**Local Highways Maintenance Challenge Fund**

**Expression of Interest Form: 2020/21 proposals**

This form is for proposals over £5 million to be funded by DfT in 2020/21.

The closing date for Expressions of Interest is **31 October 2019**.

For proposals submitted by components of a Combined Authority a separate EOI form should be completed for each one, then the CA should rank them in order of preference.

<table>
<thead>
<tr>
<th><strong>Applicant Information</strong></th>
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<tbody>
<tr>
<td><strong>Local authority name:</strong></td>
</tr>
<tr>
<td>Leicestershire County Council</td>
</tr>
<tr>
<td><strong>Manager Name and position:</strong></td>
</tr>
<tr>
<td>Ann Carruthers, Director of Environment and Transport</td>
</tr>
<tr>
<td><strong>Name and position of officer with day to day responsibility for delivering the proposal.</strong></td>
</tr>
<tr>
<td><strong>Contact telephone number:</strong> 0116 305 7000 <strong>Email address:</strong> <a href="mailto:ann.carruthers@leics.gov.uk">ann.carruthers@leics.gov.uk</a></td>
</tr>
<tr>
<td><strong>Postal address:</strong></td>
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<tr>
<td>Leicestershire County Council</td>
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<tr>
<td>County Hall</td>
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<tr>
<td>Environment &amp; Transport Department</td>
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<tr>
<td>Glenfield</td>
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<tr>
<td>LE3 8RJ</td>
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**Combined Authorities – Not applicable**

*If the proposal is from a local highway authority within a Combined Authority, please specify the contact and ensure that the Combined Authority has submitted a Combined Authority Application Ranking Form.*

**Name and position of Combined Authority Co-ordinator for CA proposals:**

<table>
<thead>
<tr>
<th><strong>Contact telephone number:</strong></th>
<th><strong>Email address:</strong></th>
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SECTION A – Description of works

A1. Name of proposal:

Zouch Bridge Replacement

A2. Geographic area:

Please provide information about the location of the proposal (in no more than 50 words)

The existing bridge forms part of the A6006 which is a strategically important part of the road network supporting the regional economy as well as taking traffic to East Midlands Airport. It provides a strategic connection between Leicestershire and Nottinghamshire by crossing the River Soar between Hathern and Zouch.

OS Grid Reference:

450248, 323249

Postcode:

LE12 5JN

You might wish to append a map showing the location (and route) of the proposal, existing transport infrastructure and other points of particular interest.

See attached plans

A3. Description of existing problems and how the proposal would address them. Please set out which other options have been considered:

The existing bridge was built in 1930 and is part of the A6006 which is strategically important in terms of transport infrastructure and the regional economy. It links Leicestershire and Nottinghamshire by crossing the River Soar between the villages of Hathern, in Charnwood Leicestershire, and Zouch, in Rushcliffe Borough, Nottinghamshire. It also takes traffic from the south to East Midlands Airport which is the UK’s busiest pure cargo airport and second only to Heathrow airport, handling over 320,000 tonnes of flown cargo every year. It comprises two main river spans and eight flood spans.

It became clear that the bridge was approaching the end of its useful life and a Condition Survey (Special Bridge Inspection) was carried out by the Council’s Structures Team in February 2013 which recommended that the bridge be demolished and replaced.

Even after significant concrete repair schemes, an ongoing problem has been identified with the integrity of the ageing concrete. An example of this is that the waterproofing system is no longer fully bonded to the failing deck concrete, resulting in numerous failures in the carriageway surfacing.

So, after years of extensive and costly repairs, the bridge continues to deteriorate. In the medium term, it is likely to require a weight restriction and, ultimately, closure. Given that it is not economic to continue to repair the structure it is inevitable that it is only a question of time before it fails. Options to
limit traffic over the bridge would fundamentally conflict with the strategic nature of the road and consequently the traffic it carries. Closure without re-provision would necessitate a lengthy (28 miles due to weight and height restrictions) and expensive diversion for such users, as well as increasing the carbon footprint.

In light of these problems other options considered were:

- Continuing with reactive maintenance to the concrete, monitoring the bridge and carrying out repairs as required. Disadvantages of this is that much of original reinforced concrete will remain in poor condition, continual testing and repairs will be required and this option does not remove the need for the eventual replacement of the bridge

- Imposing weight restrictions, by way of limiting vehicle weights, closing lanes, or closing the road as necessary. Disadvantages of this are increased risk of bridge failure, substantial traffic disruption, queuing traffic during lane closures and a 28-mile traffic diversion during full closure leading to public dissatisfaction. Increased inspection frequency and increased costs would be required as well as still requiring the replacement of the bridge.

Therefore, after careful consideration of these options and in line with the principles of risk-based and evidence-led decision making, set out in Well-managed Highway infrastructure – Code of Practice, the option was to replace the existing bridge with a new bridge to the south.

Since 2013, the Council has been working on the project to replace the bridge with a new bridge to the south. This is on the basis that an on-line solution (i.e. closing the road and demolishing the existing bridge prior to building a replacement) represents an unacceptable disruption to the road network and would be more costly to undertake. Existing services would need to be diverted onto a temporary service bridge across the River Soar and then re-diverted back onto the new bridge. As such the only realistic and cost-effective option is to seek to provide the replacement bridge off-line which enables the current bridge to be used up until the time that the new bridge is built and can be made available for traffic. The scheme includes the demolition of the existing bridge.

The additional land to the south of the existing bridge has been purchased and planning permission is in place to build a new bridge.

Continued monitoring of, and repairs to the bridge, combined with reactive weight restrictions mean that the bridge has reached the end of its useful life and needs to be replaced. Replacement of the bridge with a new structure will avoid serious adverse impact on Leicestershire’s road network, minimising disruption to traffic and business, and eliminate the safety risks associated with the ageing bridge.

The provision of a new bridge would serve to minimise future reactive and emergency maintenance work, both of which have been necessary on a frequent basis during recent years. These have required various levels of traffic management and will have had a negative impact on journey times.
SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

Please indicate the anticipated cost of the proposal in the table below. **Figures should be entered in £000s** (i.e. £10,000 = 10).

**Funding profile (Nominal terms)**

<table>
<thead>
<tr>
<th>£000s</th>
<th>2020-21</th>
<th>2021-22</th>
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<tbody>
<tr>
<td>DfT Funding Sought</td>
<td>£6,253</td>
<td>DfT funding is not available in 2021-22</td>
</tr>
<tr>
<td>LA Contribution</td>
<td>£2,000</td>
<td>£1,126</td>
</tr>
<tr>
<td>Other Third-Party Funding</td>
<td>£0</td>
<td>£0</td>
</tr>
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**Notes:**
1) Department for Transport funding will be granted in the 2020-21 financial year, but local highway authorities may carry that funding over to following financial years if necessary.
2) There is no specific amount for a local contribution by the local authority and/or a third party but if additional funding is proposed please state what this is expected to be.

B2. Timetable

Proposed start date - 1st April 2020

Estimated completion date – January 2022

B3. Strategic Case and Economic Case

The rationale for making the investment, evidence of the existing situation and why the asset needs to be repaired or renewed. It should also include how it fits into the overall asset management strategy for the authority and why it cannot be funded through the annual Highways Maintenance Block Funding grant.

*(free text)*

The Councils Asset Management framework documents (Local Transport Plan - LTP3, the Highway Asset Management Policy, the Highway Asset Management Strategy and the Highway Infrastructure Asset Management Plan - HIAMP) set out the council’s approach to managing the network and its assets. There is specific mention within the HIAMP of the need for the replacement of Zouch bridge.

The Council has a capital budget contribution of £3.1 million but needs additional further funding of £6.25 million in order for the project to start.
1) Current problems

The existing bridge is nearly 90 years old and the reinforced concrete structure is nearing the end of its useful life. A total of £270,000 has been spent on concrete repair works since 1999, mainly on the deck beams and supporting columns, but there is continued deterioration throughout, particularly with the deck surface. Significant areas of failed waterproofing membrane has led to the subsequent failure of the carriageway surfacing – trial holes revealed that the bond was lost due to the friable nature of the ageing concrete.

The bridge, in its current condition, is subject to an enhanced bridge inspection regime to ensure safety.

Also, the existing footway is only on one side but with the footway from the Leicestershire side being on the opposite side to the Nottinghamshire footway.

2) Impact on the network

If the bridge was closed before a replacement was built, this would have an impact on the effectiveness of Leicestershire’s road network, increasing journey times and business costs, and would affect the delivery of the Council’s strategic transport objectives in this part of the county.

Should the bridge be closed, the signed diversion route is 28 miles long. A traffic count undertaken on the route in 2017 indicated that the Average Annual Daily Traffic was 12,137 vehicles, of which 524 (4.3%) were HGVs.

Once the replacement bridge is constructed, the availability and reliability of the network will be restored.

3) Options considered

Option A – Carry out Reactive Maintenance (Concrete Repairs). Undertaking further concrete repairs was not considered a viable option and would just delay the inevitable replacement of the bridge.

Option B – Reactive Weight Restrictions (Weight limits, lane closures and/or road closures). Again, this option was not considered viable as it would lead to substantial traffic disruptions, queuing traffic during lane closures with a 28-mile traffic diversion during full closure.

Option C – Replacing the bridge with a new bridge to the south. An on-line solution was considered but discounted on the basis of network disruption and cost. The Statutory Undertakers’ (SU) apparatus over the bridge needs continuity of supply, hence a service bridge would be required to divert the apparatus whilst the existing bridge was demolished, and a new bridge constructed. The apparatus would then be re-diverted to the new structure at considerable cost. The proposed off-line solution would result in minimal disruption to the network and requires one movement of the SU apparatus from the old to the new bridge.

The new bridge will provide footways on both sides as well as a cycle lane on one side of the bridge.

4) Project deliverability

The proposed scheme is ‘shovel-ready’ – it has the necessary documentation in place (planning permissions, Side Roads Order and Bridge Scheme Order) and, after a Public Inquiry, the necessary
land has been acquired by Compulsory Purchase Order. Leicestershire County Council took possession of the land in September 2019.

The design is complete, and a contractor has been engaged via the Midlands Highway Alliance Medium Scheme Framework for value engineering and buildability discussions. SU diversions are agreed.

The scheme is supported by Nottinghamshire County Council.

5) Project funding

Leicestershire County Council total Capital funding for bridgeworks in 2019/20 was £806k and, although the allocations for 2020/21 and beyond have not yet been determined, the likelihood is that financial pressures will mean that this amount will be reduced. The estimated total construction cost of Zouch bridge is £9.379 million and although there is a capital allocation of £3.126 million set aside, there is insufficient funding available from the usual Capital funding streams to fund the balance of £6.253 million.
SECTION C: Declarations

C. Senior Responsible Owner Declaration

As Senior Responsible Owner for Zouch Bridge I hereby submit this request for approval to DfT on behalf of Leicestershire County Council and confirm that I have the necessary authority to do so.

I confirm that Leicestershire County Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Ann Carruthers

Position: Director of Environment and Transport

Signed:

Submission of Expression of Interest:

The deadline for the Expression of Interest submission is 5pm on **31 October 2019**

Successful proposals for EOIs in Tranche 2B are to be funded by DfT in 2020/21.

An electronic copy of the EOI should be submitted to:

roadmaintenance@dt.gov.uk copying in Paul.O’Hara@dft.gov.uk