

# Clementhorpe flood alleviation scheme

Update: Terry Avenue access during construction

January 2020

*Since submitting our planning application we have been working to further define the activities required to construct flood defences along Terry Avenue. We have developed a programme of work and assessed the impact each phase of activity will have on the community. This shows that it will not be possible to maintain safe public access along the section of Terry Avenue between Skeldergate Bridge and Duke's Wharf while work is carried out. This means, to build these flood defences, this section of Terry Avenue will be closed to all for a maximum of 12 months.*

## Background

On 21 March 2019 we submitted our planning application for the Clementhorpe flood alleviation scheme. Members of the public raised numerous concerns about aspects of the planning application including the proposed closure of Terry Avenue for up to 18 months and proposed diversions for cyclists and pedestrians.

The proposed closure was to ensure sufficient space to carry out work to prevent water from travelling below the surface and bypassing the new above ground defences, as seen during the operation of the Aqua Barrier in 2008. This work would have involved installing eight metre solid concrete piles along parts of Terry Avenue – a process requiring large equipment and significant ground excavation.

The installation of piles to this depth in this narrow location carries a number of risks and concerns. For example noise, dust, property damage and access restrictions. As such we instructed an alternative contractor to determine if the depth of piles could be reduced. In June 2019 we received positive feedback, piling could be reduced to a depth of five metres and, if seepage rates could be confirmed as minimal, grout injection would be viable in Clementhorpe.

We updated our planning application in October 2019, stating that access for pedestrians and cyclists could be maintained along Terry Avenue for the majority, but not all, of the construction period, based on the grout injection method. This decision was made based on the smaller sized machinery

required to carry out grout injection and the ability to maintain public safety throughout the work.

## Ground investigations: October 2019

We carried out ground investigations to confirm seepage rates and therefore the viability of grout injection. These small scale investigations involved minimal excavation and small equipment, working along Terry Avenue. The results confirm that grout injection is viable for use in Clementhorpe.

Despite the small scale of these works, a number of incidents arose where work had to stop and members of the public needed to be escorted through the active working area. This caused significant delay. To ensure Terry Avenue was fully reopened on time we had to impose a 24 hour road closure for vehicles.

This has led us to conclude that it is not viable to safely accommodate the public along Terry Avenue during the main work.

## Scheme proposals: detail of work required

Whilst the proposed Clementhorpe flood alleviation scheme stretches from Skeldergate Bridge to Lovell Street (at the entrance to Rowntree Park), there are three key construction locations which will impact on access along Terry Avenue:

1. Terry Avenue grout injection
2. Clementhorpe floodgate
3. Waterfront House floodwall

Further information on the work required at these locations is provided below.

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the risk of flooding  
for York



 [yorkfloodplan@environment-agency.gov.uk](mailto:yorkfloodplan@environment-agency.gov.uk)

 [consult.environment-agency.gov.uk/yorkshire/yorkfas/](http://consult.environment-agency.gov.uk/yorkshire/yorkfas/)

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### Terry Avenue grout injection

To provide a below ground barrier, known as a seepage cut-off, it will be necessary to excavate a trench along Terry Avenue between Skeldergate Bridge and Dukes Wharf. This will allow for:

- Excavation to identify sewer connections and services e.g. water, gas, electricity, telecommunications and to confirm the route of the seepage cut-off
- Injection of grout to provide a seepage cut-off
- Construction of a clay liner to connect above and below ground work ensuring the flood defences are not damaged by future work within the highway.

### Clementhorpe floodgate

To install a bi-fold flood gate at the bottom of Clementhorpe, significant above and below ground work is required including:

- Excavation to remove the existing Aqua Barrier foundations
- Identification and protection of existing services
- Installation of bi-fold floodgate foundation, including piles
- Diversion of existing buried services, by service providers
- Backfill of excavation and required road and footpath reinstatement/reconfiguration
- Installation of bi-fold floodgate and storage cabinets.

### Waterfront House floodwall

To install the new floodwall, significant above and below ground work is required including:

- Identification, protection and diversion of existing services, by service providers
- Injection of grout to provide seepage cut-off
- Installation of the floodwall foundation, including piles
- Construction of a clay liner to connect above and below ground work ensuring the flood defences are not damaged from future work within the highway

- Backfill of excavation and required road and footpath reinstatement/ reconfiguration
- Construction of concrete floodwall
- Installation of flood resistant glass panels to ground floor balconies/windows plus new brick façade.

### What does this mean for access?

We have concluded that due to the extent of above and below ground work, and through the experience of recent ground investigations, access along Terry Avenue cannot be maintained safely once construction starts. It is expected that access will be closed for a maximum of 12 months.

### Pedestrians and cyclists

The proposed diversions for pedestrians and cyclists are outlined in our current construction traffic management plan (CTMP) which is available on the City of York Council planning portal under application reference 19/00570/FUL.

Pedestrian access to the existing houseboats on Terry Avenue will be maintained.

### Vehicles

Alternative routes for vehicles seeking access to areas south of Skeldergate Bridge will be required, including:

- Houseboats
- Dukes Wharf residents
- The Roomzzz Aparthotel
- The Caravan and Motorhome Club – Rowntree Park
- Rowntree Park car park

As per our current CTMP, alternative vehicle access is proposed from the south via Butcher Terrace and Terry Avenue. Residents of Dukes Wharf have confirmed that they will utilise the private road to the rear of the property.

### Next steps

We aspired to present the Clementhorpe flood alleviation scheme at the January planning



committee. If approved, construction was expected to start in early spring 2020.

To keep public safety as paramount importance, as outlined above, we have taken the decision to update our application further. We are aiming to present the scheme to committee in March 2020.

To meet this aim we will:

- January: Review output of transport workshop held in September to ensure proposals reflect output
- January: Confirm phasing of work and develop programme for delivery
- January: Update relevant planning documentation
- February: Submit updated planning documentation to City of York Council for distribution and consultation
- March/April: Present proposals at planning committee for planning decision

If approved, we aim to start construction by summer 2020.

### Staying in touch

We are keen to remain in touch with all residents directly or indirectly affected by flooding within the Clementhorpe area. There are a number of ways to contact us:



[yorkfloodplan@environment-agency.gov.uk](mailto:yorkfloodplan@environment-agency.gov.uk)



Wellington Row, York YO1 6FZ  
Open: Mon | Wed | Thurs 10-4



@YorkFAS



York Flood Alleviation Scheme,  
Environment Agency, Foss  
House, 1-2 Peasholme Green,  
Kingspool, York YO1 7PX

mailing list. Please let us know if you wish your name to be added to this.


To ensure residents receive up to date information on the scheme, we have developed an electronic

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 [yorkfloodplan@environment-agency.gov.uk](mailto:yorkfloodplan@environment-agency.gov.uk)

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