

ELY ROAD CROSSING

To: **Cabinet**

Date: **17th September 2012**

From: **Executive Director - Economy, Transport and Environment**

Electoral division(s): **Ely North and East**

Forward Plan ref: **N/A** *Key decision:* **Yes**

Purpose: **To consider options to relieve congestion at the A142 level crossing at Ely and approve the associated Compulsory Purchase, Side Road and Navigation Orders.**

Recommendation: **Cabinet is recommended to note the comments brought forward by the Overview & Scrutiny Committee and to approve:**

- a. Pre-planning submission public consultation;**
- b. the submission of a planning application for option B;**
- c. the publication of Draft Compulsory Purchase, Side Road and Navigation Orders; and**
- d. the delegation of power to make, if necessary, minor or technical amendments to the Draft Compulsory Purchase, Side Roads and Navigation Order to the Executive Director: Economy, Transport and Environment in consultation with the Cabinet Member for Growth and Planning .**

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1 INTRODUCTION & BACKGROUND

- 1.1 Cabinet at its meeting on the 13th December 2011 considered emerging proposals to relieve congestion at the A142 level crossing at Ely. Cabinet indicated a preference for a bypass on route option B, but supported further design and evaluation of five options.
- 1.2 Following the Cabinet meeting an Options Assessment Report (OAR) has been developed, which appraises all of the potential schemes. These appraisals are summarised in sections 2 and 3 of this report. Additional work has also been undertaken on the technical feasibility and construction methodology for the underpass improvements, and this work has been fed into the OAR.
- 1.3 In parallel with the technical work further discussions have also taken place with key partners such as the District Council, Network Rail and English Heritage to understand their concerns and requirements in developing the appraisal. English Heritage and others have raised concerns about the possible impact of the bypass on the setting of Ely Cathedral. To address this, a Heritage Setting Study has been undertaken to provide an objective appraisal of the visual impacts of the options on the setting of the Cathedral. The methodology of the study was agreed with English Heritage and follows national standards. The background documents are available at:
www.cambridgeshire.gov.uk/transport/elycrossing
- 1.4 Enterprise Growth and Community Infrastructure Overview and Scrutiny Committee considered the Cabinet decision on 12th January 2012. The Committee was informed of the additional work being done on the options. The Committee agreed that no further action was warranted but asked to review the Options Assessment Report and Setting Study prior to their consideration by Cabinet.
- 1.5 The OAR and Setting Study were considered by the Enterprise Growth and Community Infrastructure Overview and Scrutiny Committee on 12th July 2012. Following extensive debate and consideration of the issues the Committee agreed to make the following recommendations to Cabinet:
 - 1 Commission appropriate surveying and modelling to ascertain the impact of the options on surrounding areas
 - 2 Obtain a formal position statement from English Heritage regarding the OAR in order to inform future decisions
 - 3 Consider all methods of adapting whichever option is chosen so that it is sympathetic to the surrounding area
 - 4 Proceed with Option B, subject to the above recommendations
- 1.6 The members of Scrutiny supported Option B by a majority of 6-4.
- 1.7 Additional traffic surveys have been commissioned to allow the existing traffic model to be extended. This will enable the traffic impacts over a larger surrounding area to be quantified. It is anticipated that this work will be completed in September and will feed into any future consultation.

- 1.8 English Heritage continue to work with the project team, and have submitted their formal response, which is attached to this paper as Appendix C, and is available on the Council's website. The concerns of English Heritage are considered in section 3 of this report.
- 1.9 During the development of the OAR and Setting Study discussions took place with English Heritage (EH). These included detailed discussions with Officers to agree the parameters of the studies and meetings involving senior officers and lead members. The draft final versions of both the OAR and Setting Study were issued to EH prior to the preparation of the papers for the Overview and Scrutiny meeting.
- 1.10 English Heritage continued to express their concerns about the bypass option and following a meeting with senior officers on the 26th June 2012 EH wrote to the council outlining their position. This letter was not tabled to Overview and Scrutiny Committee as it only restated English Heritage's position. It was, however, subsequently sent to the Committee members as well as the formal advice from English Heritage noted above. Council officers asked EH several times to set out their formal substantiated position so that this evidence could be made available to the Overview and Scrutiny Committee but English Heritage declined to do so. Despite this the report to Overview and Scrutiny made it very clear that English Heritage were not supportive of the bypass and this was also made clear at the meeting
- 1.11 The detail design of any option taken forward to a planning application will be developed to fit as sympathetically as possible into the existing townscape and landscape. The public consultation will feed directly into the design process influencing the final scheme.

2. OPTIONS ASSESSMENT SUMMARY

- 2.1 The Options Assessment Report assesses the options under consideration against established national criteria for schemes of this nature as well as an assessment of the local tourism impact. The following options have been assessed;
- Heavy Commercial Vehicle (HCV) Stacking Area
 - HCV Queuing Lanes
 - Bypass route D
 - Bypasses route B
 - Underpass Improvements
- 2.2 The location of each of these potential options is shown on Appendix A.
- 2.3 The OAR considers the need for intervention, and then evaluates how effectively each option achieves the objectives identified. The report brings together and updates work done to date to form a strategic review of the evidence available. It does not seek to provide recommendations as to which option to take forward, rather simply laying out the evidence for each option. Project recommendations are given in section 4 of this paper and are based

on an officer evaluation of the performance of the individual options against each other and the agreed assessment criteria.

- 2.4 The full appraisal table for each option is shown in Appendix B.
- 2.5 As part of the OAR the Benefit Cost Ratio (BCR) of each option has been calculated. The BCR takes into account the benefits assessed in monetary terms of implementation of a project versus the amount it costs to deliver the project. The higher the BCR the better the investment. The monetary benefit takes into account a wide range of factors including journey time savings, reliability benefits, vehicle operating costs and indirect tax benefits relating to spend on fuel.
- 2.6 As part of the assessment all previous cost estimates have been reviewed and revised to 2014 prices.
- 2.7 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 if BCR = 1.5 to 2.0; high value for money if BCR = 2.0 to 4.0.
- 2.8 Benefit Cost Ratios for each option are as follows:
- | | |
|--------------------------|---|
| • HCV Stacking Area | 1.14 (low value for money) |
| • HCV Queuing Lanes | 2.13 (high value for money) |
| • Bypass route D | 0.88 (does not represent value for money) |
| • Bypass route B | 2.69 (high value for money) |
| • Underpass Improvements | 1.03 (low value for money) |
- 2.9 In summary, the impact of the options is as follows.

HCV Stacking Areas/HCV Queuing lanes

- 2.10 The HCV stacking areas or queuing lanes would provide dedicated waiting areas for high vehicles including buses, which can then be allowed across the level crossing when the barrier is open. This would prevent the current situation whereby large vehicles queuing at the crossing block the use of the existing underpass and contribute towards long queues.
- 2.11 These are relatively low cost schemes (£5.6m and £7.5m respectively) but would be extremely difficult to enforce and blocking of the crossing may still occur. There are also significant concerns over the safety of the proposals and they would not offer wider regeneration benefits in the area and would create problems on the wider road network. Although these schemes would be locally visually intrusive there would be no significant impact on the historic environment of Ely.
- 2.12 The Benefit Cost Ratio of these schemes is 1.14 for the HCV Stacking Area and 2.13 for the HCV queuing lanes.

Bypass route D

- 2.13 This bypass option is a 1.5km long, single carriageway designed for a 60mph speed limit. It contains one structure – a bridge over the rail line. A four arm roundabout is at its western end connecting with Angel Drove (A142). It connects at the eastern end by a three arm roundabout adjacent to the existing underpass. The estimated cost is £34.2m.
- 2.14 This scheme will remove traffic from the crossing allowing it to be closed. It will not, however, result in local traffic redistribution meaning that wider benefits to Ely of removing traffic from the station area will not be realised. It will also have a moderately adverse impact on the access to the rail station because of the location of the roundabout in relation to the car park entrance, which will cause queuing in the car park during the morning peak period.
- 2.15 The rail bridge would need to be a substantial structure as the alignment would require the road to be on a relatively tightly curved alignment at the point where it crosses a junction of multiple railway tracks. This structure would have a significant negative impact on the setting of Ely Cathedral.
- 2.16 The Benefit Cost Ratio of Bypass route D is 0.88.

Bypass route B

- 2.17 Option B proposes a 1.7km long single carriageway bypass designed for a 60mph speed limit. It contains two structures – a viaduct over the river and flood plains and a two span bridge over the Cambridge and Newmarket railway lines. The cost is £30.7m.
- 2.18 This scheme will remove traffic from the crossing allowing it to be closed. It will also result in local traffic redistribution, thus removing traffic from the sensitive station area. It will also result in more balanced traffic flows throughout Ely arising from wider traffic distribution which will result from removing congestion at the Queen Adelaide Way junction with the A142. In transport terms it therefore achieves considerably more than the other options including Bypass Option D.
- 2.19 Bypass route B will have a significant negative impact on the setting of Ely Cathedral in particular where the alignment crosses the River Ouse.
- 2.20 The Benefit Cost Ratio of Bypass route B is 2.69 in consequence of the wider traffic congestion reductions achieved.

Underpass

- 2.21. Three potential underpass options have been considered. As the feasibility of constructing an underpass is a key concern with these options a technical feasibility study has been undertaken in addition to the OAR. The only option which would meet full highway standards and construction methodology requirements is to widen and lower the under pass (option U2 in the technical feasibility report) This option has therefore been assessed in greater detail.

The option will require online widening to provide a 7.3m carriageway plus footway/cycleway and lowering of the existing carriageway to provide 5.3m headroom. The scheme would require some land but would not result in the loss of car parking spaces at the rail station.

- 2.22 The estimated cost is £30.8m. Enlarging an underpass under a live railway line requires a sequence of complex engineering operations, each with significant construction risks, including disruption to train operations. In consequence the estimate includes a significantly higher allowance for risk than the bypass options.
- 2.23 Underpass construction would require closure of the existing underpass with consequent traffic disruption and potential impacts on Ely businesses. These temporary impacts are not taken account of in the Benefit Cost Ratio (BCR) assessment.
- 2.24 The scheme would allow the level crossing to be closed but would not remove traffic from the station area, and unlike the bypass options it does not achieve any wider traffic redistribution benefits. It would be more visually intrusive than the existing layout requiring substantial concrete retaining walls within the Ely Conservation Area and will therefore have a slight adverse impact on the setting of Ely Cathedral.

3 RAILWAY INDUSTRY POSITION

- 3.1 During the development of the scheme there has been considerable discussion with the rail industry. This includes station and train operating companies and Network Rail. The railway industry partners are fully supportive of the principle of creating an alternative route and have submitted a brief statement to this committee outlining their position. This is attached as Appendix D.
- 3.2 The rail industry support the objectives of the Ely Crossing scheme as a significant element in the improvements needed to support the increase in passenger and freight services through Ely. Their response draws particular attention to the opportunities to improve access to the station, which they consider only a bypass solution can provide, and their concerns about the potential for substantial adverse impact on rail services during construction of an underpass. They conclude that the rail industry preferred solution would include a bridge over the railway line to the south-west of the station.

4. EVALUATION

- 4.1 The full option assessment is provided in Appendix B. An evaluation, which summarises this information and identifies the recommended option, is set out below. The evaluation considers the following criteria.
 - Does the option alleviate the congestion on the A142 at Ely.
 - Value for money, what is the cost to benefit ratio for each option.

- What are the impacts to the environment and heritage.
- Does the option provide any wider or additional benefits or dis-benefits.

4.2 Using these criteria, officers are of the view that neither the HCV stacking area nor the HCV queuing lanes offer sufficient benefit to be considered further. Neither provide wider traffic benefits or improve traffic conditions in the immediate vicinity of the station. There are serious concerns about the safety of both, and both would require a level of enforcement that could not be guaranteed, thus reducing their effectiveness. The BCR for the stacking area is low and whilst higher for the queuing lanes, this is not sufficient to outweigh the dis-benefits. In both cases the BCR's are lower than the Bypass route B option.

4.3 An assessment of the remaining three schemes against these criteria is as follows.

Alleviation of congestion on the A142 at Ely

4.4 Considering only the issue of the existing delays at the level crossing, both bypass options and the underpass provide effective solutions. However the underpass option creates no additional road capacity and thus makes no significant provision for future traffic growth.

Value for money

4.5 Bypass Option B which is estimated to cost £30.7 million shows the strongest performance on economic and social impacts with a BCR of 2.69 (High Value for Money) and performs significantly better than all other options in terms of journey time savings (£20 million) and reliability benefits (£4.7 million) for business users and transport providers.

4.6 Bypass Option D is estimated to cost £34.2 million has a low BCR of 0.88 (Negative Value for Money). It is less beneficial than Route B and shows journey time savings of only £6 million against £20m for route B. It has reliability benefits of £2.5 million against £4.7 million for route B for business users and transport providers.

4.7 The underpass improvement option has a BCR of 1.03 (Low Value for Money) and again is less beneficial than Route B in terms of journey time savings (£6m against £20m for route B) and reliability benefits (£2.3 million against £4.7m for route B) for business users and transport providers. This is because the underpass only alleviates congestion at the level crossing whereas option B has much wider congestion reducing benefits.

Environment and Heritage

4.8 Since the Overview and Scrutiny Committee in July, English Heritage have formally responded to the OAR, and the Heritage Setting Study. A copy of the formal response is attached to this paper as Appendix C and is available on the website.

- 4.9 English Heritage consider that the bypass would result in substantial harm to the setting of Ely and its Cathedral. English Heritage are concerned that the Baseline Heritage Setting Study does not make it clear that the setting of the Cathedral is the primary heritage issue and consider that the report is not balanced as, in their view, it includes too much detail on the analysis of less important heritage assets, resulting in an under assessment of the harm of a bypass option. English Heritage also consider that the OAR lacks clarity in identifying the key drivers behind the project.
- 4.10 English Heritage confirm that they have been party to a number of detailed discussions on the setting study providing further detailed comments on specific points within the reports. However, they wish to make it clear that they have not agreed the content. None of these points are in officers' view, sufficient to change the recommendation for bypass B.
- 4.11 The project team will continue to work with English Heritage updating and amending the Baseline Setting Study with a view to getting agreement prior to a planning submission. These updates will also inform the planned public consultation and any subsequent planning application.
- 4.12 The Council's evaluation recognises that the bypass options have significant adverse impacts to landscape character and particularly in relation to the historic setting of Ely and the Cathedral, although this is only from specific limited areas and views, in particular from the River and adjacent footpath. The view of the cathedral approaching Ely by road from Stuntney is unaffected.
- 4.13 The heritage impact of route D is judged to be less intrusive than that of route B, however, it is still considered to have an adverse impact on the setting of the Cathedral, City and river. The photomontages illustrating the visual impact of the Options will be available at the meeting.
- 4.14 For both bypass options B and D, overall CO₂ emissions would increase as a result of longer journeys but the localised CO₂ emissions in the vicinity of the station would reduce significantly as traffic is removed. Noise and severance impacts in the station area would also be significantly reduced
- 4.15 The underpass would see only small decreases in CO₂ in the station area and noise and severance impacts would be largely unchanged.

Wider additional benefits and dis-benefits

- 4.16 The existing A142 separates the railway station from the town. The station forecourt, and the area surrounding it and the A142, are generally considered to present a poor aspect for those arriving in the City by train. East Cambridgeshire District Council is currently reviewing its Local Plan, with a view to incorporating proposals for improvements in the station area into the statutory planning framework. It is anticipated that a public consultation on the emerging proposals will commence in the autumn.

- 4.17 The bypass options will significantly reduce the amount of traffic in the vicinity of the rail station. This will allow for the enhancement of a part of the City which is within the conservation area and an important gateway to Ely. It is an important area in the broader setting and experience of Ely as a historic city and religious centre. Improvement of this area will significantly enhance the economy of Ely by allowing for environmental improvements that will draw in more tourists and make it a more attractive place to live and work.
- 4.18 This is all captured in the District Council's emerging Local Plan which contains growth goals for the city, and has as key proposals, development of station interchange facilities and an employment hub, reduction in severance of the station from the City by traffic congestion and improved walking and cycling links.. This work is programmed to go to public consultation later this year to be followed by a formal decision.
- 4.19 An underpass solution would not allow for these wider benefits to be achieved. It would not reduce traffic in and around the station and its physical scale and form would increase severance and reduce possibilities for wider environmental and heritage enhancement. It will not improve the broader views of Ely for those emerging from the rail station and makes enhanced and logical walking and cycling routes more difficult to achieve.

Evaluation Summary

- 4.20 Taking all of these points into consideration, the officer recommendation is that Bypass route B should be the option the Council promotes through planning. Bypass Option B is the most effective in relieving congestion in Ely, provides the best value for money and, by allowing the improvement of the areas around the station, has the greatest additional benefits. Set against these is the impact on the heritage setting of the Cathedral, which, while significant, is not considered to outweigh the other benefits.
- 4.21 In contrast the underpass while preserving the heritage setting only achieves the limited transport objective of relieving existing congestion at the level crossing. It would rule out any significant improvement of the station area, has no additional transport benefits, makes no provision for future traffic growth and is poor value for money.
- 4.22 Members in arriving at a decision will wish to consider for themselves the relative weight to be given to the benefits of Option B in comparison with an underpass and the recognised significant impact of Option B on the heritage setting of the Cathedral.

5. PREFERRED OPTION AND NEXT STEPS

- 5.1 Should Cabinet be minded to support option B, further public consultation setting out the findings of the options assessment, heritage setting study and the detailed design for option B will be required. It is anticipated that the consultation would take place in October and November prior to a planning application submission at the end of the year.

- 5.2 The planning application will require a full Environmental Impact Assessment and would be considered by the County Council's Development Control Committee under Regulation 3 of the Town and County Planning Act.
- 5.3 Given the complexity of issues and the heritage setting of Ely Cathedral being of national importance it is possible that the Secretary of State will call in a planning application decision for review at Public Inquiry.
- 5.4 Option B is 1.7km in length and crossing arable land, flood plain and committed development land. A total of 11 land owners and 3 tenants are affected. The scheme requires the acquisition of approximately 13 hectares of land, with an additional 3 hectares required for construction and ongoing maintenance.
- 5.5 Whilst every reasonable effort will be used to acquire the necessary land and rights by negotiation, a Compulsory Purchase Order and a Side Roads Order are proposed to ensure the necessary land and powers are available to deliver the scheme. The Orders will be made under the 1980 Highways Act. A separate Navigation Order, using a Statutory Instrument, is required to build a new Highway over navigable water.
- 5.6 The Orders would be published late in 2012 in parallel with the planning application. Objections to the Orders are also likely to be considered at a Public Inquiry. It is therefore anticipated that all of the issues regarding the scheme would be considered at a Public Inquiry, which it is anticipated would take place in the summer of 2013. Subject to the outcome of the Inquiry the earliest possible start date for construction would be summer 2014.
- 5.7 To facilitate delivery, Cabinet is asked to delegate the power to make, if necessary, minor or technical amendments to the Draft Compulsory Purchase, Side Roads and Navigation Orders to the Executive Director: Economy, Transport and Environment in consultation with the Cabinet Member for Growth and Planning.

6 SIGNIFICANT IMPLICATIONS

The following bullet points set out details of significant implications identified by officers:

6.1 Resources and Performance

- The report seeks approval to progress the scheme through statutory processes. Work is going on in parallel on the options for funding implementation.
- The production of the Orders will be managed by existing officer capacity within the County Council
- The County Council's highway consultants, Atkins, have the resource and capability to undertake the work. This will be funded by the Council's capital programme
- There are no significant financial implications from this report.

6.2 Statutory Requirement and Partnership Working

- Compulsory Purchase Orders will be needed for the timely acquisition of land.
- Side Road Orders are required when it is necessary to stop up highways and /or private means of access and local footpath diversions.
- The County Council is working in partnership with East Cambridgeshire District Council.

6.3 Equality and Diversity Implications

- The proposal will have no equality and diversity implications.

6.4 Engagement and Consultation

- Further pre-planning consultation is programmed for October and November 2012 to inform the detailed design and final planning application submission.

6.5 Public Health Implications

- The proposal will create further opportunities to improve walking and cycling links in and around the south east of Ely. These improvements could lead to improved mobility and access to the countryside for local residents.

Source Documents	Location
Enterprise, Growth and Community Infrastructure Overview and Scrutiny Committee paper 12th January 2012 Ely Crossing Options Assessment Report Ely Stetting Study Underpass Improvements Feasibility Study Report Cabinet Paper 13 th December 2011 item 6 Ely Crossing A142 Ely Southern Bypass Annex E Submission- major schemes bid. Ely Master Plan Local Transport Plan 3	Members lounge, Cambridgeshire County Council web site ET 1121 Castle Court Shire Hall, Cambridge