

Local Highways Maintenance Challenge Fund



Department
for Transport

Application Form: bids for funding in 2019/20

The level of information provided on this form should be proportionate to the size and complexity of the works proposed. An Excel data proforma should also be completed.

Note that DfT funding is a maximum of £5 million per project for bids in 2019-20. An individual local highway authority may apply to bid for only one scheme. Funding will be provided in 2019/20, but it is recognised that construction may go into 2020/21 as well. The closing date for bids is 31 October 2019.

For schemes submitted by a Combined Authority for component authorities a separate application form should be completed for each scheme, then the CA should rank them in order of preference.

Applicant Information

Local authority name: East Riding of Yorkshire Council

Bid Manager Name and position: Claire Hoskins, Strategic Infrastructure Group Manager

Contact telephone number: 01482 391747 **Email address:** Claire.hoskins@eastriding.gov.uk

Postal address: Asset Strategy
 County Hall
 Cross Street
 Beverley
 East Yorkshire

Postcode: HU17 9BA

Combined Authorities

If the bid 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 Bid Co-ordinator: N/A

When authorities submit a bid for funding to the Department, as part of the Government's commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, the local highway authority must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department.

Please specify the weblink where this bid will be published:

<https://www.eastriding.gov.uk/council/plans-and-policies/other-plans-and-policies-information/transport/other-local-transport-schemes/>

SECTION A – Description of works

A1. Project name: East Riding Gully and Drainage Renewal Scheme

A2. Headline description: The proposal is based on a programme of gully repair and replacement at over 6,700 sites across the East Riding, focusing on areas at risk of surface water flooding. The scheme will improve the resilience of the local highway network whilst reducing delays and damage caused by severe rainfall events.

Proposed start date: 2nd January 2020

Estimated Completion date: 31st March 2020

Brief description: The proposed scheme comprises a programme of gully repairs and replacement, addressing a significant backlog of works. This will bring the asset base back into a condition that is fit for purpose whilst reducing highway flooding, improving safety and providing a better service for residents. This programme of works will be complemented by the introduction of four new gully emptying vehicles, to be purchased by the Council. This will make the existing gully cleansing service more efficient, delivering revenue savings and environmental benefits through the reuse of water and more efficient disposal of gully material. The £2.1m scheme includes a £0.315m (15%) contribution from the Council and the majority of the works can be delivered in 2019/20.

A3. Geographic area:

Please provide a short description of the location referred to in the bid (in no more than 50 words)

The highway drainage asset repair and replacement works will take place at over 6,700 sites across the East Riding. Sites will be prioritised using a risk based matrix focusing on high speed roads, areas where there is a high frequency of highway/property flooding and sites with known safety issues.

OS Grid Reference: TA 03167 39716

Postcode: HU17 9BA

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

A map showing the location of the East Riding is included as Appendix A.

A4. Type of works (please tick relevant box):

DfT funding of **up to £5 million in 2019/20**

Structural maintenance, strengthening or renewal of bridges, viaducts, retaining walls or other key structures, footbridge or cycle bridge renewal

Major maintenance, full depth reconstruction of carriageways, structural maintenance of tunnels

Resurfacing of carriageways including improvements to footways or cycleways that are within the highway boundary

Renewal of gullies and replacement of drainage assets

SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

Before preparing a proposal for submission, bid promoters should ensure they understand the financial implications of developing the project (including any implications for future resource spend and ongoing costs relating to maintaining and operating the asset), and the need to secure and underwrite any necessary funding outside the Department's maximum contribution.

Please complete the table below. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Funding profile (Nominal terms)

£000s	2019-20	2020-21
<i>DfT Funding Sought</i>	1,785	<i>DfT funding not available in 2020-21</i>
<i>LA Contribution</i>	150	165
<i>Other Third Party Funding</i>		

Notes:

- 1) Department for Transport funding will be granted in the 2019-20 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 this is proposed please state what this is expected to be.

B2. Local Contribution / Third Party Funding

Please provide information on the following points (where applicable):

- a) The non-DfT contribution may include funding from the local authority or a third party. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.**

The Council has committed to a £0.315m (15%) local contribution towards the gully repair and replacement proposals. The Council has also invested £0.75m in four new gully cleansing vehicles, to be paid for through prudential borrowing.

Whilst consideration was given to securing additional funding from a third party, these opportunities are limited due to the dispersed nature of the scheme and difficulties in attributing sites on the general highway network to a particular developer/organisation.

- b) Please list any other funding applications you have made for this project or variants of it and the outcome of these applications, including any reasons for rejection (e.g. applications made through any similar competition).**

The Council has not submitted any other bids for gully repairs, drainage infrastructure or similar schemes.

B3. Strategic Case (sections (a) to (g) below)

This section should **briefly** set out the rationale for making the investment and evidence of the existing situation, set out the history of the asset and why it is 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.**

a) What are the current problems to be addressed by the proposed works? (Describe economic, environmental, social problems or opportunities which will be addressed by the scheme).

East Riding of Yorkshire Council is the fifth largest local authority in the country in terms of area, with a population of approximately 339,000 spread across some 930 square miles (240,768 hectares). As a result the Council manages an extensive drainage asset base including approximately 90,000 gullies, 10,000 combined kerb and drainage outlets and around 3,000 culverts.

However, there is insufficient funding to maintain these assets in a condition that is fit for purpose, and the overall approach to managing the Council's drainage and gullies asset base is currently one of managed deterioration. This pressure on existing funding is increasing year on year as the Council adopts new gullies and drainage assets associated with development. Following the implementation of automated gully condition recording as part of the Council's gully cleansing operations, output data suggests that there are currently 2,700 gullies and pipes which require upgrade, replacement or urgent structural maintenance. In addition there are over 4,000 gullies with outdated 'lids', particularly in more urban areas, which render them more prone to blockage from leaves and detritus, an issue which does not go unnoticed by residents.

Defective gullies are, at best, inefficient, and at worst, potentially unserviceable. Blocked gullies can lead to flooding events and disruption which often prove more difficult to resolve due to the various faults. Flooding has a significant impact on local economic productivity, reducing access to employment, education and healthcare, and can be devastating for those who have suffered damage to their property, vehicle or premises. Highway flooding also poses a significant safety risk for drivers and causes the road surface itself to deteriorate more quickly, all leading to costly clean-up and repair bills. The frequency and severity of heavy rainfall incidents are both anticipated to increase by approximately 30% in future years as a result of climate change.

The topography of the East Riding means that 1,600km (47%) of the highway network would be affected by a 1:30 year flood event (0.3% AEP), and over 40,000 properties lie within the floodplain. In June 2007 the East Riding was subject to major surface water flooding with over 10,000 properties affected and since then the Council has worked in collaboration with partners at the Environment Agency, Yorkshire Water and local Internal Drainage Boards to reduce the risk of flooding where possible. Whilst a robust system of highway drainage can make a significant impact in terms of reducing local flooding, suitable funding opportunities for a large scale programme of more localised repair works have not materialised.

In addition to ageing drainage infrastructure the Council's current fleet of low capacity gully emptying vehicles are coming to the end of their life and require replacement. The current fleet is costly to run and maintain, and is inefficient in terms of water use, carbon emissions and waste storage capacity. A recent wider Council review of landfill sites has reduced the locations for gully material disposal from four to three, which has led to longer and less efficient cleansing regimes as the vehicles have to travel further to access a suitable disposal site. This is a particular issue for the East Riding, which is a large rural area including a carriageway network extending to over 3,550km. This has prompted a review of the waste storage capacity of our current vehicles in order to reduce costs and lost time. The Council has therefore already committed £0.75m to replacing our ageing gully cleansing vehicles using prudential borrowing, with the new vehicles expected in spring 2020.

In summary, the problems that would be addressed if this bid is successful are as follows:

- **Economic:** existing high rates of highway flooding affecting access to businesses, and compromising the resilience of our highway network and the viability of key transport links. Developer confidence in the area is reduced due to perceptions around flood risk and the long-term economic viability of the East Riding is at risk.
- **Environmental:** blocked gullies lead to highway flooding and associated safety issues for drivers, cyclists and pedestrians. Increased risk of contaminated water spilling in to verges and combined drains. The existing fleet of gully emptying machines are inefficient with high emission rates, high water use and low capacity, requiring frequent trips to disposal sites with corresponding high CO₂ emissions.
- **Social:** disruption due to highway flooding affects journey times and reliability. Properties and businesses are at risk of flooding, impacting on the health and wellbeing of local residents as the fear of flooding persists. Tourism links are compromised, and safety issues regarding surface water flooding increase. Morale for workforce operatives in current vehicles are poor as maintenance needs are not addressed.

b) Why the asset is in need of urgent funding?

Recent inventory data suggests that just over 7% of the gully network requires repair or replacement. The asset base has suffered from many years of under-investment and has now reached the point where it is struggling to cope with heavy rainfall events. In the last five years over 36km of highway has been temporarily closed following surface water flood events, with associated disruption and delays for drivers. Analysis of Section 19 reports show that routes in the East Riding affected by pluvial and fluvial flooding are typically obstructed for an average of 3 hours 20 minutes, leading to an average diversion length of 5km.

In line with best practice the Council's Transport Asset Management Plan considers highway drainage as part of the carriageway asset. This means there is no dedicated capital budget for gully repairs or replacement, other than works that can be included as part of wider carriageway maintenance schemes. The current management of the asset based on existing resources and costs leaves very little funding available for planned works. The asset base now requires an injection of capital funding to help bring it back into a condition that is fit for purpose. A programme of capital works will also lower costs associated with reactive maintenance.

Since the floods of 2007 the Council has delivered over £85m of major flood alleviation works funded by the Environment Agency/DEFRA and LEPs. This funding is focused on large scale schemes such as flood attenuation lagoons or watercourse diversion and control rather than smaller scale programmes of work such as this. If successful, this funding would not only address the economic, environmental and social issues set out above but will also support our Local Flood Risk Management Strategy (2015-2027) and the Strategic Flood Risk Assessment, developed in partnership with the EA.

The Council has committed to purchase new gully emptying vehicles through prudential borrowing. Whilst this results in a slightly higher purchase cost the increased efficiency of the new vehicles will reduce fuel and energy costs.

c) What options have been considered and why have alternatives have been rejected?

- **Do nothing** – withdraw all current funding resulting in the rapid decline of the highway drainage asset, eventually resulting in the failure of the system and increasingly widespread highway flooding and road structure deterioration. This would be in breach of our statutory duty as a Highway Authority and Lead Local Flood Authority. This clearly would not be publically acceptable,

and would have a serious impact on local businesses, visitors to the area and the travelling public generally as well as our partners at the EA and Yorkshire Water.

- Do minimum – limit funding to emergency repairs and minimal reactive maintenance with no planned maintenance. Whilst the decline in the overall condition of the asset base would be slower, this would introduce additional risk relating to safety and would still lead to regular road closures, as well as sporadic large investment in costly reactive maintenance. This would not be acceptable for the reasons set out above.
- Do something – continue with current approach based on revenue investment on regular gully cleansing and revenue repairs. A full maintenance programme of structural repairs would not be delivered and the overall condition of the asset base would continue to decline.
- Preferred option – an injection of additional capital funding from the Challenge Fund combined with a local contribution from the Council to restore gully and drainage assets on key routes to good condition.

d) What are the expected benefits / outcomes?

Through the Challenge Fund, the Council intends to remove all defective drainage from areas susceptible to surface water flooding, and use the funding saved on reactive repairs to build up a planned maintenance programme which will continue to drive down the backlog of drainage infrastructure repairs.

If this bid is successful, the Council will use a risk based approach combined with existing data to develop a matrix determining where funding should be targeted to provide maximum value for money. This is in line with best practice, as set out in HMEP's 'Guidance on the Management of Drainage Assets'.

Data from our new digital gully recording system has been incorporated into the Council's CONFIRM asset management programme to provide a robust evidence base on the type, location and condition of the current asset base. This has provided the Council with a robust dataset to establish the backlog in gully replacement. This inventory data will be cross-referenced against the routes included in the Council's Network Resilience Plan along with sites with known safety issues associated with highway flooding, high speed routes and those that carry a high volume of traffic. This will allow us to target capital funds most effectively, addressing the issues set out earlier in this submission whilst providing maximum value for money.

In summary, the expected benefits/outcomes are as follows:

- Completion of a planned maintenance programme of structural repairs and replacement of gullies and blocked/collapsed outlets at over 6,700 sites;
- Improved surface water capture, increasing flood resilience and reducing incidents of highway flooding and associated disruption and delays;
- Reduced reactive and clean-up costs during and after a flood event and less maintenance required on other highway assets affected by flood water;
- More efficient gully cleansing vehicles which are cheaper to run. Compacting waste material increases capacity and reduces the number of disposal trips required, which in turn will allow an additional 16,000 gullies to be cleaned each year;
- Delivery of a sustainable service, balancing the needs of highways users with improving quality and minimising costs.
- Social benefits from reducing the fear of flooding for residents and improving morale of staff able to implement long term improvements to highway drainage assets.

f) What will happen if funding for this scheme is not secured? Would an alternative (lower cost) solution be implemented (if yes, please describe this alternative and how it differs from the proposed scheme)?

If funding is not secured then the Council will continue with its current regime of gully cleansing and reactive maintenance as set out under the 'do something' option above. However, this will not address the backlog of required repair work and the drainage asset base will continue to deteriorate.

The percentage of gullies requiring repair or replacement will increase and highway flooding will worsen over time, directly impacting on drivers and reducing the efficiency and resilience of our highway network. This in turn will increase risk as well as the requirement for carriageway maintenance and will impact on the economic productivity of the area. The Council's reputation as a competent Highway Authority would be at risk and reputational damage could be significant.

g) What are the economic, environmental and social impacts of completing this project?

The economic, environmental and social impacts of this proposal are as follows:

Economic

- Reduced highway flooding results in less delays and disruption for the travelling public, improving journey times and reliability;
- The resilience of our highway network is maintained;
- Reduced flooding to local properties, supporting the local economy and encouraging development;
- A more efficient service means the Council is better placed to accommodate new development and future highway asset adoption;
- New vehicles are cheaper to run and fuel costs are reduced through less requirement to travel to disposal sites;
- New vehicles offer better access to kerb side drainage locations, which reduces the risk of insurance claims from nearby parked vehicles;
- More efficient vehicles also optimises productivity on site, with single vehicles able to tackle larger and more complex jobs rather than requiring several crews; and
- The scheme will be delivered by the Council's in-house Streetscene Services team, retaining local employment opportunities.

Environmental

- New cleansing vehicles have increased capacity meaning fewer disposal trips, reduced CO₂ emissions and better air quality;
- Because gully waste is compacted, the burden on landfill and associated disposal costs are reduced;
- Water in the cleansing vehicles is recycled and reused, reducing trips required to re-fill the units and associated waste water; and
- Risk of contaminated water entering other systems is reduced.

Social

- Lower chance of collisions and casualties associated with flooded roads;
- Residents' mental and physical wellbeing is improved as the chances of their property being flooded due to blocked drainage are reduced;
- The new vehicles require less physical input from operatives, supporting the health and wellbeing of our staff and adapting to an ageing workforce;
- Improved health and safety through vehicle design and innovation. The Volvo FE cab will be procured because it is amongst the safest in the world and offers better protection for drivers, operators and the public; and
- Access routes to local facilities including employment, education, healthcare and leisure are maintained.

B4. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty? Yes No

B5. The Commercial Case

This section categorises the procurement strategy that will be used to appoint a contractor and, importantly for this fund, set out the timescales involved in the procurement process to show that delivery can proceed quickly.

What is the preferred procurement route for the scheme? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

Framework contract

Direct labour

Competitive tender

The prioritised gully repair and replacement works will be delivered by the Council's in-house Streetscene Services team.

**It is the promoting authority's responsibility to decide whether or not their scheme proposal is lawful; and the extent of any new legal powers that need to be sought. Scheme promoters should ensure that any project complies with the Public Contracts Regulations as well as European Union State Aid rules, and should be prepared to provide the Department with confirmation of this, if required. An assurance that a strategy is in place that is legally compliant and is likely to achieve the best value for money outcomes is required from your Section 151 Officer below.*

B6. Delivery of project

Are any statutory procedures, such as planning permission, required to deliver the project? If yes please provide details below;

Yes No

No statutory procedures or permissions are required before this scheme can commence. The works do not require planning permission, works outside the highway boundary, land acquisition or liaison with Network Rail, and can therefore start on site almost immediately following a funding decision.

SECTION C: Declarations

C1. Senior Responsible Owner Declaration

As Senior Responsible Owner for the East Riding Gully and Drainage Renewal Scheme I hereby submit this request for approval to DfT on behalf of East Riding of Yorkshire Council and confirm that I have the necessary authority to do so.

I confirm that East Riding of Yorkshire Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Claire Hoskins

Signed:

Position: Strategic Infrastructure Group Manager



C2. Section 151 Officer Declaration

As Section 151 Officer for East Riding of Yorkshire Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and East Riding of Yorkshire Council:

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution
- will allocate sufficient staff and other necessary resources to deliver this scheme on time and on budget
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties
- accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested
- has the necessary governance / assurance arrangements in place
- has identified a procurement strategy that is legally compliant and is likely to achieve the best value for money outcome
- will ensure that a robust and effective stakeholder and communications plan is put in place

Name:
Julian Neilson

Signed:



Submission of bids:

The deadline for bid submission is 5pm on **31 October 2019**

Successful bids for Challenge Fund Tranche 2B are to be funded in 2019/20.

An electronic copy only of the bid including any supporting material should be submitted to:

roadmaintenance@dft.gov.uk copying in Paul.O'Hara@dft.gov.uk