

York Flood Alleviation Scheme

September 2021

Update for October's Executive Decision Session

This is an update of the progress made over the last three months on the flood alleviation work in York, as well as providing information on the current status of our work and expected timelines for delivering the remaining work. In this update we have provided:

1. Summary of city wide flood alleviation activities
2. Engagement highlights and summary
3. Programme information table
4. Map of the York Five Year Plan flood cell outlines

1. Summary of city wide flood alleviation activities

Flood Cells Update

Scarborough Bridge to Ouse Bridge right bank (B4)

We have completed the majority of work in this flood cell to better protect 39 properties from flooding. We have increased the height of the flood wall and gates along North Street, built a new flood wall between Leeman Road and the Memorial Gardens, and installed demountable panels across the entrances to the Gardens. We have started work to install a new flood gate under Lendal Bridge. This work was originally planned to be completed before the summer holiday season but unfortunately, due to unforeseen circumstances, there have been delays and the road closure has been extended to 22 October 2021. We are working with Northern Power Grid (NPG) to complete the necessary work to the electricity cables so that the replacement gate can be installed as quickly as possible. During this time the access under Lendal arch will remain closed with the temporary flood defence in place. The team has explored the possibility of partially re-opening the road whilst this work takes place, however this has been deemed not to be practical.

Clementhorpe (B8)

This flood defence scheme runs from Skeldergate Bridge to Rowntree Park, has an estimated cost of £7.7 million and will better protect 135 properties from flooding. Construction of the scheme began on 1 March 2021, with the closure of Terry Avenue, from Skeldergate Bridge to Dukes Wharf, required. The road closure was implemented in two stages, on 17 May 2021 and 5 July 2021. The road closure is expected to last 12 months. Due to the complexity of the work and extent of underground seepage cut off required, work on the scheme is estimated to take up to 18 months to complete. We are currently aiming to complete this work by autumn/winter 2022.

Clifton and Rawcliffe (B10)

This scheme involves raising the height of the Clifton Ings Barrier Bank and extending it at both ends to reduce flood risk to 140 properties in York. Work here has been subject to a number of delays and concerns, primarily over suitable material for the embankment and raising costs. We have overcome a great number of concerns and are now planning on starting preparatory work this September. This will include setting up a compound area and diverting the Sustrans Cycleway. This diversion keeps the route within Rawcliffe Meadow and forms part of our programme to make improvements to the surface and usability of the path.

Coppins Farm to Scarborough Bridge (B11)

We have completed the majority of work on increasing the height of the flood defences in this flood cell. We have extended and increased the height of the flood embankment in St Peters School fields, built a transition wall between the embankment and the end of Almerly Terrace and installed piles into the Network Rail embankment up to Scarborough Bridge. We have installed new gates at Almerly Terrace, however, the glass panels for the wall didn't

meet our specifications and on site work to reduce the seepage rate to within tolerance didn't work. Further testing is ongoing, and subject to the panels meeting our specification, we plan to complete installation this autumn including repairs to the wall along Almerly steps and installation of a new floodgate to the top of Almerly Steps

[Scarborough Bridge to Lendal Bridge \(B12\)](#)

The work we're doing here will reduce the risk of flooding to 57 homes and businesses in the Marygate area. We are increasing the height of the flood walls and gates between Scarborough Bridge and Museum Gardens. This will include installing glass panels on top of the defences along Earlsborough Terrace, and demountable panels on top of the Marygate flood gate. We are also increasing the height of, and extending, the flood embankment in Museum Gardens. Work started in May 2021 with earth works in Museum Gardens started in August. In addition to the wall raising, we will adjust the lip of the flood gate next to Scarborough Bridge to improve ease of access. Work is due to be completed in January 2022.

[Bishophthorpe \(C1\)](#)

The scheme will include the construction of a 170m wall, with 6m deep piling underneath the length of the wall, a flood gate across the bottom of Chantry Lane, and a new manhole chamber with a penstock mechanism. These defences will directly benefit 117 properties, at an estimated cost of £2.5m. We established our compound area in May 2021 and started construction of the scheme on Chantry Lane in the same month. Piling work was completed in July. Work is due to be completed in early 2022.

[Clifford's Tower \(F1\)](#)

This scheme will initially involve raising of the wall between St George's car park and the Foss Basin tying into Skeldergate Bridge. We are working closely with the CYC Castlegate project team to ensure our projects align.

[Tang Hall Beck and Osbaldwick Beck \(F4/F5\)](#)

We are currently reviewing options and are in discussion with CYC and Yorkshire Water to establish the best course of action to alleviate flood risk in this area.

[Westfield Beck \(F12\)](#)

The flood risk in this area is complicated as it is influenced by a number of sources. We have been in discussions with our partners to consider what options may be available. To mitigate flood risk here a number of factors need to be considered to ensure that any work does not have adverse impact on another flood risk source. We will continue to work with our partners to identify possible options and how any work may be delivered.

[Foss Storage Area \(F8, F10 and F11\)](#)

This scheme, approximately 2km north of Strensall, will better protect 490 vulnerable homes between Strensall and The Groves area of York from flooding. It will also reduce flood risk to key transport routes and result in environmental benefits including tree planting, wetland creation and improvements to river bank habitat. We have now discharged all planning conditions and are making preparations to start work subject to access arrangements.

[Foss Barrier](#)

Since the Boxing Day flood in 2015, we have greatly increased the pumping capacity of the pumps at the barrier, installed new infrastructure to support the pumps and new power supplies. In January this year, we installed a new, taller barrier gate. All this has been achieved whilst ensuring the station remains fully operational throughout. Subject to final checks and reinstatement of the car park our work to fully refurbish and upgrade the Foss Barrier is nearly complete.

[PFR](#)

[Foss Confluence to Fulford \(B16\)](#)

We are near completion of installing individual bespoke measures at all eligible properties in flood cell B16. Once all the measures are fitted and all relevant checks have been complete we plan on engaging the residents in a series of activities to ensure they are fully equipped to be the best prepared for flooding. This includes knowing how and when to store, deploy and maintain their measures, what actions they can carry out to minimise impact of flooding and who to contact for information or assistance. A key component of future resilience to flooding is ensuring the

residents have a home and community emergence plan in place. We are working with our colleagues in Flood Resilience and CYC Emergency Planning to plan and deliver these engagement activities.

South Bank (B8)

Surveys and measurements have taken place at 90% of eligible properties in this flood cell. Reports are being drafted which will be shared with property owners. We plan on reaching agreement on suitable measures with property owners this summer with installations being able to take place later this year.

Lendal Hill, Skeldergate and Naburn (B12, B7 and C3)

These flood cells make up the first group being delivered by a different contractor. In contrast to how PFR has been processed previously this contractor will be taking each property through the whole process i.e. from organising the survey to ordering and installing the products and ensuring sufficient training in deploying and storing individual measures. Engagement is ongoing with around 60% of eligible property owners having completed our online questionnaire. This questionnaire is a pre requisite to having a free property survey which will determine suitability of the property and propose required measures.

Government House Rd, Kings Staith, Bishopthorpe and Acaster Malbis (B11, B15, C1 and C2)

Group 2 flood cells for our new contractor are currently being contacted to determine level of engagement required. Questionnaires will be sent to eligible property owners this summer.

2. Engagement highlights and summary

Engagement highlights

Clementhorpe Engagement Cabin (B8)

To provide an easily accessible service for residents in Clementhorpe whilst construction of our new flood defences is underway, we set up an engagement cabin on the periphery of our compound area at the bottom of Butcher Terrace. The cabin was opened to the public on 17 May 2021. This has been open three days a week, staffed by either an Environment Agency officer or our contractor's Community Liaison officer. So far, we have had approximately 30 visitors. In addition, we have continued to respond to a high volume of email enquiries and circulated notices to the community in advance of particularly noisy or disruptive work in the area.

Clementhorpe road closures (B8)

In advance of the Terry Avenue road closures on 17 May 2021 and 5 July 2021, we sent notification by email and letter drop to residents in the area, as well as via the York Civic Trust mailing list. In total, the notice of the road closures was sent to over 2,000 addresses. We also arranged for staff to be present on the first day of the road closures, to provide a personal face to face service for the public, providing information about the road closure and explaining the reason for it. Across the two days, we spoke with over 400 members of the public. Most seemed unaware of the closure despite all our notifications and were grateful for the diversion advice.

Bishopthorpe door knocking (C1)

In advance of construction starting in Bishopthorpe, we called on the 28 homes in the area on 13 May 2021, to introduce ourselves, answer questions, provide information to residents about the work and what the likely impacts would be. This was well received by many residents who appreciated that we had taken time and effort to ensure they were forewarned and prepared.

Weekly Cell updates (B4, B8, & B12)

Following on from a practice initiated in flood cell B4 we now send weekly updates via email to local businesses and other stakeholders directly impacted by our work. These have been welcomed by our stakeholders who feel kept closely up to date on progress and significantly what to expect in the coming week. This has helped to build trust and confidence from our stakeholders and allowed them to plan around our activities where necessary.

PFR property visits

In South Bank, Environment Agency staff accompanied our PFR contractors when carrying out property visits. This allowed the property owners to engage with both ourselves and our contractors simultaneously which enabled them

to get immediate answers to their questions. This approach was well received by both the homeowners and contractors who felt the engagement was a positive step towards building trust and confidence.

Clifton engagement (B10)

To engage with users of Clifton Ings footpath and cycle way we set up a pop up event near the allotments. We spoke to a number of walkers and cyclists on the day to inform them of our upcoming work and gather feedback on the impacts our scheme will have on them. The response was overwhelmingly positive and we will repeat the process in the coming months.

Marygate Car Park diversion signage

Due to the nature of our changing closures and diversions in this area and the multitude of routes people can take we felt it was necessary to create bespoke signage. We created posters which not only informed of the closure, it provided a map of the area with proposed diversions, gave advice on appropriate routes which avoided steps and clear signpost for popular destinations. Following feedback we made suitable changes to accommodate the needs of the public and will be implementing additional signage for the sustrans cycle route.

Tree Planting Map

In response to the online tree planting map launched in March, we have received 25 suggestions for locations within York where trees could be planted. Each one has been investigated by a dedicated officer to determine its suitability for planting and issues such as who owns the land.

Engagement activity summary

Although our Community Hub on Wellington Row has remained closed over the summer months, we have continued to provide regular city wide newsletters and briefings for specific flood cells by email to anyone who requests them.

Since April we have:

- Prepared and shared 6 newsletters, either city-wide or to specific flood cells, to a combined mailing list of almost 900 recipients;
- Sent letters and emails to residents to notify them of works scheduled to begin in their area;
- Continued to share regular updates via press releases, our social media pages and our webpage;
- Met with councillors and key stakeholders throughout York;
- Kept the public in York informed about road closures and diversion routes for any schemes where this has been necessary.

In addition, we receive and respond to correspondence on a daily basis via our York Flood Plan email account. On average we receive about 50 emails a week from the public.

3. Programme Information Table

Flood Cell	Estimated total cost (£k)	Full Business Case	Planning Permission	Construction Start and est. duration	No. of properties better protected (approx.)
B4 - Scarborough to Ouse Bridge (Right Bank)	2,555	Approved by Large Projects Review Group (LPRG) Apr 2019	Planning application was Approved March 2019	New Lendal Arch gate planned install Easter to October 2021	39
B7 - Queen's Staith and Skeldergate	291	Approved by LPRG Apr 2019	Not required	TBC	41
B8 - Clementhorpe	7,717	Approved by LPRG Jun 2019	Planning application was Approved June 2020	Started March 2021. Planned duration of 18 months	135
South Bank		Approved by LPRG Aug 2019	Not required		29
B9 - Fulford	CYC to lead on delivery and funding				
B10 - Clifton & Rawcliffe	20,600	Approved by LPRG Jan 2020.	Planning application was Approved Sep 2019	TBC	140
B11 - Coppins Farm to Scarborough Bridge (Left Bank)	3,665	Approved by LPRG May 2019	Planning application was Approved March 2020	July 2019 – ST Peters School field	156
B12 - Scarborough Bridge to Lendal Bridge (Left Bank)	2,950	Approved by LPRG May 2019	Planning permission approved November 2020	Planned May 2021 until Jan 2022	57
B15 - King's Staith to Skeldergate Bridge	405	Approved by LPRG Aug 2019	Not required	TBC	51
B16 - New Walk	750	Approved by LPRG Aug 2019	Not required	Installation ongoing completion due Apr 2021	44

C1 - Bishopthorpe	3,390	Approved by LPRG Oct 2020	Planning permission granted August 2020	Started May 2021, with a duration of 9 months	117
C2 - Acaster Malbis	226	Approved by LPRG Aug 2019	Not required	TBC	14
C3 - Naburn	627	Approved by LPRG Aug 2019	Not required	TBC	56
F4 - Tang Hall Beck F5 - Osbaldwick Beck	TBC	TBC	TBC	TBC	TBC
F8 - Groves to Haley's Terrace F10 - Haley's Terrace to Link Road F11 - Link Road to Ring Road	17,526	Approved by LPRG Dec 2020	Planning application approved by CYC and Ryedale Nov/Dec 2020.	Planned autumn 2021/spring 2022 18 months	490
F12 - Westfield Beck	TBC	TBC	TBC	TBC	56

Key

Confirmed

Planned/expected

4. Map of the York Five Year Plan Flood Cell Outlines

