

THE HIGHLAND COUNCIL
PLANNING, DEVELOPMENT AND INFRASTRUCTURE
COMMITTEE

Agenda Item	11
Report No	PDI 45/14

5 NOVEMBER 14

STROME FERRY BYPASS ROUTE OPTION APPRAISAL - AUGUST 2014

Report by Director of Development & Infrastructure

Summary

This report will summarise the findings of Part 2 of the STAG appraisal carried out for the Strome ferry Bypass and outline the strategy to be followed to implement one of the options contained within the STAG appraisal. Members are invited to approve a proposal to investigate funding options and develop a funding package to support the selection of a preferred option. The outcome will allow recommendations to be made on the preferred route to a future Planning, Development and Infrastructure Committee.

1. Background

- 1.1 The Strome ferry Bypass was developed in the 1960s to relieve pressure on the small car ferry that operated for many years across the Strome narrows to the west of Lochcarron in Wester Ross.
- 1.2 The project was promoted by the former Ross and Cromarty County Council with the objective of improving the transport links in Wester Ross and encouraging economic development.
- 1.3 The road was designed by Babbie Shaw and Morton and constructed by Duncan Logan Contractors Ltd. The new road was opened to traffic in 1970.
- 1.4 The road lies on the line of the Moine Thrust, a geological area of shattered and fragile rock which runs through the West Highlands. This geological formation of overlapping tectonic plates has led to instability in areas where the rock is exposed through excavation, such as on the Strome ferry Bypass.
- 1.5 Before the Strome ferry Bypass was completed there was a major rock/landslip failure at the eastern end of the scheme which culminated in the construction of the current avalanche shelter. This avalanche shelter encompassed both the road and the railway and provided protection from unstable rock faces high above the road.
- 1.6 Over the period since the road was opened there have been a number of rock face failures. These failures, and the need to secure the rock face, have

required significant investment from the Council's capital programme to provide stability and protection works.

- 1.7 Emergency works in 2012, caused by a rockfall in December 2011, resulted in the road being closed for four months and involved the Council reinstating the passenger and car ferry at the Strome Narrows, long detours for heavy goods vehicles, disruption to school pupils and disruption to local businesses in Kyle, Plockton, Achmore, Stromeferry, Lochcarron and Applecross. The out-turn cost of the emergency repairs was c£3.2M. There was a further rockfall in December 2012 when the road was closed for 3 days.
- 1.8 The Council allocated £500K for an Options Appraisal using the Strategic Transport Assessment Guidelines (STAG), Parts 1 and 2. Consultant Engineers URS Ltd was employed to carry out the STAG Part 1 and Part 2 assessment as well as the engineering assessment of the options.

STAG Part 1 - Options generation and sifting, and selection of options was completed in May 2013 and was presented to Committee (TEC39-13).

2. STAG Part 2

- 2.1 Nine routes were recommended by Committee to be taken forward to STAG Part 2; these are illustrated in the attached **Appendix A** to this report:

Northern Corridor (3)

- N6 - Route through Lochcarron with bridge crossing
- N6b - Route through Lochcarron with barrage
- N9 - Bypass Lochcarron with bridge crossing

Online Corridor (5)

- O2 - Viaduct
- O3 - Tunnel
- O4 - Do-minimum
- O6 - Shared use with railway
- O7 - Avalanche shelter

Southern Corridor (1)

- S4 - Glen Udalain (There are additional local link roads being considered to link the communities of Achmore and Stromeferry to the S4 Route).

- 2.2 The draft reports have now been completed by URS Ltd and a Preferred Option is to be selected. The Options have been ranked against the appraisal criteria and an engineering assessment of each option has been carried out.

3. Report Findings

- 3.1 Further Stakeholder meetings were held in November 2013 and public consultations were undertaken in March 2014. The scoring of the Options and preliminary findings were presented and comments received from the public.

3.2 Public Consultation

There were 42 written responses received following the public exhibition. The percentages represent the proportion of all responses which expressed a preference or rejection of any of the options

- Northern Corridor
 - 45% of people favoured the northern route option.
 - 24 % of people were against a bridge crossing.
- On line Corridor
 - 12% of people favoured an on line option
 - 12% of people were against an on line option
- Southern Corridor
 - 26% of people favoured the southern route option
 - 17 % of people were against this option.

3.3 There is no Option which clearly satisfies all of the assessment criteria. Three options have been identified which most closely match the scheme objectives. These are:

- Option N9 North - Lochcarron Bypass
This option requires a bridge crossing of the Strome Narrows and a bypass road around Lochcarron village.

The options which passed through the village of Lochcarron have been rejected as they do not significantly reduce construction costs and there was a strong feeling amongst the local community that a route through the village would be unacceptable.

- Option O2 Online - Viaduct
This route would relocate the existing railway onto a viaduct constructed on the southern side of Loch Carron. A new road would then be formed on the land vacated by the railway.

All of the online options have the problem of disruption during construction. Closure of the road and rail links, to a greater or lesser extent, would be required for all schemes which are constructed online. The closure of existing transport links was seen as a significant dis-benefit by the local communities.

- Option S4 South - Glen Udalain
This option involves a diversion of the existing road corridor to the south. The route will lead to a slight increase in journey distance for the majority of road users.

3.4 A summary of the conclusions drawn from the reports are as follows:

Stromeferry Bypass Highlight Table

Route	Best satisfying Scheme Objectives	Best satisfying STAG Criteria	Total Scheme Costs	BCR (Cost to Benefit Ratio)	Phased Costs	
					to bypass rockfall area	for complete route
Option N9, North Lochcarron Bypass	✓✓✓	✓✓✓	£108.62M	0.54	£104.95M	£109.3M
Option O2, On-line Viaduct	✓✓	✓	£123.16M	0.12	£69.55M	£132.13M
Option S4, South Glen Udalain	✓	✓✓	£81.41M	0.10	£57.16M	£85.83M

3.5 Phased Costs

The table in section 3.4 gives an indication of the implications of phasing the construction works for the three most favoured options:

- Option N9 North
This option requires a new bridge over the Strome Narrows and a new bypass road around Lochcarron village. This means that virtually the whole scheme must be completed at the same time to achieve the required outcome of bypassing the rock fall area. This therefore makes phased delivery impractical.
- Option O2 Online
This option does benefit from phased delivery; half of the total scheme cost will deliver a road which bypasses the rock fall area. This would however include road and rail closures during construction.
- Option S4 South
This option also benefits from a phased delivery approach, two thirds of the total scheme costs will achieve the outcome of bypassing the rock fall area. It should be noted that the overall benefit to cost ratio for this option is the lowest of the three.

3.6 The reports of the Options Appraisal are detailed and extensive and include:

- Engineering Assessment including cost report
- Environmental Assessment Report
- Traffic and Economic Assessment
- STAG Part 2 Report
- Appraisal Drawings
- Public Consultation
- Tidal Generation Report
- Review of Tunnel Options
- Geotechnical Desk Study Report
- Business Survey Report

Copies of the reports will be available for more detailed inspection on the Council's web site from the 6th of November.

4 Funding

4.1 The capital programme currently identifies £10M of funding for the project (ref Committee Report HC-18-13). It is recognised that this falls far short of the estimated scheme costs. A funding package for the preferred option will have to be developed and shall require additional Committee approval. It is clear that unless a financial package includes external funding bodies the scheme is unaffordable to the Highland Council alone.

Funding is fundamental to scheme delivery and will be a key factor in allowing a recommendation on the preferred route to be made. However the complexity of the project can be illustrated by considering the other factors members will have to consider to allow a clear recommendation to be made. These are:

- satisfying government guidelines for scheme assessment (STAG);
- satisfying the Scheme Objectives set by Project and Stakeholder groups;
- recognising rules and programme implications for Consenting and Statutory processes;
- being aware of phasing to improve affordability criteria; and
- giving consideration to any wider regional benefits or strategic planning by regional or Central Government.

4.2 It is recommended that officers pursue funding bodies including Scottish Government, Highlands and Islands Enterprise and European Funding to develop an overall funding package.

5 Option Selection

5.1 When officers are able to report on funding from external bodies they will report back to Committee and make a recommendation regarding the Option which can be delivered by the Council.

5.2 The timetable for reporting the outcome to Committee will be determined by the funding success.

6. Implications

6.1 The existing capital programme identifies £10M of funding for the project. Reports shall be brought to Committee on an overall funding package for future consideration.

5.3 Legal

It is likely that objections shall be received to any preferred route selected and that the scheme would be subject to a Public Local Inquiry as part of the approvals process. The Council will be required to justify the selection of the preferred option during the public local inquiry.

5.4 Climate Change/Carbon Clever; Risk and Gaelic and Rural implications

Considered as part of STAG process and will influence the preferred option and subsequent design development.

Recommendation

Members are invited to approve that officers pursue external funding bodies to develop an overall funding package to enable the project to proceed.

Designation: Principal Engineer

Date: 04/08/14

Author: Garry Smith

Background Papers: May 2013 (TEC39-13) and (HC-18-13)

Emerging Route Options from Stage 1

