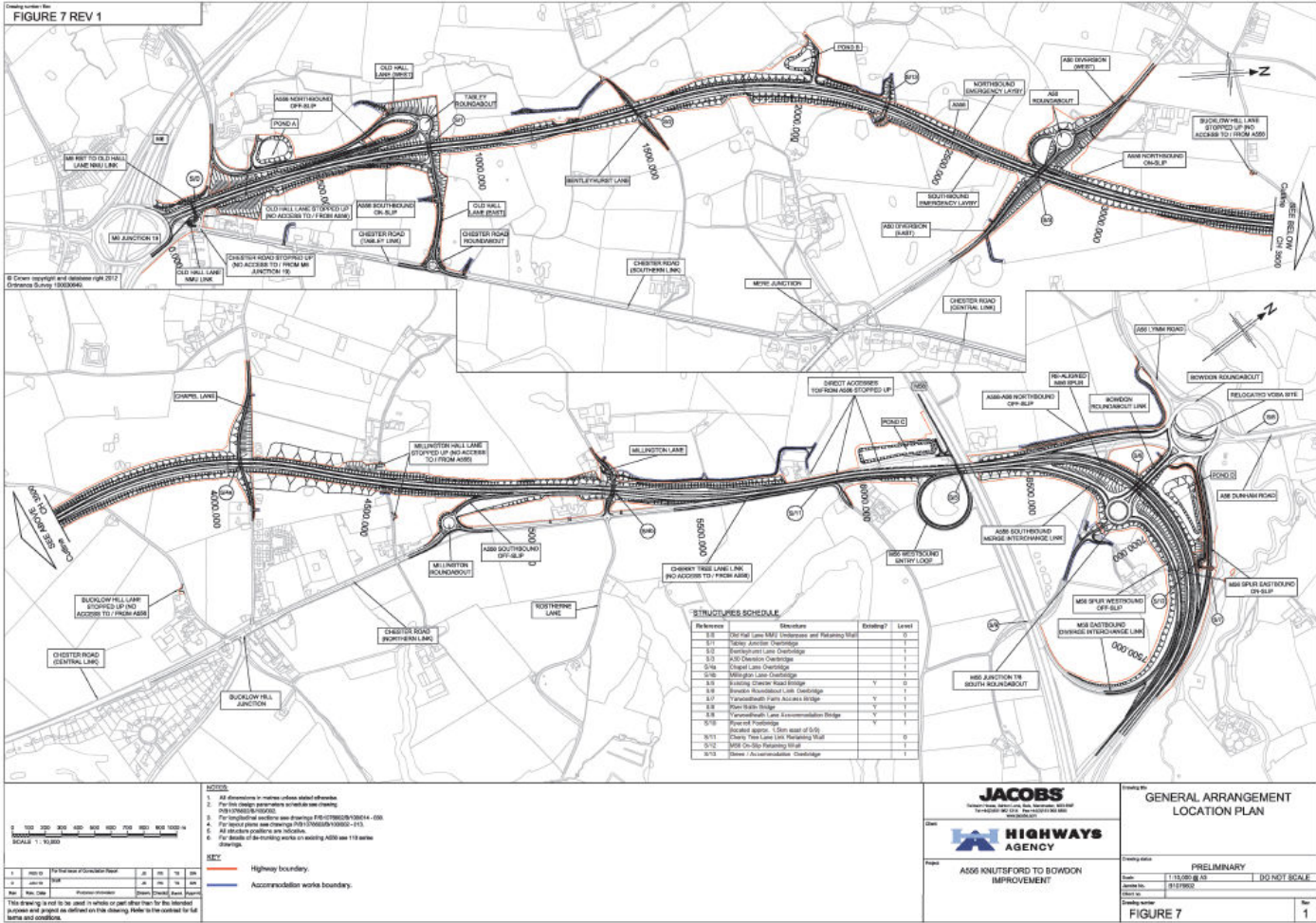
14.4 Overall the scheme reduces severance at locations along the de-trunked A556 particularly at Mere and Bucklow Hill. A limited number of individuals are affected by the stopping up of Bucklow Hill Lane reducing access to facilities in Hoo Green. NMU users have improved provision along the de-trunked route and across the new A556.

## **SECTION 15 CONCLUSIONS**

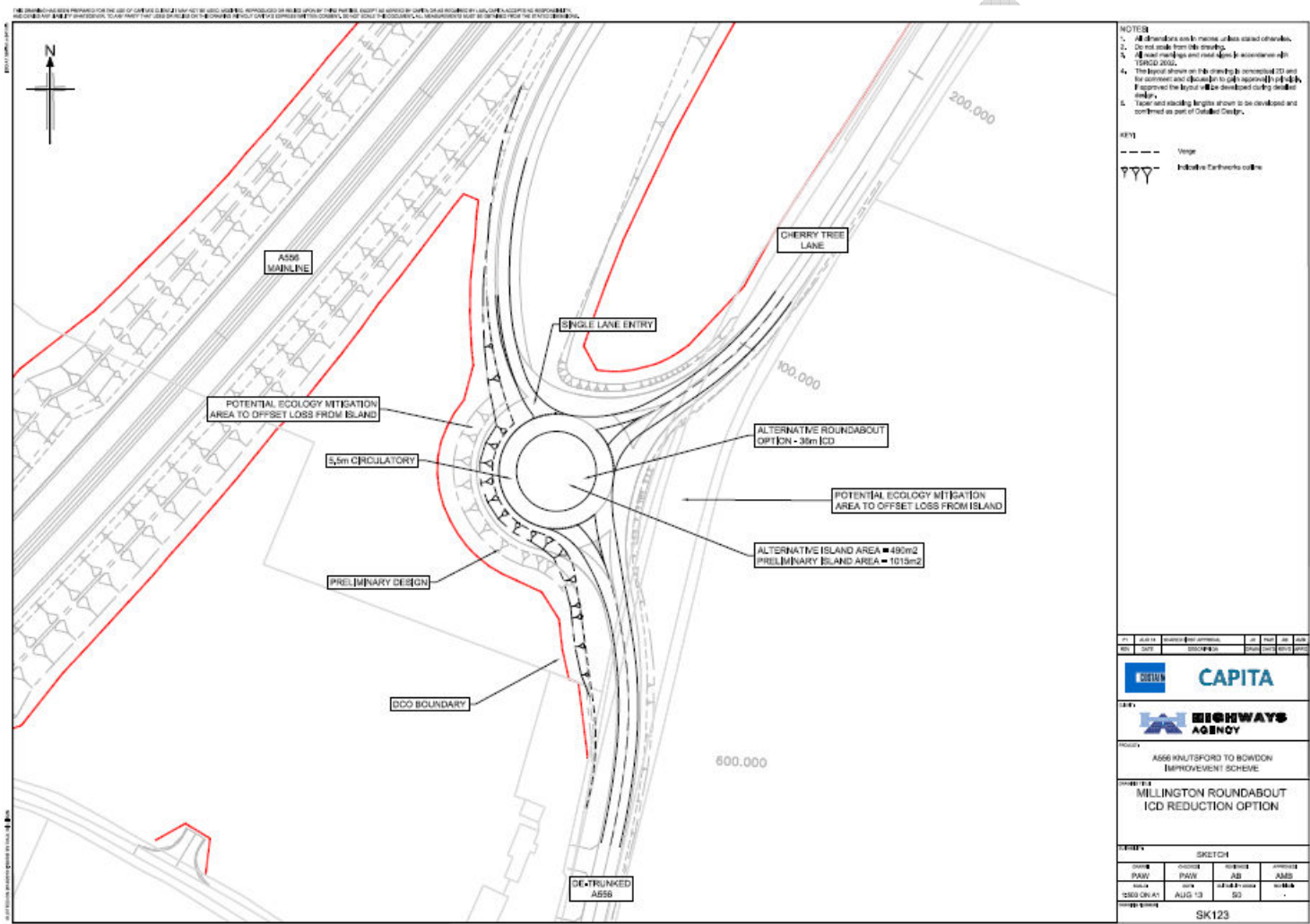
15.1 This report has been produced by CEC and considers the impact of the proposed A556 Knutsford to Bowdon improvement scheme on the CEC area.

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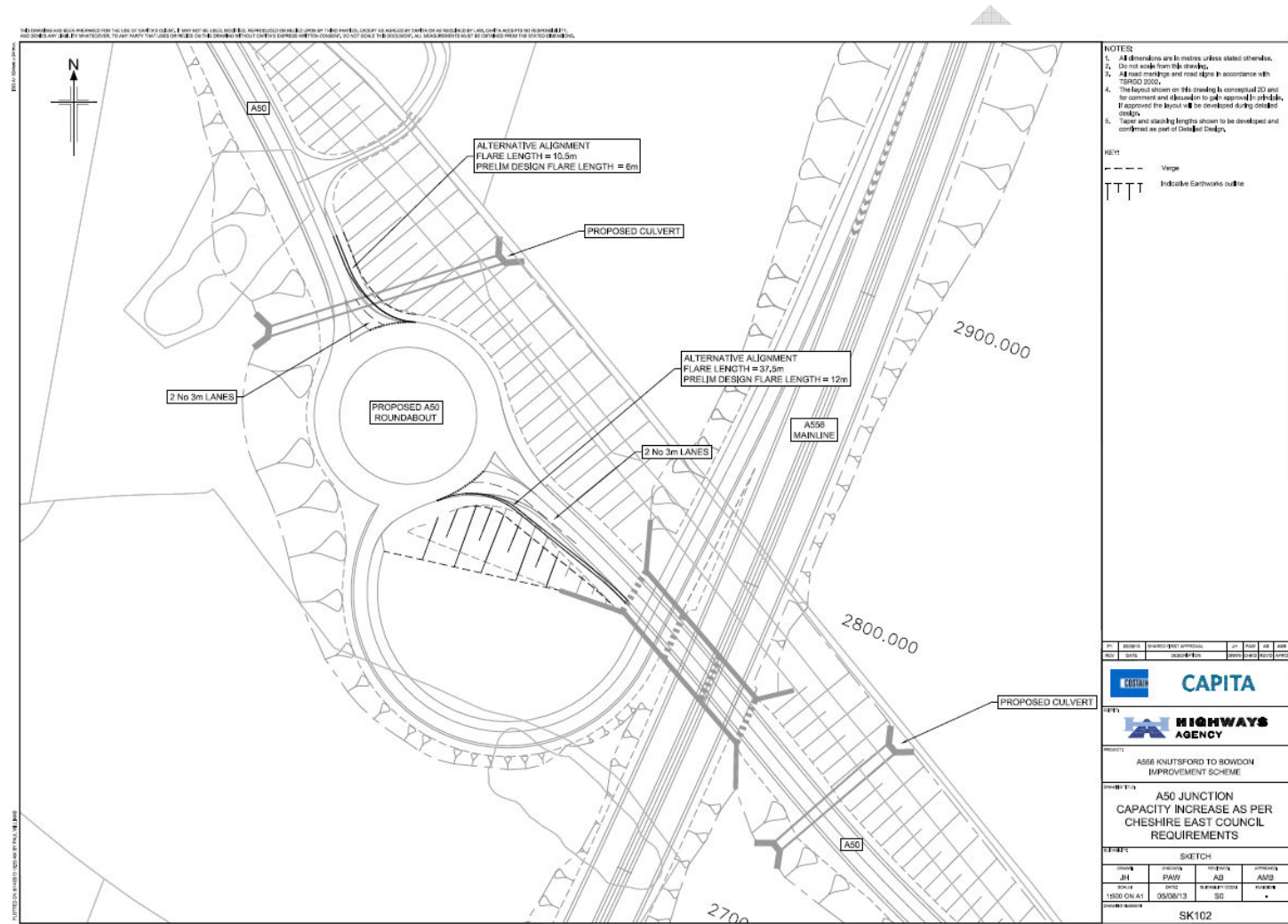
Appendix A Location plan and extents of the proposed scheme.



# Appendix B Millington roundabout (slip from A556, de-trunked A556 and Cherry Tree Link)

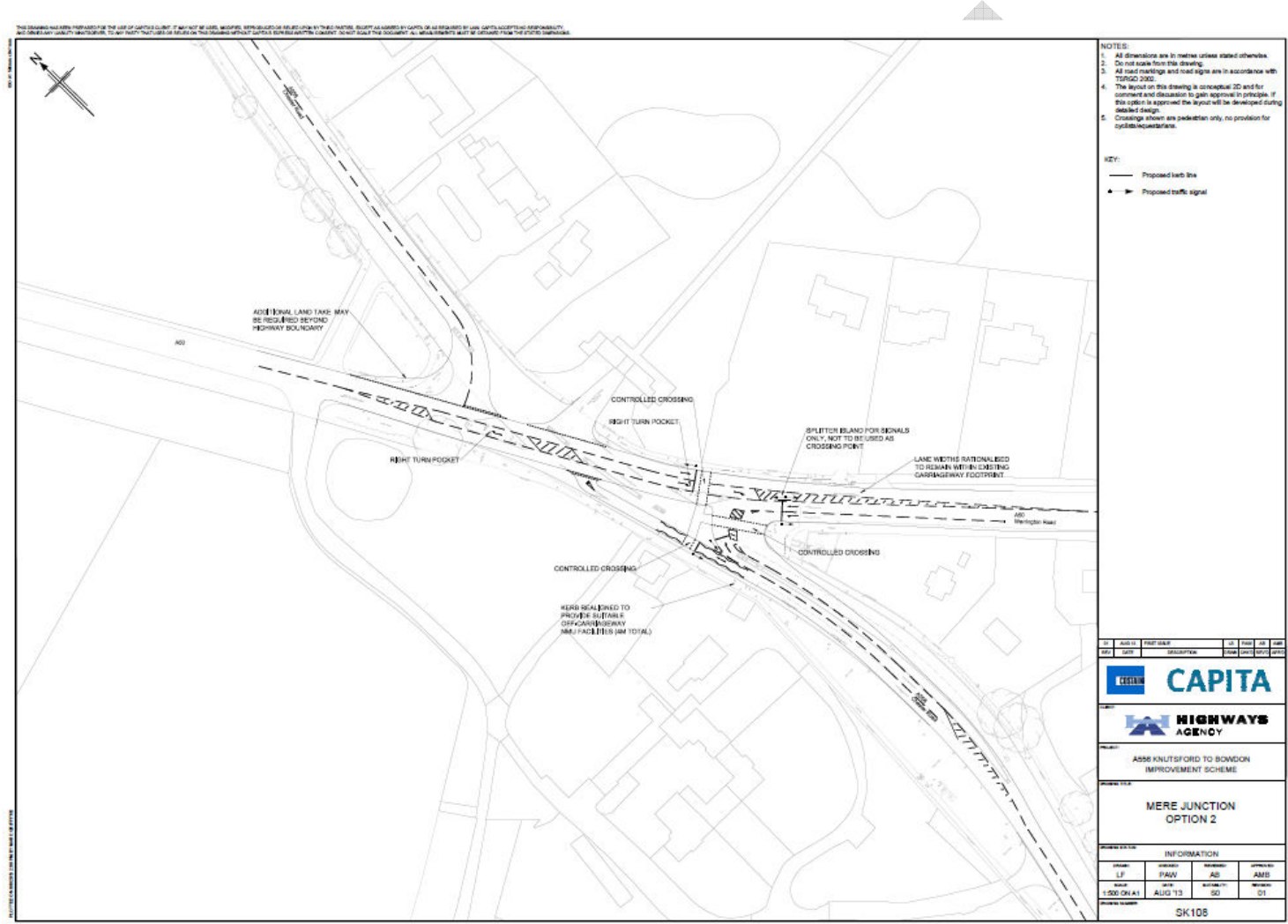


# Appendix C A50 / new A556 roundabout junction





Appendix D Proposed layout for A50 /de-trunked A556 Mere crossroads



Appendix E Proposed layout for A5034 /de-trunked A556 Bucklow Hill junction

