

# Local Highways Maintenance Challenge Fund



Department  
for Transport

## Application Form (for Tranche 2A)

The level of information provided should be proportionate to the size and complexity of the scheme proposed. Note that DfT funding is a maximum of £5 million per scheme. An individual local authority may apply only for one scheme

For schemes submitted by components of a Combined Authority 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:** Southend-on-Sea Borough Council

**Bid Manager Name and position:** Paul Mathieson – Group Manager

*Name and position of officer with day to day responsibility for delivering the proposed scheme.*

**Contact telephone number:** 01702 215321      **Email address:**  
paulmathieson@southend.gov.uk

**Postal address:** Department for Place  
Southend-on-Sea Borough Council  
Civic Centre  
Victoria Avenue  
Southend-on-Sea  
SS2 6ER

### **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

**Contact telephone number:** N/A      **Email address:** N/A

**Postal address:** 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, they 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. The Department reserves the right to deem the business case as non-compliant if this is not adhered to.

**Please specify the weblink where this bid will be published:** [www.southend.gov.uk](http://www.southend.gov.uk)

## **SECTION A - Scheme description**

**A1. Scheme name:** Southend Highway Flood Reduction and Resilience Improvement Scheme

### **A2. Headline description:**

Please enter a brief description of the proposed scheme and its timetable including the completion date (in no more than 50 words)

The scheme will renew and upgrade gullies and the drainage networks in three hotspot areas that have suffered from more frequent surface water flooding, as identified in the asset management strategy. It will improve resilience and reduce the cost of damages and delays caused by extreme weather events.

### **A3. Geographical area:**

Please provide a short description of area covered by the bid (in no more than 50 words)

The three areas are within the Borough of Southend-on-Sea focussing on the Central Seafront area, Shoeburyness and access to London Southend Airport. These represent key locations for tourism, residential and business activity and all fall within Critical Drainage Areas, as identified in the Local Flood Risk Management Strategy.

*Please append a map showing the location (and route) of the proposed scheme, existing transport infrastructure and other points of particular interest to the bid e.g. development sites, areas of existing employment, constraints on land use, planning etc.*

#### **Annex 1 – Location of Scheme**

#### **Annex 4 – Draft Resilience Network – including infrastructure locations**

#### **Annex 5 – LTP3 Strategy Map**

Area 1 - HHR – Harp House Roundabout, SS2 6TP. OS Grid Reference 587404,188709, includes access routes to Southend Airport and the bus interchange between routes 7, 8 and 9 services  
Area 2 - CB – City Beach, Seafront, SS1 2EJ OS Grid Reference 588685, 185088; central seafront area and includes tourism and leisure facilities and is an area of high footfall, it is also subject to “tide locking” and relies on Anglian Water Services pumping stations. There is also a larger hinterland of residential streets that contribute to overland surface water flows and sewer surcharging.  
Area 3 – Shoebury SS3 9HG – OS Grid Reference 592442,184289, Shoeburyness and mainly residential with scope to improve highway surface water drainage.

### **A4. Type of scheme (please tick relevant box):**

#### **Small project bids** (requiring DfT funding of up to £5 million)

Major maintenance, strengthening or renewal of bridges, tunnels, retaining walls or other structures

Major maintenance or renewal of carriageways (roads)

Major maintenance or renewal of footways or cycleways

Major maintenance or renewal of drainage assets

## **SECTION B – The Business Case**

### **B1. The Financial Case – Project Costs and Profile**

Before preparing a scheme proposal for submission, bid promoters should ensure they understand the financial implications of developing the scheme (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 following tables. **Figures should be entered in £000s** (i.e. £10,000 = 10)

**Table A: Funding profile (Nominal terms)**

<b>£000s</b>	<b>2017-18</b>
<i>DFT Funding Sought</i>	565 [85%]
<i>LA Contribution</i>	100 [15%]
<i>Other Third Party Funding</i>	0 [X%]

*Notes:*

1) *Department for Transport funding is only for the 2017-18 financial year.*

2) *A minimum local contribution of 10% (by the local authority and/or third party) of the project costs is required.*

### **B2 Local Contribution / Third Party Funding**

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

- a) The non-DFT contribution may include funding from organisations other than the scheme promoter. Please provide details of all non-DFT funding contributions to the scheme costs. 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 Borough Council has included a total of £350k in the 17/18 Capital Programme to fund essential improvements to the wider drainage asset of which £100k will be allocated to this scheme. The Council Capital programme is currently insufficient to deal with the consequences of extreme flooding conditions.

- b) Where the contribution is from external sources, please provide a letter confirming the body's commitment to contribute to the cost of the scheme. The Department is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Have you appended a letter(s) to support this case?  Yes  No  N/A

- c) Please list any other funding applications you have made for this scheme or variants thereof and the outcome of these applications, including any reasons for rejection (e.g. through the Access Fund or similar competition).

No other funding applications have been made for this scheme or variants.

### **B3. Strategic Case** (Maximum 50 words for each section a) to g) **Annex 2**

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 the scheme 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 your scheme? (Describe economic, environmental, social problems or opportunities which will be addressed by the scheme).

The scheme reduces the frequency and severity of highway flooding caused by the existing gully configuration and network deficiencies.

ECONOMIC: Regular flooding of businesses, some closed for months following each event

ENVIRONMENTAL: Contaminated surface water spilling into verges and combined drains

SOCIAL: Disruptive to local properties and tourism

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

Unable to cope with runoff volumes following heavy rainfall. Flooding occurs at least annually, although four rainfall events August 2013 to September 2014 caused extensive flooding. Upgrades to gully/highway configuration required. Capital investment needed in critical areas to support Flood Risk Strategy and the 2014 Flood Investigation Report

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

CB: Provide attenuation storage at high tide and upgrade pump. Upstream flood bund rejected due to cost.

Shoebury: Reconfigure gullies and drainage connections to ditches. Alternatives rejected based on storage cost at high tide.

HHR: Reconfigure gullies and pipes for attenuation. Widened watercourse option rejected on cost and disruption grounds.

d) What are the expected benefits / outcomes?

Improved surface water capture, increasing flood resilience. Significant reduction in business / residential property damage, reduced property and highway repair costs, and reduced congestion as roads will not need to be closed. Decreased health risk as foul water less likely to discharge onto highway and beach from combined sewers.

e) Please provide information on the geographical areas that will benefit from your scheme.

Flood resilience benefits to roads draining towards three locations and properties cut-off by closures.

CB: Marine Parade, Eastern Esplanade (800m)

Shoebury: Shoebury Common Road (650m), Maplin Way / Waterford Rd

HHR: Roundabout including route between Airport/Retail Park and town

Wider decongestion benefits across borough and north to Rochford (Essex).

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)?

Council would continue to liaise with partners and improve flood event / road closure public communications. Gully cleaning, general maintenance and dealing with gully defects to continue, focused on CDAs. Insufficient funds to upgrade assets, therefore disruptive flood events with property damage and road closures expected to continue / increase.

g) What is the impact of the scheme?

Short term highway disruption during construction. On completion, significant reduction in disruptive flood events with fewer road closures and reduced damage to commercial / residential properties. Improved seafront and Airport Retail Park business profitability, with business and associated jobs retained in Southend

See **Annexes 3 and 4 showing Emergency and Priority Routes Map** – this has been developed as an integral part of the Asset Management Plan focusing investment on the resilience network and highlights local flooding incidents

**B4. Affordability and Financial Risk** (maximum 50 words for each of a) to c)

What is your Authority's most recent total outturn annual capital spending on highways maintenance (Year 2015/16) = £1,507m **figures should be entered in £000s** (i.e. £10,000 = 10)

What is the DfT contribution sought as a % of that annual total = 37.491% (to 3 decimal places)

This section should provide a narrative setting out how you will mitigate any financial risks associated with the scheme

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

a) What risk allowance has been applied to the project cost?

20% has been applied to the cost estimate based on compensation events due to additional works required and delays to the programme

b) How will cost overruns be dealt with?

There is a Prince 2 project management system in place, with the necessary controls. Monthly monitoring and reporting takes place, including NEC3 procedures to manage contracts. Any overruns will be managed as part of the Council's overall capital programme.

c) What are the main risks to project delivery timescales and what impact this will have on cost?

- 1) Unforeseen ground conditions and locations of assets
- 2) Adverse weather delays to contract programme
- 3) Additional works required due to inaccurate records

These risks would increase the cost, however advance surveys including CCTV and ground penetrating radar. Early Contractor Involvement will reduce the likelihood and severity.

**B5. Equality Analysis**

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

**B6. Value for Money**

**Annex 2**

**a) For all scheme bids, promoters should provide, where available, an estimate of the Benefit Cost Ratio (BCR) of the scheme.**

**PVB (£ millions):** 37.05

**PVC (£ millions):** 0.99

**NPV (£ millions):** 36.06

**BCR:** 37

Where a BCR is provided please be aware that DfT may wish to scrutinise the data and assumptions used in deriving that BCR.

A 'Modelling and Economics Technical Note' is included as Annex 2 to this submission. An appraisal summary spreadsheet can also be provided on request.

**b) Please provide the following data which will form a key part of our assessment:**

Note this material should be provided even if a BCR estimate has been supplied and has also to be entered and returned as an MS Excel file in the VfM Annex MS Excel file).

A description of the do-minimum situation (i.e. what would happen without Challenge Fund investment)

Gully cleaning, general maintenance and dealing with gully defects to continue, focused on CDAs. Insufficient funds to upgrade assets, therefore disruptive flood events with property damage and road closures expected to continue / increase.  
Flood event road closures at Marine Parade / Eastern Esplanade, Shoebury Common Rd, Harp House Rbt. Potential for these roads to be closed at the same time, leading to wider knock-on effect across the whole of Southend.

Details of significant monetised and non-monetised costs and benefits of the scheme (quantified where possible)

Monetised benefits relate primarily to reduced delay and congestion associated with road closures not being required in the future. Non-monetised benefits: reductions in business / residential property damage, reduced loss of earnings and disruption to livelihoods, reduced property repair costs. Also decreased health risk as foul water surcharge onto highway and beach less likely.

Length of scheme (km)

**CB.** Marine Pde / Eastern Esplanade – 800m  
**Shoebury:** Shoebury Common Rd – 650m  
**HHR:** Approx 200m  
**Total scheme length: 1.65km**

Number of vehicles on affected section (Average Annual Daily Traffic in vehicles and if possible split by vehicle type) – to include details of data (age etc) supporting this estimate.

Total vehicles AADT – 56,940  
Cars AADT – 48,967  
LGVs AADT – 6,224  
HGVs AADT – 1,748  
Derived from 12 hour MCCs undertaken in 2016, factored to 24 hour by local long term monitoring count.

**c) Other VfM information where relevant - depending on type of scheme bid:**

Details of required restrictions/closures if funding not provided (e.g. type of restrictions, timing/duration of restrictions, etc)

Disruptive flood events expected at least annually following heavy rainfall, leading to full road closures for approx. 12-24 hours at.  
\* Marine Parade / Eastern Esplanade (City Beach)

	<p>* Shoebury Common Road</p> <p>* Approaches to Harp House Roundabout – A1159 Manners Way and Rochford Road. Temporary diversions put in place.</p>
Length of any diversion route, if closure is required (over and above existing route) (km)	<p>Diversion routes increased distance (net) over existing route:</p> <p>* City Beach – 2.1km for through traffic, or 5.5km (approx 10 minutes) from one end of flooded stretch to the other</p> <p>* Shoebury – 2.4km (approx. 3 minutes)</p> <p>* Harp House Rbt – 2.2km for north-south through traffic, or 8.5km (approx. 9 minutes) from one end of flooded stretch to the other</p>
Regularity/duration of closures due to flooding: (e.g. number of closures per year; average length of closure (hrs); etc.)	<p>An average of one full road closure per year is expected at each of the three sites, with a closure duration of approximately 12-24 hours. Closures have occurred on the following dates in the last 4 years.</p> <ul style="list-style-type: none"> <li>• 24/08/2013</li> <li>• 11/10/2013</li> <li>• 20/07/2014</li> <li>• 19/09/2014</li> <li>• 31/05/2016</li> </ul>
Number and severity of accidents: both for the do minimum and the forecast impact of the scheme (e.g. existing number of accidents and/or accident rate; forecast number of accidents and or accident rate with and without the scheme)	N/A
Number of existing cyclists, forecasts of cycling usage with and without the scheme (and if available length of journey)	The nature and extent of flooding means that cyclists must follow a similar diversion route to cars when roads are closed. Scheme completion not expected to lead to change in cycle trip numbers or lengths.

## B7. The Commercial Case

This section categorizes 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

Council Contractor

Competitive Tender

The Council has current NEC3 compliant contracts for highway maintenance including drainage, surfacing and traffic management. The Council's waste contractor provides additional support for emergency events and clean-up operations.

*\*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.*

**B8. Delivery** (maximum 50 words for a) and 100 words for b)

a) Are any statutory procedures required to deliver the project, if yes please provide details below;

Yes  No

Details of statutory procedure (50 words maximum)

b) Please summarise any lessons your authority has learned from the experience of delivering other DfT funded programmes (such as Challenge Fund tranche 1, pinch point schemes, local majors, Local Sustainable Transport Fund, Better Bus Areas) and what would be different on this project as a result.

Important to be ready to commence work on the scheme as soon as funding is approved. This ensures that the project does not become too compressed towards the end of the period. Good asset management records and flood risk analysis means that design work will be complete within three months. Liaison with stakeholder and frontages very important to inform and gain support. This means that reasons for the scheme are set out and that good project management, governance and communications with the public and wider audience is vital for success

**B9. Stakeholder Support** (maximum 50 words for a) and 100 words for b)

c) Does this proposal have the support of the Local MP(s);

Yes  No

MPs have been contacted and awaiting their support

Name of MP(s) and Constituency

1 Sir David Amess, Southend West

2 James Duddridge, Rochford and Southend East

d) List other stakeholders supporting the Scheme

1 Anglian Water Services

2 Local Business Improvement District (Southend BID)

3 London Southend Airport

4 Environment Agency

**SECTION C: Declarations**

**C1. Senior Responsible Owner Declaration**

As Senior Responsible Owner for [Southend Highway Flood Reduction and Resilience Improvement Scheme] I hereby submit this request for approval to DfT on behalf of [Southend-on-Sea Borough Council] and confirm that I have the necessary authority to do so.



I confirm that [name of authority] will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Paul Mathieson

Signed:

Position: Group Manager Major Projects and Strategic Transport Policy



## C2. Section 151 Officer Declaration

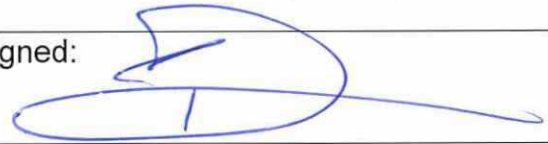
As Section 151 Officer for Southend-on-Sea Borough Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Southend-on-Sea Borough Council

- 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: ~~Joe Ghesterton~~ Ian Ambrose  
Director of Finance and Resources

Signed:

Deputy S151 officer



## Submission of bids:

The deadline for bid submission is 5pm on:

**31 March 2017** for Challenge Fund Tranche 2A (2017/18 funding)

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

[roadmaintenance@dft.gsi.gov.uk](mailto:roadmaintenance@dft.gsi.gov.uk) copying in [Paul.O'Hara@dft.gsi.gov.uk](mailto:Paul.O'Hara@dft.gsi.gov.uk)