

PERTH AND KINROSS COUNCIL

Environment & Infrastructure Committee

30 October 2019

Queen's Bridge & Old Perth Bridge - Bridge Strengthening Works

Report by Executive Director (Housing and Environment) (Report No. 19/308)

The purpose of this report is to advise the Committee on the extent and the timing of the identified bridge strengthening works to Queen's Bridge and Old Perth Bridge in Perth.

1. BACKGROUND / MAIN ISSUES

- 1.1 Queen's Bridge & Old Perth Bridge form major transportation links between Perth city centre and both local and regional communities. In light of recent structural load capacity assessments (which concluded with the recommendations that remedial structural strengthening works are required to be carried out to both bridges) budget was secured through the 2019/20 capital programme to carry out the works to secure the longevity of these vital transport links.
- 1.2 Works were broken down into two categories; main 'above deck' strengthening works, and less traffic disruptive 'below deck' bridge works.
- 1.3 The projected timescales for the main 'above deck' strengthening works were subject to the outcome of a traffic modelling exercise to determine the optimum period in which to carry out the works. At the November 2018 Environment & Infrastructure Committee, a commitment was given to provide an update to the E&I Committee once this traffic modelling had been carried out (Report No 18/364 refers).
- 1.4 This report seeks to update the Committee on the current position.

Traffic Modelling

- 1.5 Due to the location of the bridges, a prime consideration was ensuring that all appropriate measures were taken to minimise disruption to bridge users. To this end, Perth & Kinross Council commissioned specialist engineering consultants SYSTRA in April 2019 to carry out a traffic modelling exercise (see Appendix 1) with regards to the structural maintenance works of Old Perth Bridge and Queen's Bridge. This information was sought in order to inform a decision as to whether the main 'above deck' works should be postponed until after the opening of the proposed Cross Tay Link Road (CTLR), which is currently projected to be provided by April 2024.

- 1.6 Four test scenarios were modelled for each of the two main options for both bridges. These options were:-
- 1) Undertake the necessary 'above deck' strengthening works before the Cross Tay Link Road opens; or
 - 2) Undertake the necessary 'above deck' strengthening works after the Cross Tay Link Road opens.

- 1.7 The main recommendation from the engineer's reports was to postpone the 'above deck' strengthening works until after the CTLR is in place.

The modelling suggests that if these works take place before the CTLR opens, then the estimated traffic delays during the main 'above deck' strengthening works would vary between 1 and 2 hours (Scone to City Centre for example). In addition, up to 25% of bridge users would have to choose to travel via Friarton Bridge / other routes or choose to travel out with peak traffic times otherwise there would be a risk of traffic gridlock in the city centre area.

However, after the CTLR opens, estimated journey times increases during the above works could typically be around half an hour, with only a marginal number of users (5%) required to adjust journey times out-with peak periods to avoid potential gridlock in the city centre area. The Consultants have recommended the works be preceded by high profile consultation and engagement sessions, in parallel with a very strong messaging campaign across all forms of media to encourage drivers to reduce, retime or reroute their journeys.

- 1.8 It is important to note that officers do not consider that the postponement of these works would present any unacceptable risks. This is based on current information, however officers would continue to closely monitor the bridge structures and should the situation change all relevant action would be undertaken to ensure the safety of the travelling public.
- 1.9 It should be noted that any traffic implications due to the Community Link Plus (CLP) works (which were subject to successful funding from Sustrans to promote more active and sustainable transport in Perth city centre) have not been taken into account as part of the modelling due to the definitive scope and timescales of the CLP being unknown at this stage. However, disruptions will be minimised going forward when the scope and timescales of the CLP works are known.

2. PROPOSALS

- 2.1 In light of the modelling carried out it is proposed to postpone the 'above deck' strengthening works until after the opening of the proposed Cross Tay Link Road (CTLR). However, the less traffic disruptive 'below deck' bridge works will be carried out in the coming years before the CTLR is in place. Traffic modelling will also be undertaken during the project planning stages of all works in order to try to minimise the adverse impact that may result from the various traffic management options.

3. CONCLUSION AND RECOMMENDATIONS

- 3.1 The Committee was previously advised of the requirement to undertake work on the Old Perth Bridge and Queens Bridge, Perth. Traffic modelling has now been undertaken.
- 3.2 The Committee is asked to:
- To note officer's revised scheduling of the works, and to postpone the identified 'above deck' bridge strengthening works until after the opening of the CTLR in light of the traffic modelling exercise which has been carried out.
 - To note that officers may be required to bring any future works forward to safeguard the travelling public should the bridge(s) condition deteriorate significantly in the interim period.

Authors

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1. IMPLICATIONS, ASSESSMENTS, CONSULTATION AND COMMUNICATION

Strategic Implications	Yes / None
Community Plan	None
Corporate Plan	Yes
Resource Implications	
Financial	Yes
Workforce	None
Asset Management (land, property, IST)	None
Assessments	
Equality Impact Assessment	None
Strategic Environmental Assessment	None
Sustainability (community, economic, environmental)	None
Legal and Governance	None
Risk	Yes
Consultation	
Internal	Yes
External	None
Communication	
Communications Plan	Yes

1. Strategic Implications

Community Plan

Corporate Plan

1.1 This section should set out how the proposals relate to the achievement of the Council's Corporate Plan Priorities:

- (i) Giving every child the best start in life;
- (ii) Developing educated, responsible and informed citizens;
- (iii) Promoting a prosperous, inclusive and sustainable economy;
- (iv) Supporting people to lead independent, healthy and active lives; and
- (v) Creating a safe and sustainable place for future generations.

1.2 This report relates to parts (iii), (iv), and (v) above.

2. Resource Implications

Financial

2.1 Budgets will be re-profiled to allow the less traffic disruptive and urgent bridge works to be carried out in the coming years before the proposed Cross Tay Link Road (CTRL) is in place (projected April 2024), and the main 'above

deck' strengthening works will be postponed until after the opening of the CTLR.

Workforce

- 2.2 None.

Asset Management (land, property, IT)

- 2.3 None.

3. Assessments

- 3.1 Integrated Appraisal Toolkit (IAT) is attached to this report.

Equality Impact Assessment

- 3.2 Under the Equality Act 2010, the Council is required to eliminate discrimination, advance equality of opportunity, and foster good relations between equality groups. Carrying out Equality Impact Assessments for plans and policies allows the Council to demonstrate that it is meeting these duties. The Equality Impact Assessment undertaken in relation to this report can be viewed clicking [here](#).
- 3.3 This section should reflect that the proposals have been considered under the Corporate Equalities Impact Assessment process (EqIA) with the following outcome:

- (i) Assessed as **not relevant** for the purposes of EqIA

Strategic Environmental Assessment

- 3.4 The Environmental Assessment (Scotland) Act 2005 places a duty on the Council to identify and assess the environmental consequences of its proposals.
- 3.5 However, no action is required as the Act does not apply to the matters presented in this report. This is because the Committee are requested to note the contents of the report only and the Committee are not being requested to approve, adopt or agree to an action or to set the framework for future decisions.

Sustainability

- 3.6 None.

Legal and Governance

- 3.7 None.

Risk

- 3.8 Risk of high level of disruption to the public during the proposed works.
- 3.9 Risk of cost and timescales increasing due to unforeseen elements requiring repair and/or strengthening.

4. Consultation

Internal

- 4.1 Finance has been consulted in the preparation of this report.

External

- 4.2 None.

5. Communication

- 5.1 Individual Communication Plans will be produced during the project planning stages of the works.

2. BACKGROUND PAPERS

- 2.1 Environment and Infrastructure Committee 7 November 2018, Roads Asset Annual Status Report (18/364).
- 2.2 Environment and Infrastructure Committee 7 November 2018, Minutes.

3. APPENDICES

- 3.1 Appendix 1 – Systra Traffic Modelling Assessment – Executive Summary.