

Cuckoo Bridge North Toucan Crossing

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# Cuckoo Bridge North Toucan Crossing

Dumfries & Galloway Council | August 2024



## Introduction

Dumfries and Galloway Council have appointed Stantec to undertake an assessment, options appraisal and redesign of the **A76 Glasgow Road Dual Toucan Crossing at Cuckoo Bridge Retail Park.**

The infrastructure at the existing toucan crossing is in poor condition and near the end of its operational life. The Council also wants to consider active travel, connectivity and general improvements to the existing dual toucan crossing at this location with a view to addressing perceived and physical road safety issues.

Through consultation with key stakeholders, Stantec identified and appraised a number of options to identify a preferred layout. Before we prepare the detailed design we are updating the local community on the proposals.



#### **Objective 1**

Improve accessibility and connectivity for cycling, walking and wheeling



#### **Objective 2**

Improve safety for cycling, walking and wheeling



#### **Objective 3**

Improve sense of place



#### **Objective 4**

Avoid significant detrimental impact on traffic operation

## **Objectives**

The following project objectives have been defined:

- **Improve accessibility and connectivity walking, wheeling or cycling**
- **Improve safety for walking, wheeling or cycling**
- **Improve the sense of place**
- **Avoid significant detrimental impact on traffic operation**

## Timeline

The full project delivery timeline includes three stages:

1. Concept Development
2. **Detailed Design**
3. Construction

Stage one is now complete. Stantec undertook a detailed review of the local area, socio-economic data and pedestrian, cyclist and traffic movement data in October 2023. Following the baseline review, an options appraisal and stakeholder engagement was undertaken to inform the development of an initial concept design.

**We are now delivering stage two.** The work includes more stakeholder engagement, an information share with the community and an update to the concept designs to produce detailed designs.

## **Options Appraisal**

Stantec identified several scenarios and undertook modelling to estimate the impact the changes would make on journey times for pedestrians, cyclists and motorised traffic. The following scenarios were tested:

### **Scenario 1 - Glasgow Road One Lane Northbound at Crossing**

Modelling shows queuing traffic during peak times would likely queue/block back to the Cuckoo Bridge roundabout.

### **Scenario 2 - Glasgow Road One Lane Southbound at Crossing**

Modelling shows queuing traffic forming on the southbound approach to the Cuckoo Bridge roundabout would queue/block back over the crossing during peak times.

### **Scenario 3 – Glasgow Road Single Stage Crossing, Four Lanes**

Modelling shows queues and traffic forming around the crossing and the approach to the Cuckoo Bridge roundabout were within

acceptable levels.

#### **Scenario 4a – Cuckoo Bridge Retail Park Access as Signalised Junction**

Modelling shows that the queues of traffic forming on most of the approaches to the roundabout at peak times would experience significant queuing and delay. This would be dependent on how often the pedestrian stage is called.

#### **Scenario 4b – Cuckoo Bridge Retail Park Access as Signalised Junction with staggered crossings**

This type of layout was considered unacceptable because it does not provide a good level of service for pedestrians and prioritises traffic movements.

#### **Scenario 5a - Cuckoo Bridge Retail Park Signalised Roundabout**

Modelling shows that significant queuing and delay for traffic occurs at peak times that would result in queuing/blocking back and ultimately an unacceptable level of congestion.

#### **Scenario 5b - Cuckoo Bridge Retail Park Signalised Roundabout with Spiral Markings**

Modelling shows that significant queuing/delay for traffic occurs at peak times that would result in queuing/blocking back. Although additional lanes could be added to increase capacity for traffic, this would result in a very engineered solution, increased pedestrian crossing distances, a feeling of traffic dominance and a layout which was unattractive and potentially unsafe for cyclists using the road.

## Preferred Option

**Scenario 3 came out as the one that improved road safety and made the crossing more appealing to use without adversely affecting road traffic and public transport.**

A large format version of the concept design for Scenario 3 can be seen on the right. You can download a more detailed version of the design by clicking the button below:

[\*\*Download Concept Design Here\*\*](#)

The preferred option involves retaining two lanes on the northbound and southbound approach to the crossing and providing a single stage crossing with a refuge in the middle.

This layout offers an improved level of service for active travel users and modelling shows that the queues of traffic forming

around the crossing and the approach to Cuckoo Bridge Retail Park roundabout are minimal.

The radius of the northeast corner of the Cuckoo Bridge Retail Park roundabout would be altered and a pedestrian refuge island on the eastbound approach to the roundabout will be included.

## Design Considerations

The following considerations will be components of the proposed delivery of Scenario 3 as the preferred option:

- Vehicle tracking has been undertaken to ensure large vehicles can negotiate all turns at the Cuckoo Bridge Retail Park roundabout.
- There will be a pedestrian / cycle green signal phase for people walking and cycling to cross the road at the crossing on request.
- Traffic modelling has been undertaken showing there will be minimal additional delay for vehicular traffic, one to two seconds at the busiest times.

- The footways on both sides of Glasgow Road will be widened slightly, in particular the shared footway on the eastern side.
- Pedestrians and cyclists will be able to cross the road at the crossing in one movement (i.e. they will not need to wait in the middle of the road).
- Pedestrian journey times in the eastbound and westbound direction over the signalised crossing will be reduced.
- Traffic signal operation will be set to minimise the length of time between activation of the push button and the pedestrian green time.
- Sensors which detect pedestrians / cyclists still on the crossing and lengthen the pedestrian green time as required will be included.
- A safer access into the retail park is being proposed at KFC which attempts to reduce potential conflict with vehicles at the drive through. Steps will be provided with the alignment of the existing ramp altered and existing vegetation replaced with low level planting to accommodate those wheeling more safely (improved visibility).
- Advanced warning signs to inform drivers of the new crossing arrangement (temporary for six months) will be provided.
- Existing pedestrian guardrail on the footways at this location will be reviewed and assessed against current standards/good practice. Guardrail can be unsafe and becomes a maintenance burden. A buffer strip may be provided instead (e.g. 0.5 metres).

## FAQs

For your convenience the Council have responded to some frequently asked questions (FAQs) about the project below:

### **Why is the Council making these changes?**

The infrastructure at the existing toucan crossing is in poor condition and near the end of its design life. The Council also wants to consider active travel, connectivity and general improvements to the existing dual toucan crossing at this location

with a view to addressing perceived and physical road safety issues.

### **How is the project being funded?**

The work is being match funded by Transport Scotland using money which is allocated to Dumfries and Galloway Council for 2024/25 for projects which improve walking, wheeling and cycling for all, in accordance with the national Active Travel Framework (Nov 2019).

### **Can the money be spent on other things?**

The funding from Transport Scotland can only be spent on projects which improve walking, wheeling and cycling.

### **Why have I not been consulted on this project before?**

At the previous stage a number of options were identified and work was undertaken by qualified transport planners and civil engineers to determine which were feasible in accordance with various technical design standards. Options were also subject to multi-modal modelling using industry standard software and engagement with key stakeholders. This was done to ensure that we only present option(s) which are deliverable. Taking consideration of the above, a number of options have been discounted and a clear preferred option has emerged.

### **Does this mean the design is already decided?**

While the principles of the new layout have been determined, there is still an opportunity to have your say and influence some elements. In particular, the layout of the ramp into the retail park (at KFC) and the access to the NCN (east of Glasgow Road).

**The list of FAQs will be updated periodically so if you have any further questions or comments that have not been addressed above please email [GlasgowRoadCrossing@stantec.com](mailto:GlasgowRoadCrossing@stantec.com).**

## **Next Steps**

The detailed design will be finalised in financial year 2024/25, resulting in a design that can be constructed in 2025/26, subject to funding being identified.

## **Why Stantec**

Stantec is an international transportation consultancy, recently appointed by Dumfries and Galloway Council to redesign Cuckoo Bridge north toucan crossing in Dumfries.

With a dedicated Scotland Active Travel Team, Stantec have extensive experience of delivering Active Travel projects nationwide.

**Stantec has previously gained local knowledge of Dumfries & Galloway through our work in Dumfries on the Troqueer Road/Pleasance Avenue junction and the Dockhead/St Michaels Bridge Road junction.** Both projects are currently underway and aim to deliver active travel and crossing improvements at the signalised junctions. They have involved consultation, options appraisals, concept designs and technical designs.

We are a team of transport planners, geospatial analysts, active travel specialists, traffic modellers, data analysts, engineers and

designers who combine local knowledge with professional skills and an international network of experts working on similar projects worldwide.

**We care about the communities we serve** - because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives and public engagement so we can collaborate towards a shared success.

## Thank you

Thank you for visiting the website and for taking the time to participate in our community information share about the future of the Cuckoo Bridge North Toucan Crossing.

If you have any further queries, please email:  
[GlasgowRoadCrossing@stantec.com](mailto:GlasgowRoadCrossing@stantec.com)