From: Blake Peter		
Sent: 04 June 2019 17:1	11	
To: Gabriel Fox	>; Aidan Van de Weyer	
	Lewis Herbert	; Bates
Ian Cllr	Claire Ruskin	
	•	
Cc: Jo Baker Motts	; Stopard Rachel	
	; Gates Laura	
	; Wotherspoon Timothy Cllr	
	; lan Sollom	
;	Philip Allen	; Bridget Smith
	; Helen Bradbury	-
	; Steve Jones	; Rod Cantrill
	; Des O'Brien	• ,
Andrew Williams	; Nwadike Austin	

Subject: RE: GCP-LLF engagement on Madingley Road

Dear Gabriel

I am glad you found the session on May 22nd useful and understand there was constructive discussion, although I am disappointed that you were the only member of the Technical Group able to attend that meeting, which had been specifically requested.

I attach a comprehensive response to the detailed points you raise.

It is perhaps also worth reiterating, as outlined in my previous letter to Helen Bradbury, dated 1 May, (which you were copied in), hybrid options incorporating an on-road route from Madingley roundabout to the city would not form part of further assessment toward the Outline Business Case. Following consultation and assessment of an off-road option, comparing with an optimised on-road alternative, the off-road option has been recommended and noted by the GCP Executive Board as the solution that *best meets the strategic and policy objectives of the Greater Cambridge Partnership*. More information and project documentation can be viewed on the Cambourne to Cambridge Background page of the Cambourne to Cambridge Project website - <u>www.greatercambridge.org.uk/cambournetocambridge</u>.

The Option Appraisal Process identifying the off-road option as the best performing has been completed, results published and reviewed by the GCP Board in December 2018. We have and continue to be very happy to host workshops and respond to feedback from the LLF Technical Group in order to assist understanding of assessment, but as any scheme progresses toward an Outline Business Case, the range of options is assessed in order that a preferred option can be identified.

As you're aware, in response to LLF feedback, the project team has also undertaken further work to consider potential 'quick-win' options within the highway boundary along Madingley Hill and provided further clarification on reasons why a northern alignment was previously discounted. The technical papers are available on the GCP website.

I would agree that a constructive discussion took place but would not say that agreement was reached on all the points you raise.

I hope this clarification is helpful.

Kind regards

Peter

Peter Blake Transport Director Greater Cambridge Partnership

Here are the responses to the specific issues you raise, these are addressed point by point below.

LLE Technical Group Suggestion	Response
1. A segregated, double bus-lane (inbound and outbound) would comfortably fit within the highway boundary along 90% of Madingley Road up to the M11 bridge. However, for a short stretch in front of the American Cemetery and SSSI there has been considerable encroachment over the north-side highway boundary so a single bus- lane plan may be needed there (could be in- bound only or bi-directional).	The assessment undertaken by the LLF is based on a sub- standard urban cross-section which is not suitable for an inter- urban scheme. Even this cross- section cannot be accommodated on around 10% of the scheme length, and there are multiple locations where it is unlikely to be comfortably accommodated once the need for side-slopes, drainage, visibility splays is considered. A wider cross-section would be required.
2. The lawns in front of the American Cemetery extend up to about 6 metres over the highway boundary. Some trees in front of (though not part of) the SSSI extend as much as 20 metres over the highway boundary. Given the sensitive nature of these sites, there is a good argument to protect these as much as possible. Therefore a scheme which left these more or less untouched would seem preferable - though that would have to be balanced against any environmental destruction caused by an alternative scheme.	Agreed.
3. The M11 overbridge at junction 13 can accommodate 4 lanes of traffic (e.g. 2	The overbridge cannot accommodate a cycle/pedestrian

inbound and 1 outbound general traffic lanes + 1 bus lane) plus a cycle/pedestrian (non- motorised user or NMU) lane, which could be squeezed onto the bridge but may be preferable as a "bolt-on" addition to the bridge or a new NMU bridge. Atkins have previously costed (at 2010 prices) widening of the carriageway to take an extra lane at £632,000 and a new or bolt-on or NMU bridge at £2-4 million.	lane over and above 4 traffic lanes. Without an additional structure or widening, the traffic lanes would have to be substandard, and this would be unlikely to meet Highways England requirements.
4. A scheme delivered entirely inside the highway boundary may not require a planning application and may be deliverable within a couple of years (about 1 year before construction could start and then possibly 1-2 years of construction time, depending on the exact details of the scheme).	In theory, a scheme is within the highway boundary doesn't need planning consent, however it was noted that if it was felt that there could be an impact to heritage or other assets such as the cemetery or SSSI, or the scope of work exceeded permitted development, it is likely some kind of approval process would be required. The quick wins we previously proposed might be deliverable within 2/3 years. Officers made it clear that a scheme on the scale the LLF Technical Group has suggested would almost certainly take longer given the complexity of widening a heavily congested live highway. The issue of planning consent would depend on the nature of the eventual scheme. A widened or new M11 pedestrian bridge would require consent.
5. A roadway of about 17-18 metres would be optimal for inclusion of two bus lanes, made up of: 2 x 3.65m for general traffic + 2 x 3-4m for buses + 2-3m for cycles/pedestrians. In front of the American Cemetery/SSSI this may have to come down to a road width of 12-15 metres.	A compliant roadway would comprise: 2 x 4 m bus lanes, 2 x 3.65m general traffic lanes, 3 m for cycles/pedestrians, 18.3m as a minimum, excluding provision of planting strips, verges, earthworks, drainage etc. As such 17-18m cannot be considered to be optimal. A reduced width of 12m would preclude provision of any public transport priority.
6. Technically, bus lanes can be accommodated equally easily in the centre of	Bus lanes can be accommodated on the nearside or offside.

the road (the median) or at the sides. However, bus lanes at the sides are more likely to be blocked by parked cars, delivery vehicles, etc. On the other hand, median bus lanes can make it harder to provide bus stops	Nearside is conventional because of the convenience for location of stops. We agree that this will not be a frequent stopping service.
- though that is not an issue for the C2C scheme which is not intended as a frequently stopping service. There is room at the "Coton turn" should a median bus stop be needed.	We agree that offside lanes are less likely to be blocked by parked cars etc. Conversely, they may be more likely to be blocked by turning vehicles.

Hybrid Scheme

The Hybrid scheme was a proposal from the LLF Technical Group. Details of the scheme were not provided and a response to the points raised is outlined below. Based on these considerations, a hybrid scheme which is mostly off-road but uses the A1303 from Madingley Mulch roundabout, offering segregated bus infrastructure for 100% of the route inbound and ~95% outbound between Cambourne and the West Cambridge site, appears to be entirely feasible.

This would offer the following:

LLF Technical Group Suggestion	Response	
A) Direct route from Cambourne to	No scheme specific details were	
Cambridge Biomedical Campus via M11 and	provided so we are unable to	
Trumpington P&R in well under 30 minutes	comment on the proposals. For	
at peak times, with segregated running for	example the 30 minute running	
>95% of the route - significantly superior to	time is not substantiated and may	
the currently proposed off-road route via the	prove extremely difficult to achieve.	
West Fields to Grange Road.		
B) Optimal access to West Cambridge site	This is factually incorrect. The off-	
and Eddington (and via Eddington to	road route penetrates West	
Cambridge Science Park) - superior to an	Cambridge and the hybrid proposal	
off-road route that passes to the south of	does not. Some services	
West Cambridge site.	associated with hybrid scheme may	
	go through Eddington but this	
	would increase journey times for	
	those vehicles affected.	
C) Access to City Centre via Northampton St	No scheme specific details were	
in under 30 minutes.	provided so we are unable to	
	comment on the proposals. For	
	example the 30 minute running	
	time is not substantiated and may	
	prove extremely difficult to achieve.	

D) Comparable with (and for some	No scheme specific details were
destinations superior to) the GCP's	provided so we are unable to
proposed off-road scheme in terms of	comment on the proposals. It is
transport performance (journey	unclear how this conclusion is
times, passenger capacity, reliability, etc).	reached. Journey time and
	reliability likely to be worse
E) Deliverable quickly and sustainable long-	This is not the case. Extensive on-
term.	line construction could not be
	delivered quickly and would impact
	significantly existing users of the
	route.
F) Compliant with possible future CAM metro	On-road solution at Junction 13
system.	would not be considered to be
	CAM compliant by CPCA
G) Significant budget (possibly £100M or	No scheme specific details were
more) freed up to support additional	provided so we are unable to
sustainable transport improvements and	comment on the proposals.
initiatives, e.g. better ticketing, public	
transport use incentives, on-demand	
services, etc.	

I hope this clarification is helpful and I look forward to discussing this further at a future Technical Group meeting.

From: Gabriel Fox		
Sent: 30 May 2019 09:29		
To: Blake Peter	; Aidan Van	de Weyer
; Lewi	is Herbert	Bates Ian Cllr
	Claire Ruskin	;
Cc: Jo Baker Motts	; Stopard Rachel	
	; Gates Laura	
Wotherspoon Timothy Cllr		; Ian Sollom
Philip A	Allen	Bridget Smith
	; Helen Bradbury	; Steve Jones
Rod	Cantrill	; Des O'Brien
; Ar	ndrew Williams	
Subjects CCD LLE angagement	an Madinglay Baad	

Subject: GCP-LLF engagement on Madingley Road

Dear all

A useful GCP/LLF workshop took place on May 22nd to explore opportunities for an optimised hybrid/off-road Cambourne to Cambridge bus route making use of the A1303 Madingley Road between Madingley Mulch Roundabout (MMR) and the West Cambridge site.

We managed to find agreement on the following:

1. A segregated, double bus-lane (inbound and outbound) would comfortably fit within the highway boundary along 90% of Madingley Road up to the M11 bridge. However, for a short stretch in front of the American Cemetery and SSSI there has been considerable encroachment over the north-side highway boundary so a single bus-lane plan may be needed there (could be in-bound only or bi-directional).

2. The lawns in front of the American Cemetery extend up to about 6 metres over the highway boundary. Some trees in front of (though not part of) the SSSI extend as much as 20 metres over the highway boundary. Given the sensitive nature of these sites, there is a good argument to protect these as much as possible. Therefore a scheme which left these more or less untouched would seem preferable - though that would have to be balanced against any environmental destruction caused by an alternative scheme.

3. The M11 overbridge at junction 13 can accommodate 4 lanes of traffic (e.g. 2 inbound and 1 outbound general traffic lanes + 1 bus lane) plus a cycle/pedestrian (non-motorised user or NMU) lane, which could be squeezed onto the bridge but may be preferable as a "bolt-on" addition to the bridge or a new NMU bridge. Atkins have previously costed (at 2010 prices) widening of the carriageway to take an extra lane at £632,000 and a new or bolt-on or NMU bridge at £2-4 million.

4. A scheme delivered entirely inside the highway boundary may not require a planning application and may be deliverable within a couple of years (about 1 year before construction could start and then possibly 1-2 years of construction time, depending on the exact details of the scheme).

5. A roadway of about 17-18 metres would be optimal for inclusion of two bus lanes, made up of: $2 \times 3.65m$ for general traffic + $2 \times 3.4m$ for buses + 2-3m for cycles/pedestrians. In front of the American Cemetery/SSSI this may have to come down to a road width of 12-15 metres.

6. Technically, bus lanes can be accommodated equally easily in the centre of the road (the median) or at the sides. However, bus lanes at the sides are more likely to be blocked by parked cars, delivery vehicles, etc. On the other hand, median bus lanes can make it harder to provide bus stops - though that is not an issue for the C2C scheme which is not intended as a frequently stopping service. There is room at the "Coton turn" should a median bus stop be needed.

Hybrid Scheme

Based on these considerations, a hybrid scheme which is mostly off-road but uses the A1303 from Madingley Mulch roundabout, offering segregated bus infrastructure for 100% of the route inbound and ~95% outbound between Cambourne and the West Cambridge site, appears to be entirely feasible.

This would offer the following:

A) Direct route from Cambourne to Cambridge Biomedical Campus via M11 and Trumpington P&R in well under 30 minutes at peak times, with segregated running for >95% of the route - significantly superior to the currently proposed off-road route via the West Fields to Grange Road.

B) Optimal access to West Cambridge site and Eddington (and via Eddington to Cambridge Science Park) - superior to an off-road route that passes to the south of West Cambridge site.

C) Access to City Centre via Northampton St in under 30 minutes.

D) Comparable with (and for some destinations superior to) the GCP's proposed off-road scheme in terms of transport performance (journey times, passenger capacity, reliability, etc).

E) Deliverable quickly and sustainable long-term.

F) Compliant with possible future CAM metro system.

G) Significant budget (possibly £100M or more) freed up to support additional sustainable transport improvements and initiatives, e.g. better ticketing, public transport use incentives, on-demand services, etc.

We look forward to discussing this further at the LLF meeting on June 6th. Given the amount of public money involved, we very much hope GCP will fully work up a scheme of this kind as the preliminary evidence suggests it may be dominant in terms of performance, value for money and environmental impact.

Kind regards

LLF Technical Group