Oxford Flood Alleviation Scheme

- Reducing flood risk
- Enabling a thriving economy
- Connecting people and the environment

Consultation response report
Summer 2017
Executive Summary

This report provides a summary of the responses of our online public consultation, held between 22 June and 20 July 2017, to obtain public views about detailed design options for the Oxford Flood Alleviation Scheme. These included the design of new bridges, location of benches and cycle racks and style of information boards. We also asked for information on how people use areas of the scheme that might be impacted by construction, and for general feedback.

We held information sharing events before the consultation. We held library events after 22 June to help members of the public access and fill in the online consultation.

There were 91 consultation responses in total. We have published online submissions, where permission has been given at: https://consult.environment-agency.gov.uk/thames/oxford-fas-consultation-2017/consultation/published_select_respondent

The consultation responses found that:

- Bridge options 2a and 2b were most popular. Many people considered it important that the bridge was sympathetic to the surrounding environment.

- Most people were in favour of benches and cycle racks in certain locations. Northway cycle path was most popular for cycle racks and Willow Walk was most popular for benches. However, a few people were not in favour of either and mentioned perceived urbanisation of rural areas.

- Information boards were popular. Most people wanted information about plants and animals. A few people commented that the presence of information boards could spoil natural areas.

- Key times and types of use were identified for transport and walking routes that are likely to be impacted during construction.

- We received some general feedback about the scheme. The main topics were the design of the scheme, the look of the scheme area, preserving archaeology, environmental opportunities and potential impacts, flood risk, construction and opportunities for access improvements.

Next steps

We will feed responses to the consultation into our detailed design of the scheme, which also considers technical issues, as well as environmental and social impacts. We will submit the final design for planning permission in spring 2018. If we gain full approval for the scheme we plan to start the 3 year construction period at the end of 2018.
Contents

Executive Summary .................................................................................................................. 2

1. Introduction ............................................................................................................................ 5

2. Consultation objectives ........................................................................................................ 6

3. Consultation process ........................................................................................................... 7
   Timeline for the consultation ............................................................................................ 7
   Promoting the consultation ............................................................................................... 7
   Online consultation ............................................................................................................. 8

4. Consultation responses ........................................................................................................ 10
   Overview .............................................................................................................................. 10
   Information about people responding to the consultation .............................................. 10
   Bridge design options ......................................................................................................... 13
   Location of cycle racks and benches ................................................................................ 14
   Information Boards .............................................................................................................. 16
   Use of Willow Walk ............................................................................................................ 19
   Use of South Hinksey A34 junction .................................................................................. 20
   Use of fields in scheme area .............................................................................................. 21

5. Answers to questions and comments ................................................................................ 24
   Design of the scheme and other options for reducing flood risk in Oxford .................... 24
   The look of the scheme area ............................................................................................. 25
   Preservation of the archaeology and history of the area .................................................... 25
   Environmental opportunities and potential ecological impacts ..................................... 25
   Flood risk, surface water and groundwater flooding ....................................................... 25
   Access and safety during and after construction .............................................................. 26
   Opportunities for access improvement, recreation and education .................................... 26
   Other comments ................................................................................................................. 27

6. Making use of the feedback ................................................................................................. 28

7. Appendices ........................................................................................................................... 29
   Appendix 1 ........................................................................................................................ 29
   Appendix 2 ........................................................................................................................ 34
   Appendix 3 ........................................................................................................................ 35
Figure 1: Consultation question – what is your interest in the scheme area?............ 10
Figure 2: Consultation question – what is your age?........................................... 11
Figure 3: Consultation question - What is your primary language?......................... 12
Figure 4: Consultation question - do you consider yourself to have any disabilities which affect your ability to access information about the scheme or to take action to reduce your flood risk?........................................................................................................... 12
Figure 5: Consultation question – what is your home postcode? ...................... 12
Figure 6: Consultation question - Please rank the bridge options in order of preference, with 1 being your most preferred and 9 being your least preferred ...... 13
Figure 7: The most (2a and 2b) and least (1a) favoured bridge options............... 14
Figure 8: Consultation question - Please indicate your preferred locations for the following features: benches and cycle racks on the 3 labelled footpaths ............. 15
Figure 9: Consultation question - Please rank your preferred style for information boards in order of preference, with 1 being your most preferred and 9 being your least preferred .................................................................................................................. 17
Figure 10: The most (Example 1 and 3) and least (Example 4) preferred style examples for information boards ................................................................. 18
Figure 11: Consultation question - What type of information would you like to see included?.............................................................................................................. 18
Figure 12: Other suggestions for information board content ................................ 18
Figure 13: Consultation question - Please tell us what times of the day are you most likely to use Willow Walk to help inform our traffic management plan Times of day people use Willow Walk ........................................................................................................... 19
Figure 14: Consultation question - How do you use Willow Walk? How people use Willow Walk ........................................................................................................ 20
Figure 15: Consultation question - What times of day would you be most likely to be travelling in and out of South Hinksey? ......................................................... 21
Figure 16: Consultation question - Please use the corresponding letter on the map below to show us which fields you frequently use ............................................. 22
Figure 17: Consultation question - What do you use the fields for? .................... 22

Comments 1: Example bridge option comments ............................................. 14
Comments 2: Example comments about benches and cycle racks ...................... 16
Comments 3: Example information board comments ....................................... 19
Comments 4: Example Willow Walk comments ............................................. 20
Comments 5: Example comments about A34 South Hinksey junction .............. 21
Comments 6: Example comments about fields in the scheme area.................... 23
Comments 7: Example positive comments about scheme .............................. 24
1. Introduction

Properties, major roads, railway lines, schools and businesses are at risk of flooding in Oxford. The Environment Agency carries out regular maintenance activities and operates assets to reduce flooding, but many areas still remain at risk. We are working with local partners Oxfordshire County Council, Oxfordshire Local Enterprise Partnership, Thames Regional Flood and Coastal Committee, Oxford City Council, Oxford University, Oxford Flood Alliance and Thames Water on the Oxford Flood Alleviation Scheme. This will reduce flood risk to homes and businesses in Oxford, as well as to services and major transport routes into the city.

The scheme will be approximately 5km long, it will run from north of Botley Road to south of the A423 southern by-pass where it joins the Thames. We will be lowering parts of the floodplain and working on some of the existing rivers and streams that run through it, to make more space for water and reduce flood risk to the city. We will also be building new flood walls and embankments in some areas. We are currently working on the detailed design for the scheme.

The scheme has been designed to reduce the impacts from a major flood. Oxford has not experienced a flood of this size since 1947. It will reduce flooding to all properties at risk in Oxford and the damage and disruption from floods seen in 2007, 2012 and 2013/14 would have been significantly less.

Approximately 7 million people visit Oxford every year. The scheme will keep Oxford open for business while at the same time reducing flood risk to homes and businesses to the south and west of the city. Everyone who lives, works in or visits the city will benefit from the reduced flood risk to the railway and the Botley and Abingdon roads. There will also be fewer flood related electricity, telephone and internet disruptions to homes and businesses. Over 80 properties will be less likely to experience sewer flooding.

We will create at least 5 hectares of new wildlife habitat, improve existing public footpaths and bridges, as well as reducing flood risk. The scheme will help to create opportunities for everyone to enjoy the environment and improve their health and wellbeing.

This ambitious project is made possible through central government funding and local contributions. £51 million has been raised so far by partners - Oxfordshire County Council, Oxfordshire Local Enterprise Partnership, Thames Regional Flood and Coastal Committee, Oxford City Council and Thames Water have all made contributions. Collectively, this is the greatest partnership contribution made towards a flood scheme in the country. The scheme is expected to cost around £120m. This amount includes the design and construction costs. It also includes money to maintain it during the first 10 years it is operational. As we develop the scheme we will check we are getting the best value for the money we spend, and working in partnership gives us opportunities to do this most effectively.

Subject to planning permission and funding, the earliest we expect to start work is the end of 2018 and construction will take approximately 3 years.
2. Consultation objectives

We held this consultation as part of our ongoing community engagement strategy to give people the opportunity to share their views on aspects of the detailed design of the Oxford Flood Alleviation scheme. And to collect information to help plan the construction phase. We want people to be involved, wherever possible, in influencing what structures throughout the scheme will look like. We will use this information in our planning application submission and when we produce our construction plan, to minimise disruption.

We aimed to make this consultation as accessible as possible.
3. Consultation process

Timeline for the consultation
We held our consultation from 22 June to the 20 July 2017.

Landowners and users
We held facilitated workshops for landowners, agents, occupiers and tenants, whose properties are in the scheme area, in winter 2016. We asked for their agreement on which options to include in a public consultation. We kept landowners informed of the consultation dates and information sharing events.

Consulting with our partners
We met with our partners before the public consultation opened. They responded on behalf of their organisation as part of the public consultation.

Environment Agency staff
We held internal meetings with Environment Agency staff before and during the consultation period to obtain their feedback and comments about the scheme and design options. Their comments have been taken into account, along with the other formal consultation responses to help decide upon the design options.

Promoting the consultation
Our original consultation was going to be held in May 2017, we delayed this to June when the General Election was called. The methods we used to promote the consultation are detailed below.

Postcards
- 21,000 postcards delivered to households in the Oxford floodplain in April.
- Postcards handed out at our public drop in events.
- Postcards available in the town hall and sent to local libraries for display.

Posters
- 96 posters sent to 34 community noticeboards, community centres and libraries.
- Posters displayed at Oxford Railway Station and Oxford Town Hall.

Social media and online
- 25 tweets posted about the consultation.
- 7 tweets from partners and third parties about the consultation.
- 3 Facebook articles about the consultation.
- Link to the consultation posted on our webpage
Media
- Media event on 20 June including a question and answer session, photo opportunities and a site visit with scheme partners and the Chair of the Environment Agency.
- 6 articles published in the local press prior to the consultation.
- Almost 80 emails containing materials, photographs and general information sent to local newsletters and community groups.
- Press release and follow-up articles were published during the consultation.
- 4 features on BBC radio Oxford during the consultation period

Direct emails
- Emails with a link to the consultation sent to almost 900 stakeholders to encourage participation and also as a reminder prior to the consultation end date.

Public events from October 2016 to July 2017
- We promoted the scheme and consultation at a number of public and targeted events leading up to and during the consultation. We advertised these events on social media, via local newsletters, websites and by direct email.
- 5 pop up events were held in community hubs downstream of Oxford from October 2016 to April 2017.
- 7 pop up events were held in community hubs in Oxford including local markets, Oxford train station and a shopping centre from January to July 2017.
- 6 local community drop-in events were held from March to July 2017 to explain what local impacts there might be during construction, to collect information and answer questions about local concerns.
- 4 public drop-in events were held in locations in central, west and south Oxford in May 2017 to provide an update on the scheme. We spoke to almost 200 people at these events.
- 3 library events were held in Kennington and Oxford in June to July 2017, to help members of the public complete the online consultation as we recognised that not everyone has access to a computer or is able to fill out online forms.
- We spoke to almost 200 people at our May drop-in events. We spoke to an additional 300 people at library and pop-up events held in Oxford during the consultation period.

Online consultation
At the Environment Agency, we normally hold public consultations online. This ensures a wide range of people can access the consultations and avoids people having to travel to access them.
People could fill out the consultation online or download it from the consultation webpage. For people without access to a computer, or who needed assistance filling in the consultation, we held 3 library sessions where the team were available to provide assistance. Hard copies of the consultation were also available.

Consultation questions
We asked questions on aspects of the detailed design that could be influenced at this stage of the development of the scheme.

- We asked people to rank bridge handrail styles in order of preference, give preferred locations for cycle racks and benches, and give ranked preferences of information board style and content.
- We asked for information on use of key routes that might be impacted during construction of the scheme.
- We provided an opportunity for people to express general views about the scheme. In each section there was also a text box where people could express opinions on each design option element we were consulting on.
- The final section included questions to evaluate the interests, age group and location of people to identify how we can improve our future engagement.

A balance of open and closed questions were included, to produce both quantitative and qualitative feedback. We compared the questionnaire to previous consultations and tested it on colleagues.

A copy of the online consultation questions is included in Appendix 1.
4. Consultation responses

Overview
We received 91 responses to the consultation, 84 of these were through our online consultation tool, 1 in hard copy and 6 in non-questionnaire format, by email.

The results of the consultation questions are shown in section 4 with some example comments. We also offered people the opportunity to give us general feedback. The responses included a number of comments and questions that have a common theme. We have grouped these and provided an answer that covers multiple comments under that subject in section 5.

Information about people responding to the consultation
The consultation results show that most people were interested in the scheme because they are either living or working in Oxford (Figure 1). Others were interested in the scheme because they are involved in nature, visit Oxford, the history of Oxford, flood risk outside the scheme area, development, footpaths, are allotment holders, river users, a local councillor and walking group members.

Reasons people have an interest in the Oxford Flood Alleviation Scheme

Figure 1: Consultation question – what is your interest in the scheme area?
66% of people were over 55 and only 1 person under the age of 26 responded to the consultation (Figure 2). 95% of people spoke English as their primary language (Figure 3). We need to consider whether we are reaching all communities in Oxford.

8% of people consider themselves to have a disability which affects their ability to access information about the scheme or to take action to reduce flood risk (Figure 4). Where further information was given, hearing loss, back problems and difficulty walking were listed as the disabilities. Other factors mentioned as having an impact on ability to respond to flooding and access information were computer literacy, financial factors and car ownership.

Most people live within Oxford, close to the scheme area (Figure 5).

![Ages of people who responded to the consultation](image)

**Figure 2**: Consultation question – what is your age?
Primary language of people responding to the consultation

- English: 95%
- Non-English: 3%
- Do not want to answer: 2%

Figure 3: Consultation question - What is your primary language?

Percentage of people who consider themselves to have a disability

- Yes: 8%
- No: 88%
- Do not want to answer: ...

Figure 4: Consultation question - do you consider yourself to have any disabilities which affect your ability to access information about the scheme or to take action to reduce your flood risk?

Where people who responded live

Figure 5: Consultation question – what is your home postcode?
Bridge design options
Options were presented in galvanised steel, which is a silver colour, or corten steel which is a weathered steel with a rusted appearance. People were asked to score bridge handrail style options in order of preference (1 = most preferred, 9 = least preferred).

We also asked people if they preferred panels with a cut-out design incorporated.

Bridge option preferences

![Bridge option preferences chart]

Figure 6: Consultation question - Please rank the bridge options in order of preference, with 1 being your most preferred and 9 being your least preferred

The most favoured bridge styles were options 2a and 2b (Figure 6, Figure 7). The least favoured option was 1a, 49% of people selected this as their least favourite. The importance of blending in with the surrounding environment was often given as a reason for the response. Suitability for people needing to rest, aesthetics, cost and maintenance was also mentioned. Some people preferred corten steel as they felt it blended in better with the surroundings, although there was some concern with this material and transfer of rust onto clothes.
Option 2a: A galvanised steel railing with a wooden handrail and arm rest
Option 2b: A corten steel railing with a wooden handrail and arm rest
Option 1a: Plain galvanised steel railing

Figure 7: The most (2a and 2b) and least (1a) favoured bridge options

73% of people did not want panels with cut-out designs incorporated into the bridges. People had safety concerns and felt that these were fussy, would increase costs, and would invite vandalism.

“They all basically look OK except 1a and 1b look very stark and minimalistic”

“Because 2a or 2b will make you want to appreciate the views without the compromise of extra seating along these bridges.”

“The simpler the better. Wood on the whole nice than totally galvanised. Upright better than sloping, but 4a and 4b better than 3a and 3b because you need to be able to lean comfortably.”

“The less metal the better.......wood and rusty steel will fit better within the landscape. It should look premium. Option 1a and 1b and 5 are too basic. But then on the other hand, it should also look natural within the landscape.”

“Examples of design 1a are to be seen nearby and are typically poorly maintained and unsightly. 5 is unobtrusive and should be expected to weather better than poorly-maintained all-metal designs!”

“I think wood is more vulnerable to vandalism, and corten is probably unfriendly close up. It is nice to have a rail to lean upon, so the sloping options don’t allow this. Although the sloping fence with a cantilevered rail would be expensive, these are a balance between being utilitarian and providing a rail to lean against.”

Comments 1: Example bridge option comments

Location of cycle racks and benches
We asked people where on the 3 existing paths they would like us to consider installing cycle racks or benches.
73% of people wanted footpath furniture at some location, 13% had no preference and 14% did not want benches or cycle racks at any location. Benches were preferred on all paths. Benches were a particular preference on Willow Walk and cycle racks were preferred on the West Way cycle path (Figure 8). Suggestions were made regarding the best locations for benches and cycle racks and where they would not be suitable due to lack of space. Several comments were that these facilities would encourage healthy options such as walking, increase the use of paths and appreciation of the environment. A few people felt that putting in benches and cycle racks may not be in keeping with the local area.

**Preferred cycle rack and bench locations**

![Bar chart showing preferred cycle rack and bench locations](image)

Figure 8: Consultation question - Please indicate your preferred locations for the following features: benches and cycle racks on the 3 labelled footpaths
Comments 2: Example comments about benches and cycle racks

Information boards
We asked people if they would like information boards included within the scheme area, if it is possible. We also asked about preferred style and content.

76% of people indicated they would like information boards to be included as part of the scheme.

The most favoured information board styles were Example 1, 45% of people chose this as their preferred style and Example 3, 35% of people chose this as their preferred style. The least favoured was Example 4, 69% of people chose this as their least favourite style (Figure 9, Figure 10).
Figure 9: Consultation question - Please rank your preferred style for information boards in order of preference, with 1 being your most preferred and 9 being your least preferred.

Most people wanted information about wildlife, plants, location maps and how the scheme works, to be included on information boards (Figure 11). A number of additional suggestions for information to be included on boards were made (Figure 12).

**Example 1:** Sketch style illustrations with explanatory text

**Example 2:**

**Example 3:** Stylised map with text and accompanying cartoon-style graphics

**Example 4:**

---

**Preferred information board style**

<table>
<thead>
<tr>
<th></th>
<th>Most Preferred</th>
<th>Least Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Safeguarding Polperro*
Example 4: Cartoon style graphics with a small amount of text

Figure 10: The most (Example 1 and 3) and least (Example 4) preferred style examples for information boards

**Information people would like to see on boards**

<table>
<thead>
<tr>
<th>Information board content</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife</td>
<td>60</td>
</tr>
<tr>
<td>Plants</td>
<td>55</td>
</tr>
<tr>
<td>How the scheme works</td>
<td>48</td>
</tr>
<tr>
<td>Location maps</td>
<td>48</td>
</tr>
<tr>
<td>Flood risk</td>
<td>34</td>
</tr>
<tr>
<td>How the scheme was built</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 11: Consultation question - What type of information would you like to see included?

<table>
<thead>
<tr>
<th>Other suggestions for content of information boards</th>
<th>Number of suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The local history of the area</td>
<td>4</td>
</tr>
<tr>
<td>Conservation</td>
<td>2</td>
</tr>
<tr>
<td>Cycle and footpath routes in the city</td>
<td>2</td>
</tr>
<tr>
<td>Information on waterways and recreation</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 12: Other suggestions for information board content
Use of Willow Walk

People indicated that Willow Walk is heavily used all day, especially between 10am – 12pm and 2pm – 4pm (Figure 13). Comments suggest that it is used by school children, commuters, and for leisure at the weekends. The majority of people use Willow Walk for walking and cycling (Figure 14).

![Times of day Willow Walk is most used](image)

Figure 13: Consultation question - Please tell us what times of the day are you most likely to use Willow Walk to help inform our traffic management plan Times of day people use Willow Walk

Comments 3: Example information board comments

“It would be good to acknowledge that the boards might be updated in due course, rather than installed and forgotten - some look very dated and lose their relevance/interest.”

“I’d like to see a combination of these styles, i.e. different styles in various locations.”

“The information boards above may all have their place in the landscape of the delivered scheme and it is important to ensure that the right messaging goes in the right place; an 'information hub' may contain more about what people can do and offer technical information or background to the driver of the scheme. Throughout its length a range of interpretation techniques will help visitors understand the purpose and value of the new river channel.”
Use of South Hinksey A34 junction

We asked people when they were most likely to be using the A34 junction at South Hinksey. The heaviest usage was between 8am and 10am, and between 2pm and 6pm (Figure 15).

Comments 4: Example Willow Walk comments

“I am concerned that any diversion should be truly adjacent, and open at all times during construction.”

“I cycle to work and back every work day along Willow Walk and every weekend to go to Oxford.”

“The walk is used for parents / children every school day in both directions to safely get to North Hinksey Primary and West Oxford Primary. Many children also use it who are on their way to Matthew Arnold Secondary School.”

“Willow Walk is HEAVILY used at all times of day, particularly by school children in the morning and evening. Please keep open absolutely as much as possible.”
Consultation question - What times of day would you be most likely to be travelling in and out of South Hinksey?

Use of fields in scheme area
We asked people when and how they use fields in the scheme area.

People told us that field A and field B are the most heavily used, while field G is used the least (Figure 16). 13% of people selected 5 or more fields in their answer. People mostly use the fields for walking (Figure 17). Cycling was not given as an option but was mentioned in 5 comments, and field A was identified as being particularly used by dog walkers. Concerns were raised about the ecology of the fields.
Which fields in the scheme area are most frequently used

![Bar chart showing the number of people using each field. Field A is the most frequently used, followed by Field B, Field C, Field D, Field E, Field F, and Field G.]

Figure 16: Consultation question - Please use the corresponding letter on the map below to show us which fields you frequently use.

How fields in the scheme area are used

![Bar chart showing the categories of field use. Walking to access the city centre is the most common use, followed by Dog walking, Running, Picnics, and Other.]

Figure 17: Consultation question - What do you use the fields for?
“Field A is heavily used, especially by dog walkers, at all times of day (and night). Please keep all access points open at all times if possible”

“Enjoying the wildflowers in Hinksey Meadow - including the rare Snake’s Head Fritillary”

“Our family walks in these fields every day - usually between 8 and 9, and 2 and 3 - but also sometimes evenings also”
5. Answers to questions and comments

We received positive comments about the scheme and a number of questions:

“These are constructive ideas for the scheme”
“Great work - hope work proceeds smoothly!”
“A lot of thought has gone into how this scheme will work and how it will look when complete. I cannot comment sensibly on whether it will work because I do not have the design details nor detailed knowledge about the problem being addressed. As for how it will look, you appear to be doing your best both to minimise the inevitable adverse impact during construction by consulting up front and to using the construction as an opportunity to enhance environmentally the areas affected. That's a difficult balancing act. So far, you are doing well and I appreciate being given the opportunity to provide some input. If you can keep up this level of communication during construction with regular updates of progress etc., that would be great. Well done and thank you!”

“I look forward to any flood alleviation which will be provided by this scheme.”

Comments 7: Example positive comments about scheme

The most common comments and concerns were:

- Design of the scheme and other options for reducing flood risk in Oxford.
- The look of the scheme area.
- Preservation of the archaeology and history of the area.
- Environment opportunities and potential ecological impacts of the scheme.
- Flood risk, surface water and groundwater flooding.
- Access and safety during and after construction.
- Opportunities for access improvement, recreation and education.

Design of the scheme and other options for reducing flood risk in Oxford

The Oxford Flood Risk Management Strategy looked at over 100 options to reduce the risk of flooding in Oxford. The options were identified through consultation with internal specialists, consultants, flood action groups and local residents. Out of all these options the report recommended a 3 stage approach to manage flood risk in Oxford over the next 100 years. We review the strategy approximately every 5 years.

Stage 1: Enhanced maintenance plus short term measures. This included localised desilting, new culverts under Willow Walk, work at Botley Road, and localised demountable defences. We spent £2.5 million on removing silt and gravel from the channels, increasing the capacity of structures and providing temporary defences. This work helped to protect up to 150 properties in the 2013/14 winter floods, but alone does not provide enough capacity to help protect homes, businesses and infrastructure during large floods.
Stage 2: Oxford Flood Alleviation Scheme to reduce flood risk to at least 1000 homes and businesses, and reduce flood impacts on transport infrastructure and utilities in Oxford. The scheme seeks to maintain and optimise the use of existing floodplain and not remove land from the floodplain for development. The precise route will be finalised once all Environmental Impact Assessment surveys have been completed.

Stage 3: Future upstream flood storage may be possible to complement prior work and help reduce increased flood risk as a result of climate change. Oxford is located too far down the Thames catchment to benefit significantly from upstream land management.

The look of the scheme area
We have designed the scheme to be as natural as possible in appearance and to blend into the surrounding fields. Most of the scheme will be made up of a narrow, deeper stream which always carries water and a wider shallower area adjacent, which will carry water during a flood, but will usually be covered in vegetation and look like a lower section of field. This two-stage channel imitates the natural floodplain. We want to maintain the current agricultural nature of the area.

Preservation of the archaeology and history of the area
We are conducting archaeological investigation as part of this scheme. There are two stages to this, the first was archaeological investigations at Old Abingdon Road in 2016 and the second is a wider investigation across the scheme area from August to November 2017. We are conducting this wider archaeological investigation as part of our Environmental Impact Assessment (EIA), more trenches are in areas of historical significance.

The findings of our surveys, including archaeology, will influence the precise route of the scheme. The final design will be submitted with our planning application.

Environmental opportunities and potential ecological impacts
We are seeking to provide environmental improvements throughout the scheme area. We are completing an Environmental Impact Assessment to understand the habitats and species present at different times of year. We will design the scheme to minimise and mitigate any adverse impact identified. However, some impacts are unavoidable if we are to provide the required flood reduction benefits for Oxford. We aim to provide compensatory habitat and areas for transplantation of important species and grassland communities. More information is provided in Appendix 3.

Flood risk, surface water and groundwater flooding
The scheme will reduce flood risk to all areas of Oxford currently at risk of flooding from the river. The most significant flood risk benefits will be seen in the scheme
area. We are looking at current walls and flood defences to identify where work is required to enable these to work with the scheme.

In our planning permission we have to demonstrate that that the scheme does not increase flood risk elsewhere. We have completed modelling to show this. The scheme is designed to move water around Oxford in a different way, not to speed up or slow down flood water. We have completed initial groundwater modelling, and will be undertaking our final modelling to understand the impacts of raised defences on groundwater. We are not anticipating groundwater flooding becoming worse because of the scheme, however, if necessary we would design additional drains and mitigation in local areas.

Access and safety during and after construction
We are talking to Highways England about how we can minimise disruption and address safety concerns about additional traffic coming on to the A34. During construction there will be a temporary diversion for Willow Walk in the adjacent meadow to keep the route open to the public whilst the new bridge is built. We are talking to landowners about how to maintain temporary access routes through the wider scheme area during construction. We are also considering what security measures will be required.

Flood walls and embankments have been designed to retain current access routes after construction. We will carefully consider where lifesaving equipment is required throughout the scheme area. The water level throughout the scheme area will usually be similar to the existing streams, while the second stage will be dry unless there is a flood. The risk of flooding to existing footpaths will not be significantly different to the flood risk that currently exists.

Opportunities for access improvement, recreation and education
Our 2016 public consultation on the scheme route asked for comments on paths, cycle paths and recreational facilities. While paths were popular with the public, discussions with landowners have indicated they do not wish to include additional public access to their land. New footpaths require landowner permission and we cannot change permissive footpaths across private land into a public right of way. However, we will use feedback to understand how we can improve current footpaths, and have designed bridges with access requirements in mind. We are also working with the local councils on their ‘Riverside Routes to the City Centre’ project.

Our focus is to maintain boat navigation on the main River Thames and there is limited potential to create a navigable channel as part of the scheme. A lake could not be built as part of the scheme but could be developed separately if there was local interest. This was not a popular option with the public or landowners in the 2016 consultation.

Information boards and signage will be agreed with landowners and we will take into account the suggestions made in this consultation. Innovative ideas for use of
technology will also be considered. We have discussed how to involve local schools with our scheme partners.

Other comments
We do not have any plans to provide additional bins as part of the scheme, but we will replace any that have to be removed during our work. We do not have any plans to provide additional lighting on paths, as we are trying to be in keeping with the current environment.

We are liaising with North Hinksey Parish Council and keep them informed about the scheme. There is no work or tree planting taking place on allotment land. All work will take place on the opposite side of the Seacourt Stream. Top soil was requested by some allotment holders but no agreement is yet in place.

Fly tipping is dealt with by the owner of the land it is tipped on to. If it is on public land the council is responsible for removing it. The Environment Agency becomes involved if the material fly tipped could cause a pollution incident. In this case it should be reported on our 24 hour incident hotline 0800 80 70 60.
6. Making use of the feedback

We have published all of the consultation responses we received on our website.

We will use the results of this consultation and feedback from the local planning authorities to help inform the completion of the final design for the scheme. The final design will be submitted for planning permission in spring 2018.

As part of this process, we have reviewed all of the responses to the consultation to assess how popular the various options are with the general public. Where possible this is fed into the evaluation of the options and will be incorporated into the design along with a range of other information. This includes assessing a range of factors such as: environment and landscape opportunities and constraints, value for money, sustainability, operation and maintenance, health and safety, funding opportunities and practical considerations during construction. Where conflicts arise from differing views in the feedback we will try and incorporate the majority view where possible.
## 7. Appendices

### Appendix 1

**Online consultation questions**

<table>
<thead>
<tr>
<th>Question number</th>
<th>Question</th>
<th>Answer</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Email address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Are you responding on behalf of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) yourself or your family</td>
<td>Personal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) an organisation</td>
<td>Organisation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please tick the appropriate response</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you are responding on behalf of an organisation, please specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>We will publish all responses online, with personal information removed,</td>
<td>Yes publish my response</td>
<td></td>
</tr>
<tr>
<td></td>
<td>unless you indicate otherwise. If you do not wish your response to be</td>
<td>No please don’t publish my response</td>
<td></td>
</tr>
<tr>
<td></td>
<td>made public, please indicate. Please note that if we receive any Freedom</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Information requests, we may still be required to publish your</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>response.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Please rank the bridge options in order of preference, with 1 being your</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>most preferred and 9 being your least preferred Click <a href="#">here</a> to return</td>
<td>1a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to the bridge options</td>
<td>1b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4b</td>
<td></td>
</tr>
</tbody>
</table>
5

Please indicate your reasons for this choice

---

6

Would you like to see the cut-out design panels incorporated into the bridges?

Yes

No

If yes, please add any suggestions for the design

---

7

Using the map below, please indicate your preferred locations for the following features: benches & cycle racks on the 3 labelled footpaths

Click [here](#) to see a bigger version of this map

Benches:

Cycle racks:

If you would prefer not to see benches or cycle racks installed, please indicate this in your response.

---

8

Would you like to see information boards installed as part of the scheme?

Yes

No

---

9

From the examples shown, what is your preferred style for information boards?

Click [here](#) to return to the board options

Please tick as appropriate

Example 1

Example 2

Example 3

Example 4

---

10

What type of information would you like to see included?

How the scheme works

Wildlife
<table>
<thead>
<tr>
<th>Please tick all that apply</th>
<th>Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Location maps</td>
</tr>
<tr>
<td>If other please specify</td>
<td>Information about how the scheme was built</td>
</tr>
<tr>
<td></td>
<td>Flood risk</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

11  Please tell us what times of the day are you most likely to use Willow Walk to help inform our traffic management plan?  
Please tick all that apply  
| 6am - 8am                           |
| 8am - 10am                          |
| 10am - 12pm                         |
| 12pm - 2pm                          |
| 2pm - 4pm                           |
| 4pm - 6 pm                          |
| 6pm - 8pm                           |
| 8pm - 10pm                          |
| 10pm - 6am                           |

Please provide any comments

12  How do you use Willow Walk?  
Please tick all that apply  
| Walking/running                   |
| Cycling                            |
| Horse riding                       |
| Walking with a pushchair/wheelchair|
| Other                              |

13  We need to understand how you use the A34 junction so that we can reduce construction traffic at the busiest times. What times of day would you be most likely to be travelling in and out of South Hinksey?  
Please tick all that apply  
| 6am - 8am                           |
| 8am - 10am                          |
| 10am - 12pm                         |
| 12pm - 2pm                          |
| 2pm - 4pm                           |
| 4pm - 6 pm                          |
| 6pm - 8pm                           |
| 8pm - 10pm                          |
| 10pm - 6am                           |

Please provide any comments

14  To help us reduce the impact on people who use the fields within the scheme area, we need to understand how you currently use them. Please use the corresponding letter on the map below to show us which fields you frequently use.  
| A                                      |
| B                                      |
Click [here](#) to see a bigger version of the map

Please tick all that apply

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15 What do you use the fields for?
Tick all that apply

- Dog walking
- Running
- Walking
- Picnics
- To access the city centre
- Other

If other please specify

16 Please tell us any other comments or feedback you have about the scheme

In analysing the responses to the consultation, it would be useful for us to know the following information, if you are happy to provide it.

Any personal information will only be used by the Oxford Flood Alleviation Scheme project team to review the consultation, and not for any other purpose. It will not be available online and will be destroyed on completion of the scheme.

17 What is your interest in the scheme area?

- Own land in the scheme area
- Own a home
- Own a business
- Live in the scheme area (tenant or other)
- Work in Oxford
- Attend university
- Have family nearby
- Other

If other please specify
<table>
<thead>
<tr>
<th></th>
<th>What is your age?</th>
<th>Under 18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please tick as appropriate</td>
<td>18-25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36-45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46-55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>56-65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66 and over</td>
</tr>
</tbody>
</table>

| 19 | What is your primary language?    |          |

| 20 | Do you consider yourself to have any disabilities which affect your ability to access information about the scheme or to take action to reduce your flood risk? |          |

| 21 | What is your home postcode?       |          |
Appendix 2

Register of Responses

We have published responses to our consultation online.

You can download them at:

Appendix 3
Detailed environmental responses

MG4 grassland
We are seeking to minimise impacts to MG4 grassland in the Hinksey Meadow by keeping the channel as close to the Seacourt Stream as possible. This necessitates taking down trees but reduces the area of the rare grassland within the channel area. The Floodplain Meadows Partnership are advising us on potential mitigation for those areas we might impact. Suitable sites for translocated meadow are being identified and will be discussed with landowners. We will also try to improve the diversity of existing hay fields, by spreading green MG4a hay.

Jubilee Scrape
We have embedded the Jubilee scrape in Hinksey Meadow into the design of the scheme. Exactly how the palaeochannel will be defined, retained and enhanced will be decided in further discussions with the Oxford Preservation Trust and through the continued development of the detailed design.

Creeping marshwort
We are developing a plan to promote the survival and enhancement of creeping marshwort in existing areas using information that the Flora Guardian has already provided. We are also looking for new sites that would be suitable for colonisation by this rare plant.

Land use
Grazing will be important to retain the diversity of plant life and also maintain creeping marshwort populations. We are in ongoing discussions with landowners to keep the agricultural usage of this existing flood plain area. The second stage channel will be grazed, but we will look at additional cutting to cope with rank or invasive plant species that grazing animals do not like to eat.

Tree removal
Unfortunately we do have to remove trees as part of the scheme, we are trying to keep this to a minimum. We will be retaining all of the trees on the east side of the Seacourt Stream, north of Botley Road. However on the west side of the stream we will need to clear an area to improve flood conveyance upstream of the bridge under the road. We will also have to create a channel through Kendall Copse which will involve removing the trees there. We are talking with landowners, communities and local groups such as the Friends of Kendall Copse about suitable replanting. After construction we will try to return areas back to their current use and increase the amount of wildlife habitat as a whole.
Permanent storage of excavated material
We want to use most of the excavated material in flood schemes and other projects such as restoration of old quarries. We are currently looking for options around Oxfordshire to reduce the distance we need to move it. We also have to have options nearby that do not involve using the A34. This is to make sure that work does not have to stop if the A34 is heavily congested or closed. Any storage areas would be subject to a separate full Environmental Impact Assessment and planning application. This would include investigation into potential impacts on surface water, the permeability of the land and future land use. We will publish a materials management plan as part of our planning application in spring 2018.

Hydrology and water table
We have installed monitoring dip wells at Hogacre Ecopark and other areas to understand possible hydrological impacts of the scheme. On advice from the Floodplain Meadows Partnership, these dip wells are the standard 1m deep to understand the soil hydrology that impacts plant composition. We believe the information collected here, alongside our longer term groundwater monitoring, will provide us with enough data to assess hydrological impacts. We have not yet received the dip well monitoring data, but will share this information when it is available.

Environmental Improvements and partnership
We aim to provide environmental improvements through the scheme area, and increase biodiversity and amount of habitat. We will include as much varied riverine habitat as possible within the first stage channel, including input of gravels and creation of riffles as well as inclusion of backwaters. The second stage of the channel will be used to increase the amount and quality of valuable wetland habitat new wetland habitat. This includes creation of ponds and scrapes. We will seed the 2 stage channel with locally collected grass seed and all tree, hedgerow, shrub and wetland planting will be done with local stock.

We are working with the Freshwater Habitats Trust on this aspect of the scheme and are keen to continue our discussions with the Wildlife and Wetlands Trust, to understand how they could be involved and help us in the scheme’s development. An additional benefit is the creation of a wetland corridor which will link existing high quality wetland areas.