



**Report to:** Greater Cambridge Partnership Executive Board

08 February 2018

**Lead officer:** Chris Tunstall – GCP Interim Transport Director

### **A10 Foxtton level crossing bypass and travel hub**

#### **1. Purpose**

- 1.1. The list of priority schemes for support from the Greater Cambridge Partnership (GCP) was agreed at the Executive Board meeting of 28<sup>th</sup> January 2015. The A10 Foxtton level crossing bypass whilst not within the list of prioritised schemes, was included as a relatively high priority for future consideration within later funding streams. It is now being recommended for further development as part of the Future Investment Strategy.
- 1.2. Whilst the original scheme initially only considered a level crossing bypass the revised proposals will also be consider a more extensive ‘travel hub’ with the provision of additional parking facilities to complement both our existing Park and Ride and Rural Travel Hub proposals.

#### **2. Recommendations**

- 2.1 The Executive Board is recommended to:
  - a) Note the assessment work and review of the options presented in this report and Appendix 1
  - b) Approve the development of an ‘Outline business case’ for a preferred option.
  - c) Explore the opportunity for Foxtton Station to act as a Travel Hub with a Park and Ride facility for onward rail trips into Cambridge and Cambridge North stations, and the proposed, future Cambridge South station.

#### **3. Officer comment on technical issues raised at Joint Assembly**

- 3.1. The Joint Assembly raised an issue concerning the level of car parking provision that could be provided as the Rural Travel Hub indicated approximately 40 spaces and the Network Rail 2013 GRIP 2 report proposed 85 spaces.
- 3.2. It was explained that the assessment of the scheme would be re-evaluated based on a Travel Hub and updated using the GCP objectives as opposed to the Network Rail considerations. The car parking will be looked at together with the bypass, not separately, as part of an integrated approach.

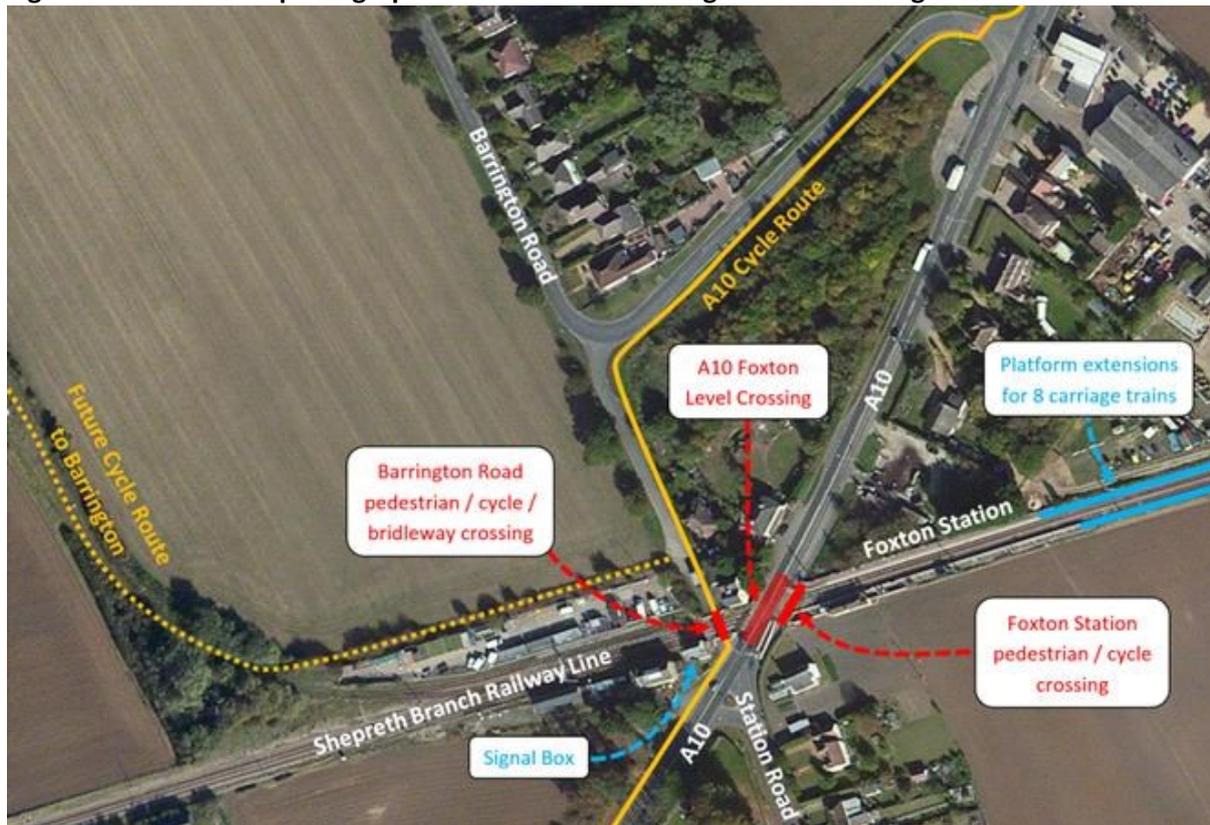
- 3.3. Questions were also raised about how this scheme would be integrated into the proposals in respect of East/ West Rail and Cambridgeshire Autonomous Metro (CAM), and other modes such as cycling together with the potential for other avenues of funding that might be looked into.
- 3.4. Officers responded confirming that the scheme would be developed taking other initiatives and investments into account. They also stated that cycling provision would be maintained in respect of the Barrington development requirement to provide a cycle link to the A10, and with cycle parking at the new Travel Hub. Officers assured the Joint Assembly that other organisations would be approached for funding such as Network Rail, East West Rail Consortium, and the Combined Authority depending on the scope of the works.
- 3.5. A question was raised regarding the emerging Foxton Neighbourhood Plan and that consideration should be given to this and the local community concerns about both visual impact and the impact on the conservation area which should be recognised as part of the study.
- 3.6. It was explained that these matters would be considered and that officers had already met the Parish Council and were aware of the emerging Neighbourhood Plan, the existing and proposed conservation area, as well as localised issues such as historically valuable buildings such as the signal box.

#### **4. Key issues and considerations**

##### ***Background***

- 4.1 At the point where the Cambridge to Royston railway line crosses the A10, there are three at-grade crossings of the track: one for the road, and two pedestrian / cycle / bridleway crossings. The road crossing causes significant congestion on the A10, particularly in peak periods. The A10 Foxton level crossing bypass scheme involves provision of infrastructure to enable the closure of the level crossing on the A10 to the immediate south of Foxton Station. The closure would be facilitated by providing a bridge or underpass for the A10 on a bypass alignment to the north west of the existing road. A pedestrian bridge or underpass at Foxton Station could also be provided as part of the scheme. Figure 1 below shows a plan of the current layout of the level crossing, some annotated constraints and future considerations.

**Figure 1** Aerial photograph of Foxton level crossing and surrounding area



- 4.2 This report summarises technical work carried by Cambridgeshire County Council, on behalf of Network Rail in 2013 (Appendix A). It also considers the present strategic objectives of the GCP and reflects more recent considerations of the, 'Cambridge to Royston cycle route', Cambridge North Station, East West Rail, Cambridge South Station proposals and Hauxton Travel Hub (Park and Ride).
- 4.3 There is a clear policy background supporting a strategic improvement to the transport network in the A10 Foxton area, particularly in the context of local growth, safety and reductions in journey times and congestion on the A10. The Third Cambridgeshire Local Transport Plan (LTP) 2011-2031: Policies and Strategy A10 Foxton Level Crossing states that 'a bridge or underpass across the railway, removing the conflict between trains and vehicular traffic, cyclists and pedestrians' is expected to be delivered. The 'scheme may also provide a new station footbridge or underpass, and improved interchange facilities'.
- 4.4 The Foxton level crossing bypass scheme supports many of the Greater Cambridge Partnership's aims and objectives including:
- Easing congestion and making it easier for people to travel by rail, cycle or on foot to improving average journey times
  - Keeping the Greater Cambridge area well connected to the regional and national transport network, opening up opportunities by working closely with strategic partners
  - Reallocating limited road space in the city centre and invest public transport
  - Connect Cambridge with strategically important towns and cities by improving our rail stations and financing new rail links
- 4.5 The scheme has an interface with other GCP schemes including the Western Orbital Park and Ride interventions and the A10 Royston to Cambridge foot and cycleway. The connection to these schemes can be seen to further the additional GCP aims and objectives including:

- Invest in public transport (including Park & Ride) to make bus travel quicker and more reliable
- Build an extensive network of new cycle-ways, directly connecting people to homes, jobs, study and opportunity.
- Complementary to existing and proposed Park and Ride and Rural Travel Hubs.

4.6 It is intended to seek authority from the GCP Executive Board to review the existing work that has been undertaken and evaluate the options based on the GCP strategic objectives. It is programmed for such a review to be completed by June 2018. Work can then progress and an Options Appraisal Report (OAR) and an Outline Business Case (OBC) can be completed by end of 2018. Following a public consultation in the spring of 2019, approval for a Full Business Case (FBC) for the scheme will be sought.

#### ***Rail implications***

4.7 The A10 currently takes around 16,000 vehicles per day in the Foxton area, the level of traffic that a road of this type could be expected to cater for. However, the presence of a full barrier level crossing significantly limits the capacity of the route. Currently, the Shepreth Branch line typically takes four Great Northern passenger train an hour in each direction, one or two of which stop at Foxton Station. The spacing of the trains and volume of traffic mean that queues on the A10 do not always have the opportunity to clear between level crossing closures, particularly at peak periods.

4.8 From 2018, the number of passenger trains using the route will increase to six trains an hour in each direction, with at least two stops per hour at Foxton. This will increase the closure time at the level crossing. In addition Freight trains also impact the crossing down time using a siding at Foxton that provides access to Barrington Quarry.

4.9 The East West Rail proposals would provide a new railway from the Bedford area to Cambridge, as part of a longer route from East Anglia to Oxford and potentially onwards to the west of England on existing lines. The route for the central section of East West Rail has yet to be determined, but it is possible that it could travel along the route of the Shepreth Branch through the Foxton area. The design of such a route would dictate no level crossings, meaning that an alignment through Foxton would have to provide a bridge or underpass across the A10. If the bypass scheme was progressed in advance of this process it would inform any option selection as opposed to be constrained by it.

4.10 As part of the national programme to close level crossings Network Rail have committed to a risk reduction programme. The objective of the programme is to close and upgrade crossings across the network, which will improve safety for everyone and reduce the risk that level crossings present to the national rail network. Network Rail has identified the level crossings on the A10 at Foxton as a suitable site for evaluation.

4.11 The Foxton level crossing bypass scheme has currently progressed through the GRIP 1 and 2 (Governance for Railway Investment Projects) stages. GRIP1 established the scope of scheme and the investment needed and potentially asset renewal and GRIP2 defines the investment goals and identifies constraints to ensure that they can be achieved both economically and strategically. GRIP2 identifies the route Options and narrows the assessment to preferred

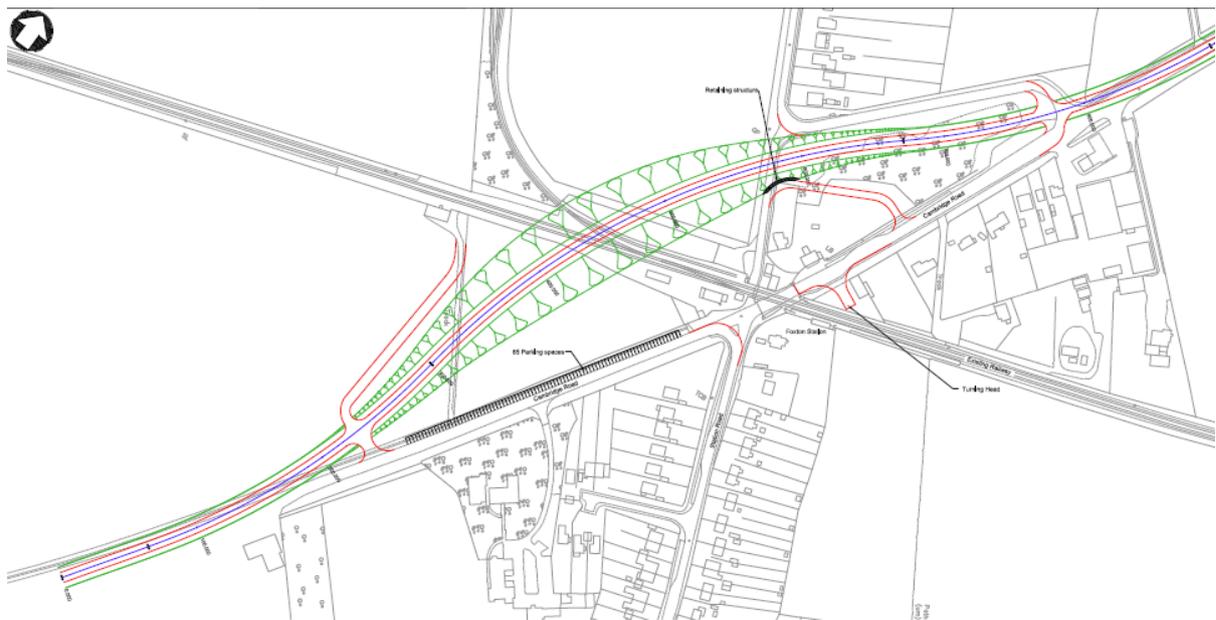
options based on the requirements of the statutory undertakers, physical and environmental constraints and makes recommendations for further work.

4.12 In the 2013 GRIP2 work confirmed that the most feasible options were for a bridge or underpass taking the A10 across the railway on an alignment to the north of the current road. It also noted that while a bridge would be cheaper, an underpass would be likely to be less intrusive. Figures 2 and 3 below show an indicative bridge and underpass route option considered on the north side of the A10 from the GRIP2 report.

Figure 2: Indicative overbridge option layout from GRIP2 report



Figure 3: Indicative underpass option layout from GRIP2 report



4.13 The 2013 GRIP2 report shows that an additional 85 car parking spaces could be provided as an option to be delivered within the scheme. However, in light of the current forecast growth and the possible investments in the rail service and potential for station improvements consideration should be given for Foxtton Station to act as a Travel Hub (Park and Ride / Rail facility) with sufficient car parking provision to accommodate demand for onward rail trips into Cambridge.

## 5.0. Options

5.1. The assessment work undertaken in 2013 did not conclude a Benefit to Cost Ratio (BCR) as the scheme was not fully costed. However, the assessment of similar schemes and the forecast growth of train and traffic travel patterns in Foxtton indicates that the likely BCR value would be 'high' or 'very high' (The Department for Transport uses the following categories in relation to Benefit Cost Ratios: Low Value for Money if BCR = 1.0 to 1.5; Medium Value for Money (VfM) if BCR = 1.5 to 2.0; High Value for Money if BCR = 2.0 to 4.0; very high VfM if the BCR is greater than 4.0). The LTP estimates costs for the scheme within the range of £14-24M and the GRIP2 report estimated costs between £11-19M, but these costs are now considerably out of date.

5.2. It is recommended that the costs for Foxtton would need to be assessed in more detail, further work on proposals should seek to develop and assess options that:

- Provide a bridge or underpass for the A10 across the Shepreth Branch to the north of the current A10 alignment, allowing for the closure of all three level crossings in the Foxtton Station area.
- Provide pedestrian and cycle facilities that allow grade separated crossing of both the railway and the A10:
  - for journeys between Foxtton and the A10 cycle route;
  - for journeys between Barrington and Foxtton / Foxtton Station; and
  - across the railway at a footbridge at Foxtton Station.
- Consider the junction strategy for the terminal points of the A10 bypass alignment, in the context of the above, and also of the additional points noted below.
- Provide enhanced facilities at Foxtton Station including car and cycle parking, passenger waiting facilities, ticket machines.

5.3 In addition it is recommended that the development of options should:

- Explore the opportunity for Foxtton Station to act as a Travel Hub with a Park and Ride facility for onward rail trips into Cambridge and Cambridge North stations, and the future Cambridge South station.
- In discussion with Network Rail, consider the implications of an East West Rail alignment through the Foxtton area and how it would impact on the level crossing and station improvement options (including whether East West Rail trains might stop at Foxtton).
- Be future-proofed against a possible future requirement for further platform lengthening to allow 12 carriage trains to stop at Foxtton.

## 6. Next steps and milestones

6.1 This report has identified a number of feasible proposals for interventions at the Foxtton level crossing. It is now proposed to recommend the review of these options and the development of an 'outline business case' for a preferred option.

6.2 The proposed timetable for the business case development work is as set out below in Table 1:

<b>Activity</b>	<b>Target completion date</b>
Review the existing GRIP 2 report and options recommended	June 2018
Develop series of distinct options for bypassing the level crossing (including consideration of developing additional parking arrangements)	October 2018
Present options for consultation to GCP Executive Board	December 2018
Public Consultation on Options	March / April 2019
Final Option recommendation to GCP Executive Board to be considered for approval subject to other investment priorities.	October 2019

6.3. Subject to the above the following key milestones will be undertaken:

Detailed design and other preparatory tasks for planning process	2020
Obtain relevant planning powers to construct	January 2021
Start construction	Summer 2022
Scheme completion	December 2023

**Table 1 – Key Milestones (subject to statutory permissions)**

## **7.0 Implications**

### **7.1. Financial and other resources**

The scheme development is funded by Greater Cambridge Partnership through City Deal funding.

### **7.2. Legal**

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

### **7.3. Staffing**

Project management is undertaken by Greater Cambridge Partnership. Consultants have yet to be appointed for any Design work needed.

### **7.4. Risk management**

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

### **7.5. Equality and diversity**

There are no equality or diversity implications in this report.

#### **7.6. Climate change and environmental**

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.

#### **7.7. Consultation and communication**

Officers anticipate engagement with the statutory and local stakeholders through the future design phases of the scheme.

#### **List of appendices**

Appendix 1	NR Foxton Level Crossing Closure: GRIP 2 Feasibility Study Report. May 2013
------------	---