# A9 Dualling Crubenmore to Kincraig project

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**Preferred option** March 2017

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### Introduction

In November 2015, Transport Scotland held exhibitions to seek public feedback on the route options for dualling the A9 between Crubenmore and Kincraig.

This leaflet provides a summary of the outcome of the route assessment work and the preferred route and junction options for the Crubenmore to Kincraig project.

It also summarises the work that will be carried out as part of the Design Manual for Roads and Bridges (DMRB) Stage 3 Assessment process.

Spey Valley from Creag Dubh

We are looking for public feedback on the preferred option developed by our consultants, CFIV, to help the ongoing development and assessment of the dualling proposals.

A feedback form is available at the exhibition or on the project website: www.transport.gov.scot/project/ a9-crubenmore-kincraig

### **Programme objectives**

### The Scottish Government has committed to dualling the A9 between Perth and Inverness by 2025.

The A9 Dualling Programme objectives are to:

- improve the operational performance of the A9 by:
- reducing journey times
- improving journey time reliability
- improve safety for both Motorised and Non-Motorised Users (NMUs) e.g. pedestrians and cyclists:
- reducing accident severity
- reducing driver stress
- · facilitate active travel within the corridor
- improve integration with public transport facilities.

### **Project development**

We are following the normal trunk road scheme development process and progressing in accordance with guidance in the Design Manual for Roads and Bridges (DMRB). See diagram right.

The three-stage assessment process covers engineering, environment, traffic and economic considerations.

Throughout this process, Transport Scotland consults with a diverse range of landowners, the public, local communities, stakeholders and interested parties including heritage, environmental and Non-Motorised Users (NMUs) such as pedestrians, equestrians and cyclists.

Following feedback from the November 2015 exhibition, the route option assessment process (DMRB Stage 2 Assessment) for the Crubenmore to Kincraig project has been completed.



Procurement

Construction

### **Dual carriageway options**

The Crubenmore to Kincraig project involves dualling approximately 16.5km of the current A9, from the existing dual carriageway at Crubenmore, to the Kincraig to Dalraddy dual carriageway section (currently under construction).

The project was split into five sections to assist the design work on the dual carriageway options. The sections were chosen based on local constraints such as topography, environmental features and the proximity of the Highland Mainline Railway.

Section I is 0.85km in length: | option (a)

Section 2 is 3.82km in length: 2 options (a) and (b)

Section 3 is 4.22km in length: | option (a)

Section 4 is 3.93km in length: 4 options (a), (b), (e) and (f)

Section 5 is 3.68km in length: | option (a)

The assessment of the options in each section considered known local constraints and feedback received from public consultations.

The line of the dual carriageway for the overall project was identified by joining together the preferred options for each section. Junction options serving the towns of Newtonmore and Kingussie have been assessed and a preferred junction selected.

### **Preferred route**

#### On the basis of the route options assessment process, section options 1a, 2a, 3a, 4b and 5a will be taken forward as the combined preferred route option.

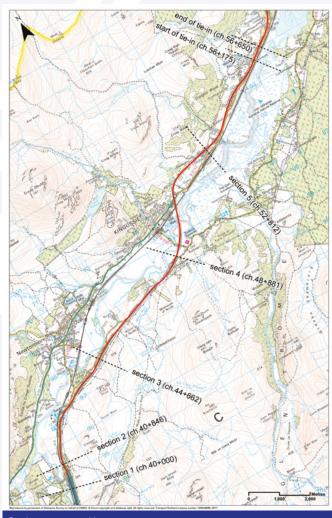
The preferred route provides online widening of the carriageway to the east, from the start of the project to Knappach underpass at the end of section 3. The alignment then moves offline to the east, through section 4 as it crosses the River Spey and Insh Marshes, before it changes to online carriageway widening to the west for the remainder of the route. It then connects with the Kincraig to Dalraddy dual carriageway, currently under construction.

Throughout the DMRB Stage 3 Assessment process the following important elements will be given further consideration:

• a strategy will be developed and incorporated into the design to provide access to land and property next to the route, and



River Spey Crossing and Ruthven Barracks



Crubenmore to Kincraig

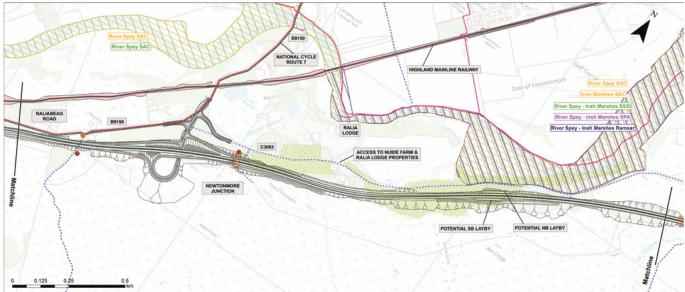
to address access requirements for Non-Motorised Users (NMUs) such as pedestrians and cyclists

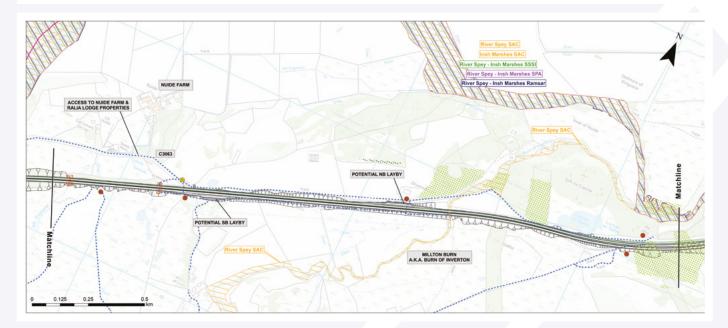
- the route alignment will be further developed to seek to reduce impact on land and properties
- the alignment will be further developed to help construction and reduce the impact on road users during construction.

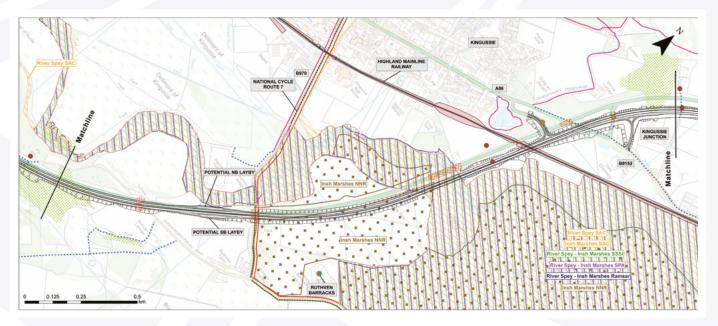


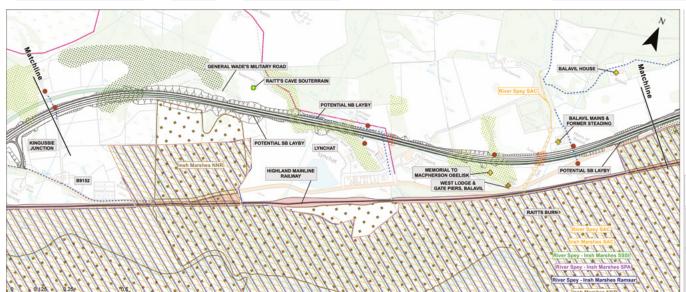
A9 looking north at Braes of Nuide

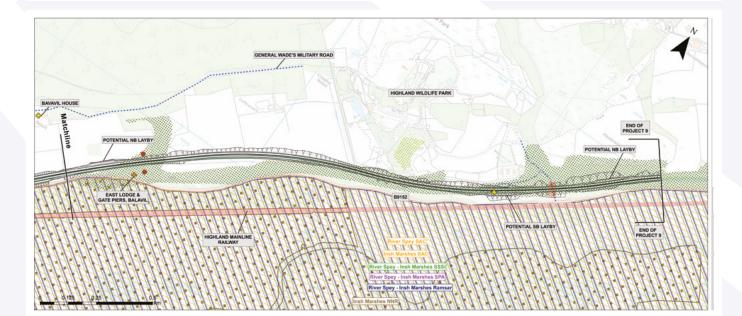












### Stage 2 preferred option – Section I Option (a)

- 0.85km long, from the tie-in with the existing Crubenmore dual carriageway and stretching between the existing Glen Truim access and Ralia Café and rest area
- Limited opportunity to widen to the west of the existing A9 due to the proximity of the Highland Mainline Railway, National Cycle Network (Route 7) and the River Truim and its associated flood plain
- A single option considered for the new dual carriageway, this involves widening to the east of the existing A9.

### Stage 2 preferred option – Section 2 Option (a)

- 3.82km long and incorporates the existing Newtonmore T-junction with the B9150. It also passes to the east of the Ralia Café and rest area and the community of Ralia properties based around the existing Newtonmore junction
- Two options considered taking into account the constraints imposed by the Highland Mainline Railway, National Cycle Network (Route 7) and the River Truim and its associated flood plain
- Option 2a provided online widening to the east and Option 2b was an offline option to the east
- Preferred option is Option 2a, to provide online widening to the east side of the existing A9. This avoids impacts on Ralia Café and rest area and the community of Ralia to the west, whilst reducing the amount of earthworks to the east as there is available ground next to the A9.

### Stage 2 preferred option – Section 3 Option (a)

- 4.22km long, commencing north of the existing Newtonmore junction and continuing north, past Nuide Farm, to the north of Knappach underpass
- Single option was considered for the new dual carriageway, this involves widening to the east of the existing A9 to minimise impacts on the River Spey and its associated special environmental areas, as well as on adjacent properties and to avoid the Lochan an Tairbh water feature.



Visualisation of Option 1a looking north



Visualisation of Option 2a looking north at Braes of Nuide



Visualisation of Option 3a looking north

### Stage 2 preferred option – Section 4 Option (b)

- 3.93km long, starting just north of the Knappach underpass and crossing the River Spey and Insh Marshes floodplain to Chapelpark Farm in the settlement of Lynchat
- Constrained on both sides by the River Spey and Insh Marshes RAMSAR, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), the River Spey Special Area of Conservation (SAC), Insh Marshes SAC, Insh Marshes National Nature Reserve (NNR) and B970 Ruthven Road
- West side constrained by Kingussie community duck ponds, Kerrow, Laggan and Lynvoan Cottages and Raitt's Cave Souterrain
- East side is constrained by Ruthven Barracks, Insh Marshes NNR, Lynchat settlement, Chapelpark Farm, Highland Mainline Railway and the B9152
- Four options were considered taking into account the many constraints:

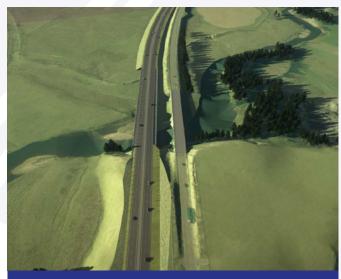


**Option 4a:** Online widening to the east, retaining the existing bridge and requiring a new bridge for the southbound carriageway.



**Option 4e:** Online widening to the west, retaining the existing bridge and requiring a new bridge for the northbound carriageway.

- DMRB Stage 2 preferred option selected was **Option 4b**, as it :
  - limits impact on River Spey (flooding and flood risk)
  - limits impact on progressive long term river channel movement
  - improves the river/floodplain ecological connectivity and species permeability
  - provides for full bridge replacement, easier construction and improved flexibility of bridge choice.
- There may be potential to align the new dual carriageway closer to the existing A9 and this will be considered further at the next stage of project development.



Visualisation of Option 4b looking south



Option 4b – offline alignment to the east

**Option 4b:** Offline dual carriageway bridge to the east, with the existing bridge and embankment removed and a new dual carriageway bridge crossing the River Spey.



Option 4f - symmetrical widening

**Option 4f:** Online dual carriageway (predominantly to the west), with the existing bridge and embankment removed, and a new dual carriageway bridge crossing the River Spey.

### Stage 2 preferred option – Section 5 Option (a)

- 3.68km long, starting at Chapelpark Farm and extending north to the tie-in with the Kincraig to Dalraddy project
- Limited opportunity to widen to the east of the existing A9 due to the significant constraint posed by the settlement of Lynchat, Balavil properties (East & West Lodge – Grade B listing), Memorial to MacPherson Obelisk and the existing B9152, which runs parallel to the A9 for the whole of section 5
- A single option for the new dual carriageway was considered, which involves widening to the west of the existing A9.

# River Spey Bridge development

Feedback from the November 2015 exhibition on the River Spey Bridge indicated support for a new bridge structure which:

- fitted well within the local landscape
- would not interrupt views of the Insh Marshes from Kingussie
- would not compete with views to and from Ruthven Barracks.

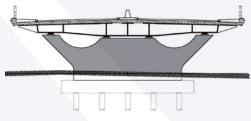
Feedback from members of the public generally gave support for a bridge style similar to that of the existing bridge, which sits low in the landscape.

The development process has considered the environmental importance of the River Spey corridor and the Insh Marshes National Nature Reserve.

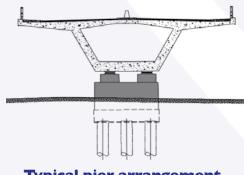
The bridge form will be considered further as part of the DMRB Stage 3 Assessment process. The preferred bridge type, pier configuration and span arrangement will be confirmed following further assessment.



Visualisation of Option 5a looking north



Typical pier arrangement – steel composite



Typical pier arrangement – balanced cantilever



Potential balanced cantilever bridge

### **River Spey flood risk assessment**

### The River Spey is a significant feature in the local landscape between Newtonmore and Kincraig. The A9 crosses the floodplain upstream of the Insh Marshes.

We have created a hydraulic model of the River Spey and its floodplain to investigate the impact of severe flood events on the A9 and the impact of A9 dualling upstream and downstream of the A9 at Kingussie.

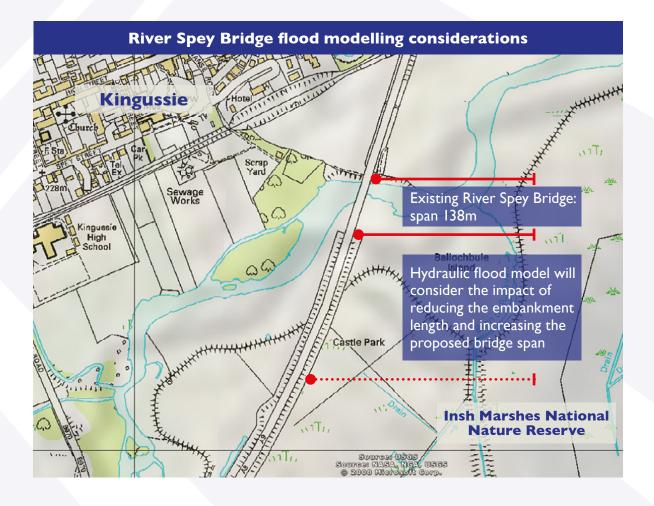
Our model has allowed us to consider the impact of various embankment and bridge span combinations.

Our studies indicate that the ability of flood water to pass below the Spey crossing is important, with different bridge spans over the Spey affecting upstream and downstream water levels in major flood events (*a 0.5% probability of flood extents being equalled or exceeded in any one year*).

We will develop the selected preferred option with an embankment and bridge span combination which aims to minimise the environmental impact on the River Spey and Insh Marshes and at the same time minimises flood impacts on receptors such as property, utilities, roads and the railway.



River Spey flood extents looking south, August 2014



### Stage 2 preferred junction – Newtonmore Option 7

Two potential junction options were considered during the DMRB Stage 2 Assessment for Newtonmore junction. These options were dependent on the mainline option in section 2.

Both junction options are in the form of a 3-way – 2-level trumpet arrangement.

**Newtonmore Option 4** was designed to tie-in to the offline alignment of the mainline, Option 2b.

**Newtonmore Option 7** was designed to tie-in to the online widening of the mainline, Option 2a.

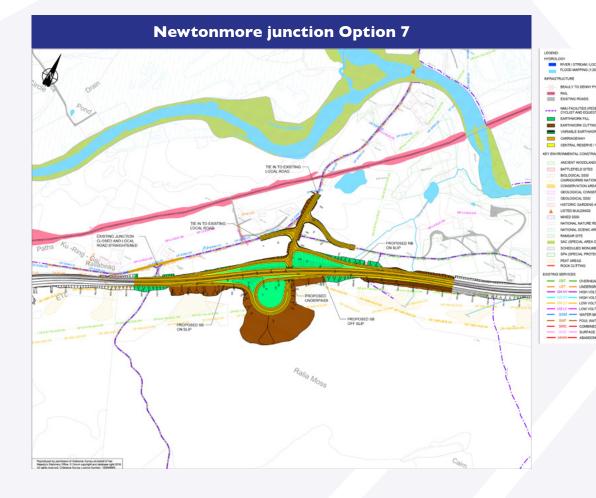
The preferred junction option is Option 7 as mainline Option 2a was chosen as the preferred mainline in this section.

This junction option results in a better earthworks balance for the project. It is considered to provide a more appropriate fit within the surrounding landscape because of the reduced earthworks footprint.

There may be potential to consider if a more compact junction layout can be adopted and this will be considered further at the next stage of the project development.



Newtonmore junction Option 7 visualisation



### Stage 2 preferred junction – Kingussie Option 2

Two potential junction options were considered in the final DMRB Stage 2 Assessment for Kingussie junction. Designs for both junction options were prepared for each mainline option within section 4.

**Kingussie Option 2** is a compact grade-separated junction with a similar layout to the existing junction with an upgrade of the existing left-in/left-out arrangements on both the northbound and southbound carriageways.

This option was developed to include additional lanes on the northbound and southbound diverges to take account of concerns expressed by members of the public about the existing junction layout.

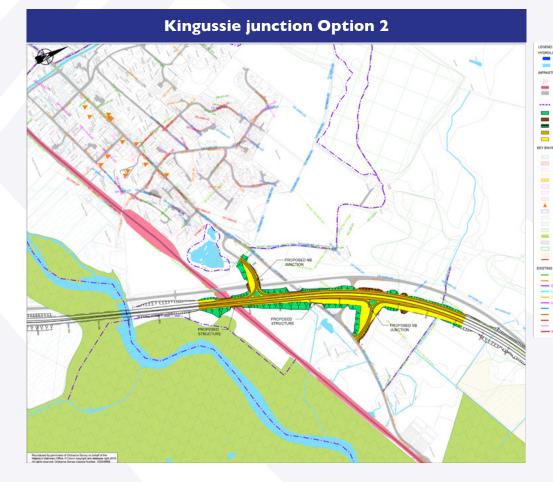
**Kingussie Option 7** is a grade-separated junction which realigns the A86/B9152 slightly to the north to accommodate the new slip roads which have longer merging and diverging lengths than the current junction.

The preferred junction option is **Option 2** as it has benefits over Option 7, including:

- minimised impact on surroundings including A86/B9152, Kingussie community duck ponds and Kingussie rail bridge
- improved earthworks balance (reducing waste disposal)
- in line with public feedback where a preference has been shown for a junction layout similar to the existing one.



Kingussie junction Option 2 visualisation



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### What happens next?

Public consultation will continue throughout the DMRB Stage 3 Assessment process and the comments and feedback from stakeholders and members of the public, will be considered as part of the further development, refinement and assessment of the preferred route option.

Further consultation will also be undertaken on the access strategy for the route, as we look to address access to properties and land adjacent to the existing A9. Some of this work has already started and plans indicating potential options to provide access to Glen Truim, Ralia, Nuide and Inverton are available to view at this exhibition.

Transport Scotland's consultant will now take forward the development and assessment of the preferred route option for the project (DMRB Stage 3 Assessment).

The next stage of the assessment process will include:

- ongoing consultation with stakeholders, affected landowners and members of the public to inform the design development of the preferred route option
- identification of the land required for the project and preparation of draft Orders, preparation of an environmental impact assessment of the developed preferred route option including access issues and publication of an Environmental Statement which will include suitable mitigation measures to reduce impacts of the project on the environment
- a further event to present the developing DMRB Stage 3 design and seek further feedback
- the publication of the draft Road Orders, Compulsory Purchase Order and Environmental Statement.

### **Comments and feedback**

# Transport Scotland welcomes your comments and feedback on the preferred route option, particularly on the following topics:

- the preferred route option and junctions
- lay-bys
- local access
- Non-Motorised Users (e.g. pedestrians, cyclists and equestrian) routes.

Please take time to consider the information presented and provide any comments you may have as soon as possible and **by 4 May 2017**.

Email to:

carron.tobin@ruraldimensions.com

Or by post to: Carron Tobin CH2M / Fairhurst A9 Dualling team City Park 368 Alexandra Parade Glasgow G31 3AU



River Spey Bridge looking south

For further information on the Crubenmore to Kincraig project, and to view the exhibition materials, drawings and strip plans, please visit:

www.transport.gov.scot/project/ a9-crubenmore-kincraig

### For further information

### Further consultation through local drop-in events and one-to-one engagement is planned during the DMRB Stage 3 Assessment process.

We will keep you updated through a range of direct communications and consultations, as well as further public exhibitions.

You can contact CFJV Stakeholder Manager Carron Tobin, at any time:

### Telephone: 0771 577 3660 Email: carron.tobin@ruraldimensions.com

For further information on the wider A9 Dualling Programme, please visit the Transport Scotland website at:

#### www.transport.gov.scot/a9dualling

If you have any queries or any comment on the wider programme, please contact the A9 Dualling team by telephone or email.

Telephone: 0141 272 7100 Email: a9dualling@transport.gov.scot