

4a Bridge of Dee - STAG Part 1 Appraisal

o Purpose of Report

This report advises Board members of the contents of the draft Scottish Transport Appraisal Guidance (STAG) Part 1 report that has been submitted by consultants. A discussion on the findings from the STAG Part 1 Appraisal is provided and suggestions made as to the options that should be recommended to Aberdeen City Council to carry forward for more detailed appraisal within a STAG Part 2 assessment.

o Background

Progress with the Bridge of Dee STAG Pre-Appraisal was previously reported in April 2012, when the Board agreed the process and timetable for the continuation of the study into the STAG Part 1 Appraisal. Jacobs, the consultants appointed to undertake the study have completed this next part of the formal assessment process and submitted a draft Stag Part 1 report which can be viewed on the Member's section of the Nestrans website.

The earlier STAG Pre-Appraisal process through a series of stakeholder workshops and consultations had identified the problems, constraints and opportunities in the Bridge of Dee area, agreed a set of objectives for any proposed solution and developed a number of options for consideration. Concepts and their variants that were unlikely to meet the agreed project objectives, or technical feasibility, optional effectiveness, deliverability or value for money/affordability criteria were sifted out at this stage. Three concepts, including variants were identified to be taken forward for a more detailed STAG part 1 analysis, namely:

- Concept 5: new downstream crossing with additional Non Motorised User (NMU) crossing adjacent to a reconfigured existing Bridge of Dee
- Concept 6: new upstream crossing with additional Non Motorised User (NMU) crossing adjacent to a reconfigured existing Bridge of Dee
- Concept 6A: as Concept 6, with additional link from Garthdee Road to A90 South Anderson Drive
- Concept 6B: as Concept 6, with additional link from Garthdee Road/Inchgarth Road to A93 North Deeside Road
- Concept 7- new crossing adjacent to existing Bridge of Dee, which is reconfigured for NMU use only.

During the review of concept 6B it was identified that there were significant engineering difficulties at the preferred location of the link road between Garthdee Road / Inchgarth Road and A93 North Deeside Road due to the vertical alignment of the link road being considerably steeper than permitted by current design standards. In addition, operational testing demonstrated that Concept 6 would operate effectively without the additional link. Concept 6B therefore did not progress to full STAG Part 1 Appraisal, on the basis that it was considered that the link had been demonstrated not to be necessary as part of the wider solution combined with the proposals for the Bridge of Dee.

A schematic plan showing the proposed location of the remaining concepts taken forward for appraisal is given in Appendix 1.

o **The Objectives for the project**

The Transport Planning Objectives set for this project following consultation at the Pre-Appraisal stage were:

- Support the implementation of the current Development Plans by 2030 in a manner which does not result in increased journey times compared to 2010 for all classes of road users
- Incorporate measures which benefit public transport and active travel and encourage modal shift away from private car use
- Improve safety, security, amenity and connectivity for non-motorised road users and communities within the study area
- Deliver air quality and noise impact benefits in areas adjacent to the local road network by directing traffic towards the strategic road network
- Recognise the importance of the River Dee SAC and the Category A Listed Bridge of Dee and develop proposals to minimise overall environmental impacts, including at these locations, to a level acceptable to the consenting authority
- Support the effective operation of the local and national transport networks, including use by traffic of appropriate distributor routes.

o **Format of the STAG Part 1 Appraisal**

The STAG Part 1 Appraisal report has assessed the concepts taken forward for further investigation using a 7 point scale against the Transport Planning Objectives given above and the Stag criteria of environment, safety, economy, integration, accessibility and social inclusion. Performance against established policy directives, feasibility, affordability and public acceptability is also considered using a red, amber and green scale. Each concept has been assessed separately and the results of the assessment are given in separate Assessment Summary Tables, however a summary of the findings against each criteria is provided in Appendix 2.

The STAG Part 1 Appraisal provides the information necessary for decision makers to understand the implications of each concept in more detail. The report does not provide recommendations on any preferred concepts as it is for the decision makers to utilise the information provided to draw the comparative conclusions and decide which of the concepts should be progressed for further more detailed STAG Part 2 Appraisal.

o **Discussion on Appraisal Findings**

Officers from Nestrans, Aberdeen City Council and the consultants have discussed the findings reported in the study and the conclusions from comparative assessment are as follows:

- Concept 5 be rejected for further consideration, on the basis that its performs least favourably in terms of the stated Transport Planning Objectives, it generally does not perform most favourably in terms of the STAG criteria, including failing to provide value for money in terms of its transport economic assessment, and in terms of public acceptability it attracted more negative preferences than positive preferences
- Concept 6 be selected for further consideration, on the basis that it performs favourably in terms of Transport Planning Objectives and STAG criteria
- Concept 6A be rejected for further consideration, on the basis that it entails a greater extent of works than necessitated by Concept 6, thus resulting in increased impacts, without providing appreciable additional benefits than

Concept 6, and in terms of public acceptability additional concerns were noted in respect of the implications of this Concept

- Concept 6B be rejected for further consideration on the basis that the link has been demonstrated not to be necessary as part of the wider solution combined with the proposals for the Bridge of Dee
- Concept 7 be selected for further consideration, on the basis that it performs favourably in terms of the stated Transport Planning Objectives and STAG criteria, and in terms of public acceptability it attracted more positive than negative preferences

o **Next Stages**

Nestrans has provided the funding to date for the study into this important section on the Regions strategic roads network. However the appropriate Roads Authorities are Transport Scotland, the Trunk Roads Authority and Aberdeen City Council as the Local Roads Authority. Nestrans will therefore have to consider the draft STAG Part 1 Appraisal and refer it and any Nestrans view onto the appropriate Roads Authorities for their consideration. Although the A90 Bridge of Dee is currently part of the Trunk Road network, it will be detrunked and become part of Aberdeen City Councils road network and their responsibility when the AWPR is constructed.

It is suggested therefore that Nestrans refer the Stag Part 1 Appraisal to Aberdeen City Council for consideration along with a recommendation that concept 6 and concept 7 be progressed to completion of the STAG assessment process, including consideration within a more detailed STAG Part 2 Appraisal study. This process will include further consultation with stakeholders, including public consultation, and the findings of that study would be reported to Nestrans and Aberdeen City Council for consideration and decision making. The outcome of that process is anticipated to be selection of the option to be progressed for statutory authorisation and implementation.

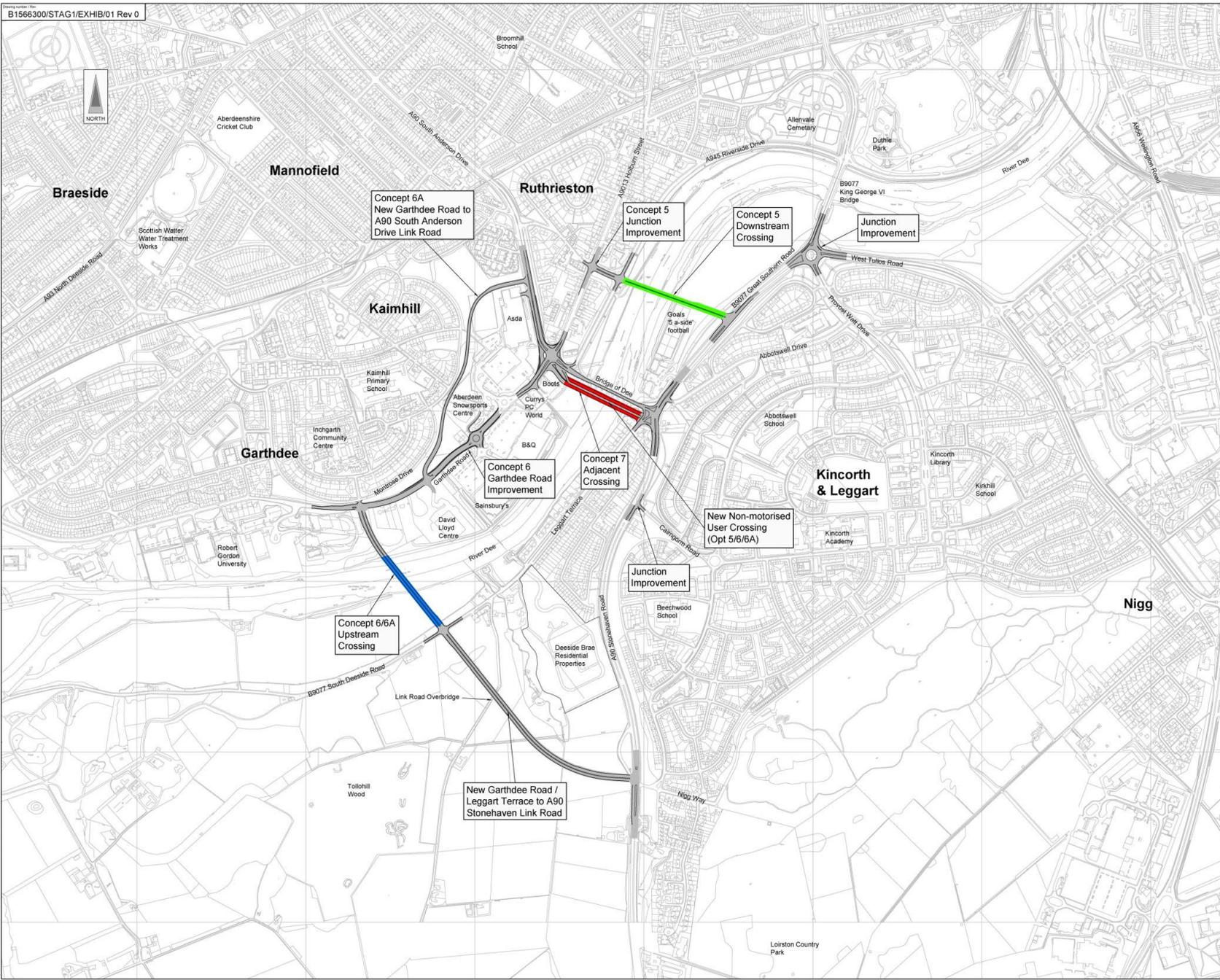
There is some funding remaining within the approved 2013/14 Bridge of Dee revenue budget that could allow the Stag Part 2 assessment process to commence this financial year following consideration of the Stag Part 1 appraisal by Aberdeen City Council. An allowance to continue the study next financial year is included within the draft 2014/15 budget that is to be considered under a separate report to the Nestrans Board.

o **Recommendation**

It is recommended that the Board

1. Consider the draft STAG Part 1 Appraisal for the Bridge of Dee and approve a final version for publication on the Bridge of Dee project pages that are held on the Aberdeen City Council website with a link given from the Nestrans website
2. Refer the report to Aberdeen City Council for consideration and Aberdeenshire Council for information along with a recommendation that Concepts 6 and 7 be progressed to Stag Part 2 Appraisal
3. Subject to agreement of the recommendation by Aberdeen City Council, approve the immediate commissioning of the Stag Part 2 Appraisal

JA 3 February 2014



Legend

- Concept 5
- Concept 6/6A
- Concept 7

Client	ABERDEEN CITY COUNCIL
Project	BRIDGE OF DEE STUDY
Drawing title	EXHIBITION DRAWINGS INDICATIVE ROUTE OPTIONS COMPOSITE PLAN
Drawing status	FOR INFORMATION
Scale	1:1
Author	B1566300
Check	
Drawn	
Drawn by	B1566300/STAG1/EXHIB/01
Drawn on	0

Summary of findings against each of the STAG Part 1 Appraisal Criteria

Environment: The most significant differentiator in environmental effects is related to the nature of the bridge crossing structures considered, with those which require works within the river being considered less favourable than those which do not require such works. When comparing similar bridge types, all concepts score broadly similarly, with minor variations. Although some environmental benefits are anticipated, all concepts are anticipated to result in adverse environmental impacts. While the assessment of the scale of these impacts is similar between concepts, in terms of cumulative impacts, Concept 7 may be considered less unfavourable than Concepts 5, 6 and 6A, on the basis that its effects occur within a more localised area.

Safety: All concepts score broadly similarly in providing safety benefits, with Concepts 6 and 6A scoring marginally more favourably than Concepts 5 and 7.

Economy: Concepts 6, 6A and 7 score most favourably in providing economic benefits, with Concept 5 scoring least favourably and failing to provide value for money in terms of its transport economic assessment.

Integration: Concepts 6, 6A and 7 score most favourably in providing integration benefits, with Concept 5 scoring least favourably.

Accessibility and Social Inclusion: All concepts score similarly in providing accessibility and social inclusion benefits.

Established Policy Directives

Established policy directives are considered to be generally supportive of Concepts 6, 6A and 7, and generally opposed to Concept 5.

Feasibility

As with the Environmental criterion, the greatest differentiator in terms of feasibility is related to the nature of the bridge crossing structures and whether these entail works within the river. Where such works are required these are considered inherently more technically challenging and complex than if they are not required.

When comparing similar bridge types, Concept 5 is considered the least technically challenging and complex option, with Concepts 6, 6A and 7 each being considered to be somewhat technically challenging and complex.

Affordability

As with the Environmental and Feasibility criteria, the greatest differentiator in terms of cost is related to the nature of the bridge crossing structures and whether these entail works within the river. Where increased spans are required to eliminate the need for works within the river, these result in increased scheme costs. In overall terms, when comparing similar bridge types, the concepts are considered to have broadly similar costs.

Public Acceptability

A public exhibition of project proposals was held in September 2013. Although most people did not express a preference between options, of those that did, Concept 7 received more positive than negative preferences, Concepts 6 and 6A received similar levels of positive and negative preferences, and Concept 5 received more negative than positive preferences.