



City of Doncaster Council

# Building flood resilience in Clay Lane



Yorkshire Water and City of Doncaster Council are proposing innovative new measures to minimise flooding and enhance the local environment in the Clay Lane area. We plan to introduce new sustainable drainage systems (SuDS) that will help tackle the issue of surface water flooding and bring a range of other community benefits.

We're keen to hear your views on the proposals and encourage you to contribute to how the new features might look. For example, you can help us decide what types of flowers and plants we add into the designs.

This brochure contains all the information made available online and at our community drop-in event. A feedback form is included with this brochure. Please complete the form and post it to us at Flood Risk, North Bridge Depot, North Bridge Road, Doncaster, DN5 9AN.

Or you can share your views on our online feedback form by scanning the QR code or visiting: doncaster.gov.uk/ services/get-involved/consultations

Our consultation will run until midnight on Friday, 27 September. Thank you for your interest in the project. We look forward to hearing your feedback.

Event Tuesday, 10th September, 2pm-6pm at the Cypress Suite, The Legacy Church, Unit 12, Shaw Wood Way, Doncaster, DN2 5TB.

## Introduction

We appreciate that flooding is an issue of ongoing concern for residents and businesses. The Clay Lane area retains surface water during heavy rainfall, which has resulted in local homes being flooded. Our proposals for new sustainable urban drainage systems (SuDS) aim to reduce flooding, improve the local environment and create an attractive, green space for community use.





During the initial phase, we'll build a number of features to store surface water and release it more slowly, helping to prevent flash flooding.

These features will include a large, planted detention basin and a series of rain gardens in areas where they will bring most benefit.

## **Our proposals**

#### 1. Attenuation pond

We propose to build an attenuation pond in an area of grassland that runs behind residential properties on Wilberforce Road and alongside the railway line.

Attenuation ponds, also known as flood or balancing ponds, work by collecting and temporarily storing storm water.

This water is gradually released at a controlled rate, thereby slowing down the flow of stormwater and preventing flooding. They are very effective for managing surface water run-off during prolonged rain.

The attenuation pond near Wilberforce Road is expected to be dry most of the year but will be planted with appropriate species that tolerate occasional flooding. Further planting on the perimeter and on either side of the pond will further restrict the flow of water directly to the structure.

The area will be further enhanced with the addition of new trees, grassland and bench seats, creating an attractive green space for community use.

For safety reasons, measures will be introduced to deter children accessing the pond to play.

Below: Proposals for the attenuation pond site.

#### 2. SuDs features

We also propose to introduce a range of smaller SuDs features on grass verges in Jefferson Avenue, Chalmers Drive, Wilberforce Road and Moffat Gardens.

These rain gardens are designed to manage rainfall in urban areas in a sustainable way. They comprise a planted depression that absorbs rainwater from impervious surfaces such as highways, roofs and driveways.

This process reduces the rate of runoff, helping to prevent flooding, while also providing a habitat for wildlife and an attractive landscape feature.





SuDS rain gardens are particularly effective in managing 'clean' surface water and can be integrated into private properties or public spaces. They are easy to maintain, can be retrofitted into existing landscapes, and offer ecological benefits by supporting native vegetation that thrives in wet conditions.

In addition to the rain gardens, two areas of permeable hardstanding are also proposed – at the turning head of Moffat Gardens and adjacent to the shops on Livingstone Avenue.

Below: Permeable paving

## Rain gardens

## Example 1



## Example 2



## The benefits

These new Sustainable Drainage Systems (SuDS) will bring a range of benefits to the local community.

They will:

- Increase the level of flood protection for residents and businesses
- Enhance the natural environment by improving water quality, amenity and biodiversity
- Reduce flooding concerns of local residents



- Deliver a practical solution to flood risk by fitting SuDS in open spaces that cause minimal disruption
- Boost local awareness of flooding and flooding issues
- Create a sustainable and robust response to the effects of climate change
- Facilitate wider discussions around parking, speeding and any potential increase in amenity areas.

## **Planting options for Clay Lane**

There are a variety of planting types and species available to enhance the design of the features we plan to introduce around Clay Lane. We're keen that local people have their say about the types of plants and flowers available.

A planting brochure is available online and the following pages gives you a flavour of the types of planting available to choose from.

To view the planting brochure and the full range of plants available for this scheme, please scan the QR code or visit doncaster.gov.uk/services/get-involved/consultations

#### Sample trees and shrubs



Cercis Canadensis



Hydrangea Paniculata 'Sundae Fraise'





Physocarpus Opulifolius

#### Sample small - shrubs





Azalea Canadensis

## Sample herbaceous perennials



Echinacea Pallida

### Sample ornamental grasses

Skimmia Japonica 'Fragrans'



Calamagrostis Brachytricha



Sesleria Caerulea

## Sample ground cover plants



Vinca Major

These plants are shown for indicative purposes only. For the full range available please visit our website.



Echinops Ritro 'Veitch's Blue'





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