



**GREATER
CAMBRIDGE
PARTNERSHIP**

Growing and sharing prosperity

Delivering our City Deal

Report to: Greater Cambridge Partnership Executive Board

21 March 2018

Lead officer: Peter Blake - GCP Transport Director

Histon Road: Bus, Cycling and Walking Improvements Final Concept

1. Purpose

- 1.1. This report sets out the preliminary concept design for Histon Road. The design meets the original objectives of the scheme and also takes into account the considerable public engagement that has taken place since previous options were consulted on.
- 1.2. This scheme supports the Greater Cambridge Partnership's transport vision of implementing public transport improvements along Histon Road, which is a significant part of a wider public transport strategy to help support the delivery of delivering proposed housing and employment growth at Cambridge Northern Fringe, Ely, Cambridge Science Park, Northstowe and Waterbeach (collectively around 27,000 new homes and 9,800 new jobs between 2011 and 2031).
- 1.3. Approval is sought to consult on the proposed design in the spring of 2018. Following analysis of this consultation it is planned to bring the final preliminary design back for consideration by the Joint Assembly and Executive Board in late 2018.
- 1.4. The report sets out a new construction cost estimate of £6M that has been produced by the consultant's quantity surveyor. This cost estimate is above the £4.3M that was original budgeted for this scheme. Therefore approval will be sought to work within the constraints of this increased budget.

2. Recommendations

- 2.1. The Executive Board is recommended to:
 - i. Support the 'Preliminary Concept' design shown in Plans 1-6 as a basis for public consultation and further detailed design work, including preparation of the business case.
 - ii. Approve the revised budget that includes a new estimate of £6M in capital costs for delivery of this scheme.

3. Officer comment on technical issues raised at Joint Assembly

- 3.1. The Joint Assembly reflected on public concern raised in the public questions submitted regarding the proposed removal of residents parking and pay and display bays on Histon Road. As set out in sections 5.10 - 5.12 below officers are aware that removal of parking will have implications and are committed to work with affected residents and businesses to deliver suitable mitigation options.

3.2. Concerns were raised as to whether it would be possible to enforce the proposed peak time loading restrictions. Officers accept this this an important point to consider and aim to ensure that the Traffic Regulation Orders (TRO's) are designed in such a way to allow effective enforcement.

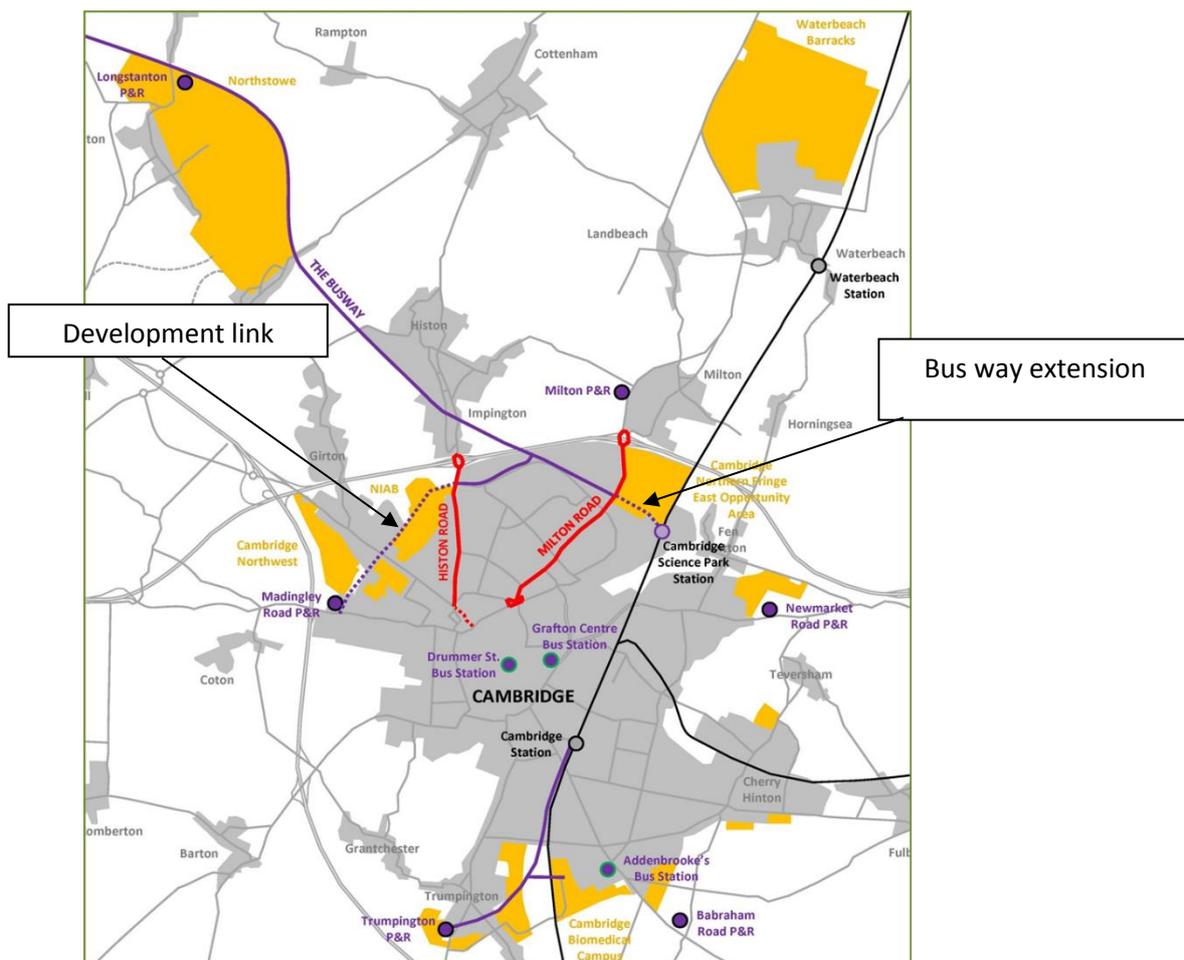
4. Key issues and considerations

4.1. The project has the following key objectives:

- a) Comprehensive priority for buses in both directions wherever practicable;
- b) Safer and more convenient routes for cycling and walking, segregated where practical and possible;
- c) Enhance the environment, streetscape and air quality;
- d) Additional capacity for sustainable trips to employment/education sites;
- e) Increased bus patronage and new services; and
- f) Maintain or reduce general traffic levels.

4.2. **Figure 1** indicates the length of Histon Road under consideration and shows its setting within the wider strategic context. The report considered by the Executive Board on 3rd November 2015 sets out the strategic and planning background, and broader context for the scheme.

Figure 1: Histon Road in the wider area context



5. Options

- 5.1. Following consultation on previous options and further local engagement that took place during the winter of 2016, the Histon Road Local Liaison Forum (LLF) proposed 12 resolutions along with ideas relating to the main junction designs. In November 2017, the Executive Board approved the Officer responses to these LLF resolutions. The responses set out a modified design direction for Histon Road which has been incorporated into the preliminary concept design by consultants WSP.
- 5.2. The design is presented in **Appendix A** and key considerations of the scheme are detailed in the following sections of this report. Consultation materials including designs and schematics will be produced for the public consultation exercise.

Junctions

- 5.3. Alternative designs for the 4 main junctions along Histon Road have now been considered in detail. This work is supported by detailed traffic modelling in order to assess the benefits or impacts that the proposed designs will have. The modelling work demonstrates that in combination with other City Access proposals, the preliminary concept will improve journey times and reliability and reduce queuing at each of the key junctions along Histon Road.
 - **Victoria Road/Huntingdon Road** – The junction is severely constrained. It is very difficult to significantly modify the junction without affecting traffic flows. However, it has been possible to set out a design that improves the environment for both pedestrians and in particular cyclists, offering some separation from motorised vehicles in the area where there is a current conflict. These benefits seek to be achieved without adverse impact on the ability for traffic to flow through what is a busy junction
 - **Gilbert Road** – It has been possible to use many aspects of the alternative LLF design which offers significant benefit to cyclists by offering off road facilities in all directions. The design also offers an on road advance stop lines for in/outbound commuter cyclists who may prefer to cross the junction on road due to the longer green time.
 - **Darwin Green** - The Darwin Green junction will be delivered by the developers and has already gone through a significant planning process. Officers are continuing the dialogue with the consultants/developers to ensure that the final design fits well with and follows the general principles of the proposed Histon Road scheme.
 - **Kings Hedges Road** - Officers have assessed the Kings Hedges junction and do not propose to make any changes to it aside from improving the cycle lane approach from the A14 junction which can be achieved without affecting the performance of the junction itself with regard to vehicle flows.

Bus Lanes and Bus Stops

- 5.4. A key aim of the project is to enhance bus priority on Histon Road. The design includes a length of inbound bus lane extending Blackhall Road to a point 40m south of Carisbrooke Road. The bus lane is estimated to improve future inbound bus journey times in the peak by up to 2.5 minutes enhancing reliability of service, a significant benefit across the network.
- 5.5. It is intended that future development of the scheme will look to include bus priority measures at the junctions in the form of bus detection and a subsequent hurry call on the signal sequence. At this stage the benefits from early bus detection at traffic signals has not been built into the traffic model and further refinements in the model will allow bus journey times to be more accurately reflected.

- 5.6. The approximate location of existing bus stops has been retained. It is proposed that where width allows the scheme will incorporate floating bus stops. This follows extensive work that has been undertaken by the County Council in developing the design alongside disability groups, cycle campaign groups, and other stakeholders, including an independent study to demonstrate their effectiveness and safety. Where floating bus stops are proposed the designs aim to provide a minimum island width of 2.3m, and in most cases it has been possible to provide up to 2.5m, in order to allow adequate space for wheelchair users to manoeuvre.

Cycling and Walking

- 5.7. The provision of high quality cycling and pedestrian infrastructure is an important objective of this scheme. As well as improvements at junctions, the design includes improved cycle lanes along the length of Histon Road. Where the road is narrower, towards the southern end of the scheme, the aim is to provide an advisory 1.5m wide cycle lane on both inbound and outbound side of the road. The advisory cycle lanes progress into segregated lanes (Cambridge Kerb) as the road widens towards the Gilbert Road junction.
- 5.8. Between Gilbert Road and the Darwin Green junction the aim is to provide a 2m wide segregated outbound cycle lane (1.6m minimum width in pinch points). On the inbound side of the road a 1.5m cycle path is protected by the bus lane for the majority of its length. The improved cycle infrastructure will improve safety and accessibility for cyclists but also address the current situation where vehicular flow is often disrupted due to the proximity of vehicles and cycles.
- 5.9. The aim is to provide 1.8m wide footpaths along the length of the scheme with a 1.4m wide minimum in pinch points. Pedestrian improvements also include provision of a new crossing in close proximity to the junction with Victoria Road.

Removal of on-street parking

- 5.10. In order to deliver highway improvements in the narrow southern section of Histon road, it will be necessary to remove the current on street parking (this includes 31 resident parking bays that are part of the Benson Area Residents Parking Zone (RPZ), and 11 pay and display. Removal of the on street parking is dependent on the ability to mitigate the impact, therefore, a detailed parking survey was undertaken within the area (the methodology agreed with the LLF in advance). The survey demonstrates that during the mornings and evenings there is sufficient space within the Benson Area RPZ to accommodate the displaced residents parking, created from the proposed removal of parking bays on Histon Road. However it is accepted that there would be a level of inconvenience introduced by this proposal, especially to those residents living directly along Histon Road.
- 5.11. A number of points were raised by residents who attended the AGM including the requirement for loading, unloading, deliveries and accessibility for disabled people. These points need to be considered in detail when the Traffic Regulation Orders (TROs) are developed, but initial thoughts are that these issues could be addressed by the use of loading restrictions, along Histon Road, at peak times only. It was also proposed that parking restrictions could also be limited to peak times. This is a point worth considering, but needs to be carefully weighed up against the negative impact this would have on the new cycling provision and compromises this could have on the current design, limiting improvements that are possible at the southern, narrow end, of Histon Road.
- 5.12. With regard to the lost pay and display bays on Histon Road, it is proposed to investigate the possibility of relocating these spaces to Linden Close.

Landscape and Environment

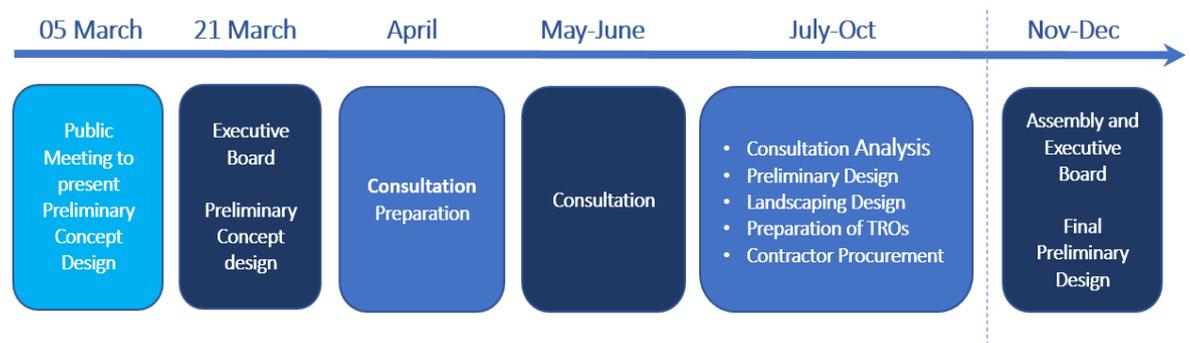
- 5.13. The design retains the line of trees running north from Gilbert Road to Carisbrooke Road. Following discussion with the Cambridge City Council arboriculture officer there is an understanding that if roots are damaged during construction then there will be a commitment to replace any lost trees. It is worth noting that it will also be possible to retain much of the mature hedgerow to the north of Blackhall road and that officers have begun discussions with the landscape designer working for Greater Cambridge Partnership, with regard to opportunities for urban realm improvements along the road. Designs will be worked up in consultation with the LLF in order to feed into the final design.

Cost Benefit.

- 5.14. The consultants WSP have prepared an early cost benefit analysis of the scheme which has indicated a benefit to cost ratio (BCR) in the range of 1.6 to 2.9, demonstrating strong value for money.
- 5.15. The approximate current day capital cost for the preliminary concept design is estimated to be £6 million. This current estimate is above the original £4.3 million that was budgeted for this scheme, but which was at the time a very high level estimate.

6. Next steps and milestones

- 6.1. Subject to the decision made by the Executive Board, Officers plan to follow the broad programme as set out below. This includes consultation on the current proposed design, taking place for a six week period between May and June 2018.



7. Implications

Financial and other resources

- 7.1. The scheme development and implementation is funded by Greater Cambridge Partnership through City Deal funding.

Legal

- 7.2. No significant legal implications have been identified at this stage although they may emerge as the project moves towards the statutory process stage.

Staffing

- 7.3. Project management is undertaken by Cambridgeshire County Council. Design work would be undertaken by consultants WSP.

Risk management

- 7.4. A full project risk register forms part of the Project Plan.

Equality and diversity

- 7.5. There are no equality or diversity implications in this report although they may emerge as the project moves towards the statutory process stage.

Climate change and environmental

- 7.6. The proposed measures have the potential to reduce congestion and improve air quality in the longer term through encouraging a shift towards sustainable transport modes.

Consultation and communication

- 7.7. A programme of engagement with the Histon Road Local Liaison Forum has led to the Officer recommendations in this report. Officers will carry out further engagement with the Local Liaison Forum through the future design phases.

List of appendices

Appendix A	Preliminary Concept Design Layout and Key Features
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Background papers

[Paper]	[Link]
Executive Board agenda and minutes Nov 2015	http://scambs.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6537&Ver=4
Executive Board agenda and minutes June 2016	http://scambs.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6632&Ver=4
Executive Board agenda and minutes Nov 2017	http://scambs.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6858&Ver=4