

Information

for County Councillors

Sheet Number:
2013-17/230

From:	Sunita Mills Service Commissioning Manager – Transport Policy
Date:	7 th June 2016
To:	All County Councillors

M5 Junction 25 (Taunton) Highway Improvements

Introduction

SCC submitted an initial expression of interest (EOI) in mid-2014 to the Heart of the South West Local Transport Board (LTB). The LTB is empowered to oversee the management of transport schemes on behalf of the Local Enterprise Partnership. The outline proposal in the EOI was for a scheme that -

- Improves the traffic capacity of M5 J25
- Provides access to a new employment site to the south west of M5 J25
- Improves cycle pedestrian facilities through the junction

The EOI was accepted as one of three schemes to be funded from a £35.4m Growth Deal funding allocation from Government to the Heart of the South West Local Enterprise Partnership in early 2015.

The Process

The LTB has set out a two stage business case process for schemes that have an allocation within a Growth Deal, this is similar to the Department for Transport’s major scheme bidding process but is slightly less onerous.

The first stage is to demonstrate value for money, deliverability and strategic case of the scheme. This allows the independent technical assessment team to provide guidance to the LTB around the acceptability of the scheme. This stage requires the promoter to carry out analysis around the engineering feasibility, the economics, environmental and social impacts, the procurement options, the project management and community engagement.

The second stage business case requires the scheme to be virtually ready for delivery having secured planning permission (where necessary), carried out detailed design and engaged contractors through a robust procurement process. This second stage takes about 12 months to complete following approval of the first stage submission.

Progress to date

Since the acceptance of the EOI the first stage business case has been developed in line with LTB guidance and has been submitted for scrutiny by the independent technical assessment team. The team will review the evidence

provided to support the scheme and will then present a report of their findings and a recommendation at the next Local Transport Board meeting (date to be confirmed).

Appendix A sets out the thought process that led to the current preferred scheme design.

Appendix B shows the current preferred scheme design.

A358 Improvement

The M5 J25 has a close relationship with the A358 and the improvement that is currently being developed by Highways England (HE) therefore interaction with HE is an essential part of the M5 J25 project. They have confirmed that they will treat the SCC improvement scheme as already committed and will tie into it. SCC officers are attending HE workshops and have provided J25 scheme designs to HE for them to use in their optioneering.

As part of the M5 J25 business case the independent technical assessment team asked SCC to consider the impact of the HE improvement on the proposed scheme. It will be a number of months until HE's preferred scheme is announced and therefore SCC tested the two most likely scenarios –

- The improved A358 routes all traffic through M5 J25
- The improved A358 provides new free flow links for traffic between M5 south (to / from Exeter direction) and A358 to avoid J25; all other traffic being routed through J25.

The purpose of these tests was to demonstrate that the improvement that the proposed SCC scheme will still offer value for money with any HE preferred scheme; by carrying out these tests SCC does not seek to set out any particular position nor pre-empt the work that HE has to do.

Junction 25 Strategic Employment Site

The aspiration for growth in Taunton is shared between SCC and TDBC. SCC is keen to support the borough council where possible to bring forward planned residential and employment development. To this end SCC has been supporting TDBC on activities to bring forward the Strategic Employment Site at J25 including enabling access to the site, should it be developed.

TDBC has recently confirmed it will be progressing a Local Development Order (LDO) for the site; the work that SCC is carrying out on M5 J25 is a key component to the LDO. The programme for this process is under development by TDBC.

Next Steps

Once the business case is approved by the LTB the next step will be to develop the scheme to a stage where it is detailed enough for SCC to apply for planning permission to build it. This will take some months and will include community engagement, detailed surveys of the area and technical design. In a parallel process SCC will need to start the procurement process in order to deliver the scheme within the funding window.

The business case and details of the scheme will be published on SCC's website at <http://www.somerset.gov.uk/policies-and-plans/schemes-and-initiatives/m5-junction-25/>

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Appendix A

SCC has carried out a number of studies to assess the impact of growth on the highway network across Taunton. As a result a number of junctions have been identified as in need of improvement in the long term. With regard to J25 the particular issues that have been identified are –

- Insufficient capacity at the M5 southbound off-slip signals.
- Significant delay on the A358 westbound approach, with or without the Strategic Employment Site.
- An increase in delay to exit Blackbrook Business Park.
- Queues and delay on the Toneway eastbound approach.

These issues would be exacerbated by the development of the Strategic Employment Site (SES) at J25 and therefore the development of an improvement needs to take account of these issues.

During the design process a detailed analysis of options has been carried out in order to achieve the preferred package. This analysis considered the main constraints, benefits and costs of the various infrastructure improvements to find the best package.

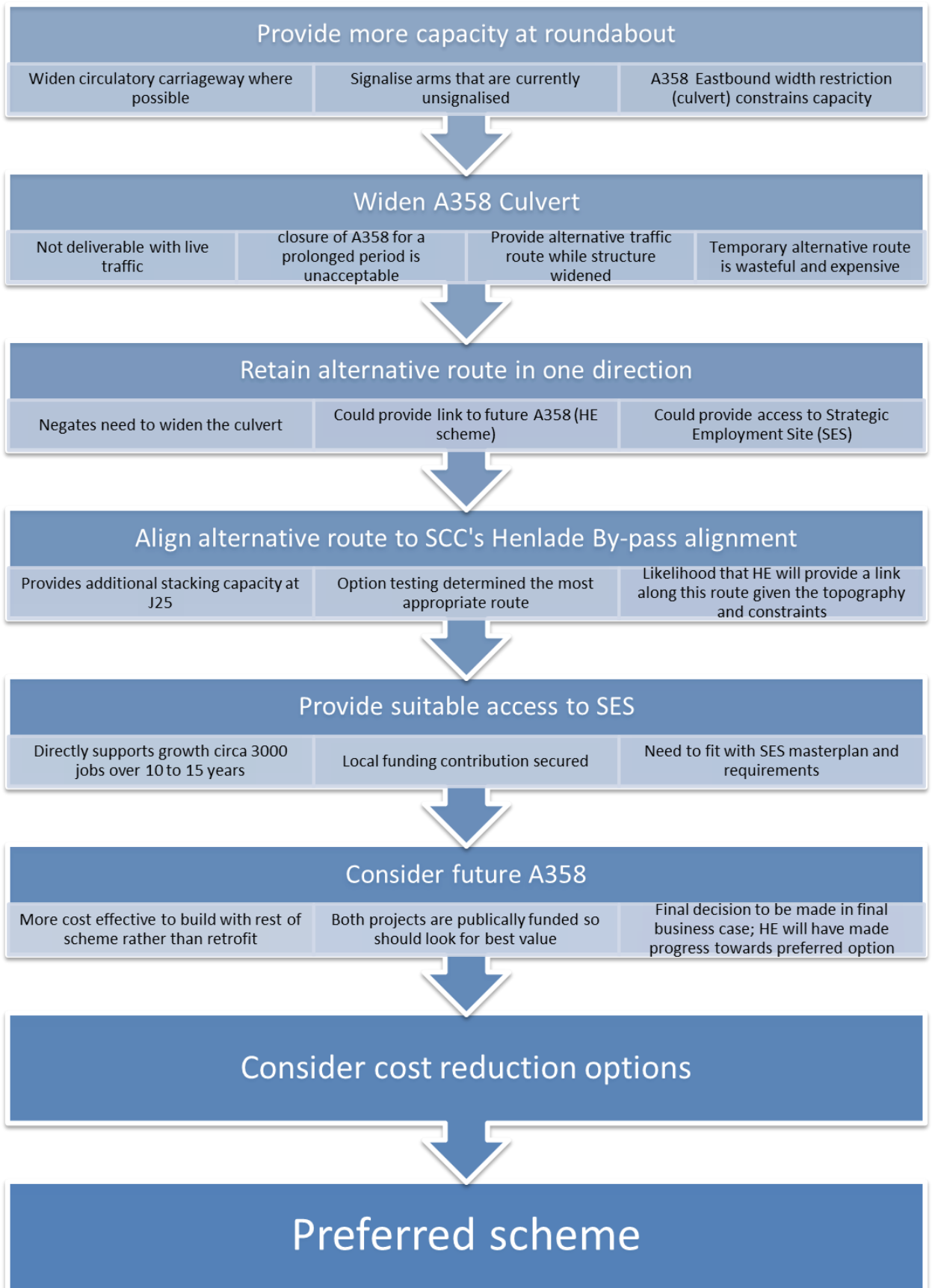
The main limitation of the existing roundabout is the A358 eastbound exit (at the Toby Carvery); the culvert that bridges the Broughton Brook is only wide enough for three lanes of traffic, one of which is eastbound. This narrowing requires traffic to merge and limits the throughput of the whole junction because there is such a large demand for this exit.

Fundamental to getting roundabouts to work efficiently is managing the amount of traffic that is circulating at any one point in time, if too much traffic is allowed into the system then it will jam up. The preferred option provides capacity for growth around the existing J25 roundabout by elongating and widening the road space; this allows more vehicles onto the roundabout at any one time

The main components of the scheme are -

- A new link between A358 / Ruishton Lane / Park and Ride junction with footway /cycleway along one side and a new roundabout to the south of the park and ride site
- A new link between the new roundabout and the existing M5 J25 roundabout on an embankment and crossing Broughton Brook with a new structure with footway / cycleway along each side (not shown)
- Elongating the existing M5 J25 roundabout on the eastern side
- Widening the existing circulatory arms underneath M5 to accommodate an additional lane on each side
- Moving the pedestrian / cycle facility to behind the bridge supports by removing some of the sloping embankment.
- Signalisation of –
 - M5 J25 / Blackbrook Park Ave
 - M5 J25 / A358 Toneway
 - M5 J25 / new link road
- Realignment of signals at M5 J25 / M5 Southbouth off slip
- A new toucan crossing on new link road between new roundabout and M5 J25 roundabout close to the new roundabout.

The flow chart below explains the thought process that led to the preferred design.



Appendix B



A	DESIGN UPDATED	KMB	a/g/o/t/a	RGN	RGR
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Rev	Description	By	Date	Chk'd	Aut.



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Client:	SOMERSET COUNTY COUNCIL
Project:	M5 JUNCTION 25

Title						
INITIAL DESIGN PHASE 1 AND PHASE 2						
File Name: MJ004045-SK-004_Rev A_Initial Design						
Original Scale	Page Size	Drawn	Checked	Authorized	Status	
1:1000	A1	RFF/KMB	RGN	RGN	P	
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