Cambridge Waste Water Treatment Plant Relocation Project
Anglian Water Services Limited

Phase Three (Statutory Phase Two) Section 47 Community Consultation Materials

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love every drop

anglianwater

Cambridge Waste Water Treatment Plant Relocation Project

Phase Three Community Consultation Leaflet

February 2022

[redacted]

Introduction

We have launched our phase three consultation on the Cambridge Waste Water Treatment Plant Relocation project. We want to hear your views on the detailed design proposals for the new facility, including our comprehensive mitigation measures (i.e. how we'll minimise the impact of the facility) and preliminary environmental information. You can access our consultation materials and provide your views at any point between 24 February and 27 April. We value all feedback.

This consultation leaflet presents and summarises our updated proposals following two earlier phases of consultation. Thank you to all who have responded so far. We have carefully considered the feedback we have received, which has helped to shape our more detailed design proposals.

For this phase three consultation we have also published our Preliminary Environmental Information Report (PEIR), which has been informed by the environmental studies and assessments we have carried out to date. The PEIR is designed to help you understand the likely environmental effects of the project and inform your consultation response at this pre-application stage. Also available are our draft management plans which show how we will minimise impacts on the local community and environment, and our draft Development Consent Order (DCO), which outlines the powers we will be seeking to construct and operate the new facility.

Copies of this leaflet, the PEIR, and all associated consultation materials are available via our website [redacted] by request via our contact channels, and at the Community Access Point locations listed on the back of this leaflet. Project information is also presented on our website via our virtual exhibition and digital engagement platform.

Please don't hesitate to get in touch with our consultation team if you have any questions on our phase three consultation or would like information to be provided in alternative formats. You can reach us using the contact details on the back page of this leaflet, including by phone or post.

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About the relocation project

Anglian Water is planning to build a modern, low carbon waste water treatment plant for Greater Cambridge. The new facility will provide vital services for the community and environment, recycling water and nutrients, producing green energy, helping Greater Cambridge to grow sustainably.

Anglian Water's vision goes beyond just building a new plant. It isn't simply about moving an old facility to a new location. We will build a facility to better serve the community and environment for years to come, one where waste water becomes a valuable resource.

The new facility, as well as being operationally net zero carbon, will be energy neutral. It is designed to adapt to changing social and environmental priorities, increasing resilience to storm flows and flooding and provide a long-term solution to how we best treat waste water for a growing Greater Cambridge population.

The relocation will enable South Cambridgeshire District Council and Cambridge City Council's long held ambition to develop a new low-carbon city district on Cambridge's last major brownfield site, known as North East Cambridge. The site is an important component of the First Proposals (preferred options) for the new Greater Cambridge Local Plan that were subject to public consultation late last year. The North East Cambridge Area Action Plan has also recently been agreed by the Councils in its Proposed Submission form and will be subject to public consultation prior to submission, once the Development Consent Order is determined. The relocation of the existing waste water treatment facility will enable this new district to come forward and deliver 8,350 homes, 15,000 new jobs and a wide range of community, cultural and open space facilities in North East Cambridge.

The scale of the essential infrastructure needed to ensure the long-term resilience of waste water treatment capacity in Greater Cambridge inevitably means impacts will be felt. We recognise and are sensitive to the community's concerns and questions about this.

We are committed to continuing to listen carefully and as part of this consultation, we want to hear your views on the mitigation measures we are proposing to avoid or reduce potential impacts, together with presenting how we have developed our proposals further taking on board the feedback we received during our second phase of consultation.

Closing the facility at the current site on Cowley Road will:

- Allow the existing site to be redeveloped, delivering around **5,600 of the 8,350 much-needed new homes** in North East Cambridge, including around 40 per cent affordable housing (rented and shared ownership)
- Enable the vision of an inclusive, walkable, low-carbon new city district with a lively mix of homes, workplaces, services and social spaces with **good connectivity**, that are fully integrated with surrounding communities
- Enable improvements to walking, cycling and public transport connectivity, helping to address climate change through **reducing car use**
- Create **new parks and open spaces** that will form an accessible green space network with a wide range of plants and wildlife, linked with parks in the wider area
- Reduce pressure for housing development in greenfield locations, where it would take up far more land and be less sustainable in terms of transport emissions. A **low-carbon city district** can achieve higher densities of housing than housing developed on greenfield or Green Belt sites and achieve a higher proportion of non-car journeys.

About Anglian Water

Anglian Water is committed to bringing environmental and social prosperity to the region we serve, through our commitment to Love Every Drop.

As a purpose-led business, we recognise we have a huge opportunity – and responsibility – to contribute to the environmental and social wellbeing of the communities within which we operate. As one of the largest energy users in the East of England, we are also committed to reaching net zero carbon emissions by 2030.

> **Our Purpose is to bring environmental and social prosperity to the region we serve through our commitment to Love Every Drop**

Our strategic direction

Make the East of England resilient to the risks of drought and flooding

Enable sustainable economic and housing growth in the UK's fastest-growing region

Be a net zero carbon business by 2030

Work with others to achieve significant improvement in ecological quality across our catchments

The **largest** water and water recycling company in England by geographic area

Serving almost

7 million

customers across the East of England and Hartlepool

One of the UK's fastest-growing regions, projected to grow by

175,000

homes by 2025

Our phase three consultation

Our phase three consultation is open between 24 February and 27 April. You can access our consultation materials and provide your views at any point during this time.

What we are consulting on

We want to hear your views on our detailed proposals for the new facility and surrounding area and our preliminary environmental information, which includes our proposed mitigation measures (that is, the steps we're taking to minimise the impact of this scheme). We really value your feedback. This will help shape those areas where there is still scope for you to influence the project.

Updated information on the design of the new facility is available to help inform your responses to our consultation questions. This includes information on carbon, storm management, water quality, the surrounding landscape, the construction phase and how we're proposing to manage odour, traffic and access once the site is operational.

Specifically, we are asking for your feedback on options which you can influence directly:

- Our landscape proposals including the extent of proposed planting and the mix of species
- The appearance of the Gateway Building
- Opportunities to influence how visitors will experience the area around the facility and its improved connections to local footpaths, cycleways, bridleways and improved recreational connectivity

We also present information on some of our preferred approaches to how the plant will be built and operated. These have evolved following earlier consultation but there are opportunities to influence the detailed design through your feedback:

- The design of the proposed vehicle access utilising junction 34 off the A14 to the site together with modifications to the local road network and the level of environmental mitigation required
- The environmental mitigation measures to be adopted for the construction phase of the project, including for the tunnels and pipelines, needed to connect to the new facility and the outfall to the River Cam
- Our preliminary environmental information, including our assessment of environmental effects and proposed mitigation identified at this pre-application stage

It's important to understand that we are not consulting on earlier decisions we have made about the project and which we have already communicated, or decisions made by other parties, including local authorities, including:

- The need for the relocation project
- Other development proposals including the North East Cambridge Area Action Plan
- The suitability of our site for the new facility and our site selection process
- The use of Junction 34 to provide a new permanent access off Horningsea Road

You can find out more about how feedback from our previous two rounds of consultation has already helped shape our current proposals, including our site selection and access route decisions, in the consultation summary reports on our website [redacted]

The journey so far

2011

Cambridge City Council and South Cambridgeshire District Councils agreed to develop an Area Action Plan (AAP) for North East Cambridge, following consideration of options for the area through earlier Local Plan studies.

2014

The Councils held a public consultation on Issues and Options for the North East Cambridge Area Action Plan.

2017

Bid prepared by Cambridge City Council in partnership with Anglian Water for submission to Homes England for Government Housing Infrastructure Fund (HIF) funding to unlock the site for high density residential and mixed-use development.

2018

Both councils allocated the North East Cambridge area as a major development location in their adopted 2018 Local Plans. Closure of the current facility will unlock the regeneration potential of the area which has great walking, cycling and public transport links, including the new Cambridge North station, making it a highly sustainable location for new homes.

2019

HIF funding bid allocated by Homes England.

2020

- The Government's Housing Infrastructure Fund (HIF) funding was awarded to the relocation project to accelerate housing delivery through the AAP in recognition of the regional and national significance of the redevelopment opportunity.
- Anglian Water held phase one consultation on the relocation project on three potential site options for the new facility. We received 1,683 visitors to our virtual exhibition, 5,780 to our digital engagement platform and 559 feedback forms by mail and email.
- Feedback from previous local plan consultations was used by the councils to help develop the draft North East Cambridge AAP, which was published for full public consultation.

2021

- Anglian Water concluded the site selection process. The chosen site was found, on balance, to perform best across a range of key assessment criteria and presented greater opportunities to restore and enhance the surrounding environment.
- In addition to ongoing survey works, Anglian Water also began environmental and ecological surveys and other ground investigation activities.
- The Secretary of State for Environment, Food and Rural Affairs made a direction under Section 35 of the Planning Act 2008, recognising the relocation project's national significance.
- Anglian Water held phase two consultation on the relocation project on emerging proposals for the new site. We received 450 visitors to our virtual exhibition, 1201 visitors to our digital engagement platform and 353 feedback forms by mail and email.
- Environmental Impact Assessment (EIA) Scoping Report submitted to the Planning Inspectorate (PINS) and scoping opinion received.
- Anglian Water published feedback received showing a preference for a more natural design to help the new site blend into the surrounding landscape. In addition to a traffic assessment, we also assessed against 22 different criteria and considered feedback from the local community and other stakeholders, including the relevant highways authorities, before choosing Junction 34 off the A14 for a new permanent access to the facility.

2022

Cambridge City Council and South Cambridgeshire District Council issued their preferred options (Reg.18) greater Cambridge Local Plan for consultation in 2021. They agreed and published the North East Cambridge AAP in its Proposed Submission (Reg.19) form in 2022. The NECAAP process has now been paused until a decision has been made on the separate Development Consent Order (DCO) for Anglian Water's proposed Greater Cambridge waste water treatment facility.

Our vision

Anglian Water is planning to build a modern, low carbon waste water treatment plant for Greater Cambridge. The new facility will provide vital services for the community and environment, recycling water and nutrients, producing green energy, helping Greater Cambridge to grow sustainably.

Anglian Water's vision goes beyond just building a new plant. It isn't simply about moving an old facility to a new location. We will build a facility to better serve the community and environment for years to come, one where waste water will increasingly become a valuable resource.

The new facility, as well as being operationally net zero carbon, will be energy neutral. It is designed to adapt to changing social and environmental priorities, increasing resilience to storm flows and flooding and provide a long-term solution to how we best treat waste water for a growing Cambridge population.

We will establish new habitats for wildlife and create improved access to the Cambridgeshire countryside, as well as connecting to existing footpaths and access routes. We want to create a place where water, people and landscape come together.

Our design vision

In January 2021, when we announced the chosen site for the new facility, we committed to developing a design vision for the project. We explained that this vision would be guided by Anglian Water's purpose and wider commitments and the National Infrastructure Commission's design principles for national infrastructure, themed around Climate, People, Place and Value. During our phase two consultation we presented our early design principles and the design emerging in the context of these guiding principles and early stakeholder engagement.

In addition to the feedback we received through our phase two consultation, we have also sought advice and guidance from independent specialists to inform our vision and design proposals. This includes the Design Council, an independent charity and the Government's strategic advisor on design, and the local Cambridgeshire Quality Panel.

Our updated design vision is guided by the following core principles:

- **Helping Greater Cambridge to grow sustainably –** the relocation will unlock Cambridge City and South Cambridgeshire District Councils' vision for a new city district and provide much needed housing and commercial space in a sustainable location. The design will need to adapt to changing social and environmental priorities sustainably to ensure the long-term resilience of this vital service.

- **Building a modern, low carbon water recycling centre of the future –** the new facility will be operationally net zero carbon, be energy neutral and will target a 70 per cent reduction in capital carbon using sustainable construction techniques. Re-using excavated material on site will reduce the carbon emissions and traffic impact from construction.

- **Creating a strong identity for the site while reducing visual impacts on the surrounding community and landscape –** taking inspiration from the landscape, past and present, the landscape-led design seeks to sculpt the surrounding area in a way that is both striking and sensitive to the surrounding communities it will neighbour. It will also reduce visual impacts by screening the plant using a flowing form of natural materials that will soften and blend to screen and draw attention away from the working elements of the facility.

- **Restore and enhance the surrounding environment –** we will increase biodiversity on the site of the new facility by a minimum of 20 per cent. We will create new wildlife habitats, which will complement local initiatives such as the Cambridge Nature Network and the Wicken Fen vision.

- **Improve access to the countryside with new paths and accessible open spaces –** Cambridgeshire has one of the lowest levels of natural green space available for public access in the UK. The design responds to this by creating quiet places for both people and nature. The proposed new paths will be connected to the wider network of public rights of way, and a new bridleway will improve access to Quy Fen and Anglesey Abbey.

- **Maximising public value and supporting a circular economy –** the design needs to look ahead beyond the immediate challenges to anticipate changing environmental and social needs. Our gateway building and Discovery Centre will provide a welcoming arrival point providing controlled access to the facility and the earthwork bank. The Discovery Centre will welcome scheduled educational visits supporting the sustainability curriculum and improving understanding of the vital role waste water treatment plays in public health and the circular economy.

- **Meeting the needs of those who will operate the new facility –** the health and safety of our people and the community is of the highest importance. The design will serve the functionality of what is needed from the operators of this vital service while also delivering space to support employees' quality of life. The design allows for access to the site by a variety of modes of transport and the presence of the site within a rural, landscaped, environment providing access to paths and the earthwork bank will be important elements contributing towards employee well-being.

We have presented information about how the facility will reduce carbon emissions in our Carbon Paper. Are there other measures or suggestions you would like to see us consider as we develop our plan for reducing carbon emissions during construction and operation of the new facility?

See Question 3 in our Feedback Form or visit our digital engagement platform via our website [redacted]

How to find out more

In June 2021 we published our Statement of Community Consultation (SoCC). This document explains how we will consult the local community and how you can help shape our proposals as they develop. We have extended the core consultation zone defined in our SoCC further for our phase three consultation, based on feedback we have received since our phase two consultation as the proposals have continued to develop, this means sending our community consultation leaflets directly via post to more local homes and businesses.

Our SoCC and the full suite of phase three consultation materials are available from the document library on our project website [redacted] The document library also includes all of our phase one and phase two consultation materials, as well as reports on how consultation feedback informed our site selection and our evolving design proposals.

This consultation leaflet presents and summarises our detailed proposals. Further information is provided through our virtual exhibition and digital engagement platform, which can be accessed via our project website.

Our environmental mitigation measures and commitments

Since our phase two consultation last year we have continued to develop our proposals, which have been informed by the feedback we have received.

We are undertaking a full Environmental Impact Assessment (EIA) for the relocation project, to inform our detailed design. EIA is a detailed process through which the likely environmental effects of the proposed development are studied, surveys are carried out, and mitigation measures to reduce or remove environmental impacts are identified. More importantly, the EIA has provided greater detail to the many questions raised by members of the local community throughout our consultation process.

Our EIA Scoping Report was submitted to the Planning Inspectorate (PINS) in October 2021. PINS has now reviewed our EIA Scoping Report and has published its Scoping Opinion, available on the project's page on the national infrastructure planning website **https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/**

As part of this phase three consultation, we are presenting the findings of the environmental studies undertaken to date in our Preliminary Environmental Information Report (PEIR). This has been presented as a series of community and topic papers to allow you to focus on the areas which concern you most. Also available are our draft management plans showing how we intend to minimise impacts on the local community and environment, and our draft Development Consent Order (DCO) outlining the powers we will be seeking to construct and operate the new facility.

We are asking for your feedback on our environmental information, some elements of the design of the new facility where changes can still be made, and comprehensive environmental mitigation measures to help shape our final detailed proposals. Following this phase of consultation, we will review all feedback received to inform our final design and associated EIA activities. The key themes and areas we are seeking your feedback on are summarised in the following pages of this leaflet.

How to access our environmental information

The PEIR papers and all associated consultation materials are available online from [redacted] You can also view them in hard copy at our Community Access Points and during our community information events throughout the phase three consultation.

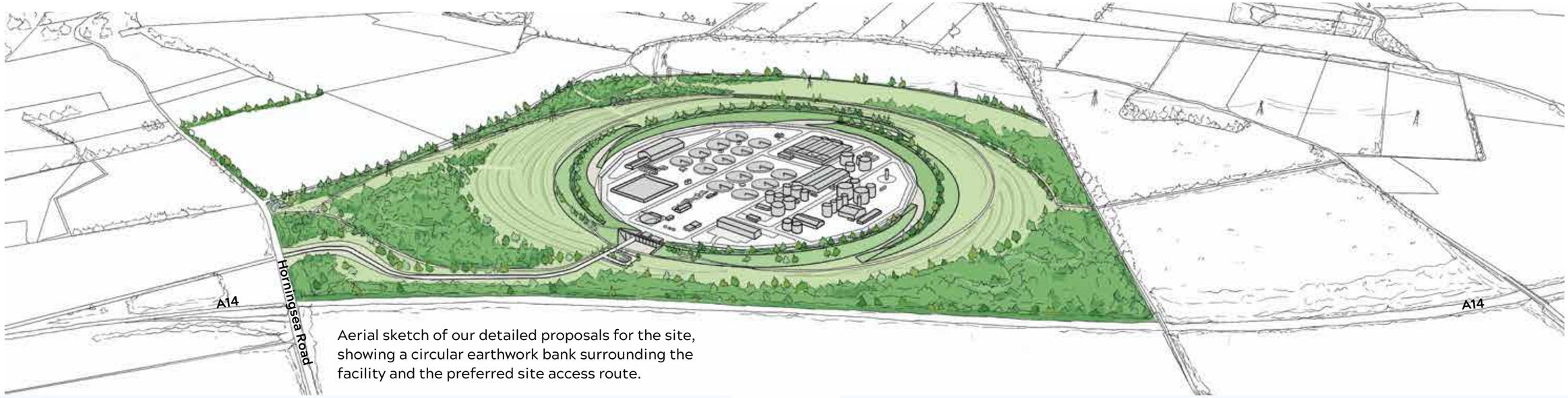
A list of the full suite of phase three consultation materials, details of where to find our Community Access Points, and dates and times of our community information events are all provided at the back of this leaflet.


[redacted]

Our proposals

Last year, during our phase two consultation, we shared our early design principles and emerging design for the relocation project.

As part of this final phase of consultation, we want to hear your views on our detailed design proposals for the new facility and surrounding site area, proposed mitigation measures to minimise impacts on local communities, and the opportunities identified for environmental enhancement beyond the site boundary. See our Feedback Form or visit our digital consultation platform via our website [redacted]



Aerial sketch of our detailed proposals for the site, showing a circular earthwork bank surrounding the facility and the preferred site access route.

Helping Cambridge to grow sustainably

The relocation provides an opportunity to develop a modern, forward-looking water recycling facility, using the latest technology and operational practices. This means we can continue to serve the growing population of Greater Cambridge for years to come, in a more sustainable and resilient way.

Maximising public value and supporting the circular economy

The efficient and effective recycling and re-use of waste water, is core to public health and the circular economy. The design of the facility further supports a circular economy by:

- more effectively recycling nutrients, in the form of phosphorous and ammonia, found in waste water,
- treating the biosolids captured as part of the wastewater treatment process, creating an enhanced soil conditioner for use by local agriculture,
- generating biogas which, when processed and exported into the local gas network, will be used to heat the homes of the local community as a renewable fuel source

Building a modern, low carbon waste water treatment facility

The design of the facility will contribute to Anglian Water's goal to reach net zero carbon emissions by 2030 by reducing energy consumption and contributing towards the circular economy. The new facility will significantly reduce carbon emissions compared to the existing Cambridge facility and will be operationally net zero and energy neutral.

We will also target a 70 per cent reduction in "capital" or "embedded" carbon during the construction phase compared to a 2010 baseline by adopting sustainable construction techniques. Read more in our Carbon Paper.

Improving storm resilience and the quality of the recycled water we return to the River Cam

Storm overflows play a vital role in our combined waste water network systems as they work like pressure release valves to protect homes and businesses from flooding during periods of extreme rainfall. The Environment Agency (EA) issues permits for our storm overflows.

The new facility will provide greater resilience and improved storm management, meaning storm overflows and Combined Sewer Overflows (CSOs) are far less likely to occur. This means that, as Greater Cambridge continues to grow, the facility will be able to treat a greater volume of storm flows to a higher standard than would be the case at today's facility.

The new facility is being designed to reduce concentration in final treated effluent discharges of phosphorus, ammonia, total suspended solids and biological oxygen demand (BOD), compared to the existing Cambridge facility. This means that when the new facility starts to operate, water quality in the River Cam will improve.

You can find out more in our Preliminary Environmental Information Report (PEIR), available on our website [redacted]

[1]You can view more information on the CSO process here: [redacted]

The new facility

We are designing the new facility to be able to adapt to changing social and environmental priorities and provide a vital service to a growing population. Its design will be sensitive to neighbouring communities.

The new facility will be consented for delivery in two phases. The first phase, which is funded by the Homes England Housing Infrastructure Fund (HIF) grant, will deliver the replacement for the existing Cambridge facility, providing treatment of flows equivalent to a population of 275,000, enough to meet growth to the mid-2030s. The growth of Cambridge towards the end of the local plan period (2041) may mean we need to increase the capacity of the plant to treat flows equivalent to a population of 300,000, all within the footprint of the proposed new facility, in a second phase. This phase will be funded through Ofwat's normal water industry 'Asset Management Plan' (AMP) cycle. The timing of this second phase would be determined by a number of factors, including the pace and scale of actual growth along with predicted changes in water consumption, and if needed would likely be built during the AMP10 period (2035-2040).

The waste water treatment facility

The facility is described in greater detail in the introductory Preliminary Environmental Information paper; however, key features include:

- Improved treated water quality, delivered by modern efficient processes and increased storm management measures.
- A 22 hectare integrated waste water and sludge treatment plant, designed to utilise Membrane Aerated Biofilm Reactor (MABR) technology for secondary treatment, an advanced process which performs well in terms of reliability, odour, carbon reduction and cost.
- Advanced sludge treatment including optimised digesters returning nutrients to the land.
- The position of the facility layout and selection of processes within the site area minimises odour to surrounding homes and existing walking and cycling routes.
- The tallest structure within the operational plant would be a narrow chimney 'stack' up to 24 metres in height. The next tallest buildings, including the two anaerobic digesters, would be no taller than 20 metres.
- An earthwork bank will encircle the operational plant. Hedgerows and trees planted on top of the earthwork bank will shield views of the buildings.
- Solar panels placed on the internal slope of the bank, facing the facility, along with generating biogas which, when processed and exported into the local gas network, will be used to heat the homes of the local community as a renewable fuel source.

Appearance of the new facility

As part of our phase two consultation last year, we asked for your views on the architectural finish of the externally facing buildings and features of the new facility. This included a gateway building, the anaerobic digesters, and any screening on top of the earthwork bank. The feedback we received was helpful, and we have developed our proposals further in line with it. This is reflected in the design which is more sensitive to the landscape and surrounding communities it will neighbour. The architectural and landscape design takes its inspiration from the landscape, past and present and the rural setting. As it matures it will soften and blend into the wider landscape. Bolder or more striking finishes will not be included in the project design.

Here, we are presenting a near final design for what the new facility could look like. This includes a more natural finish to the gateway building and a planted screen on top of the earthwork bank, with sky-like finishes on the digester towers to help soften their appearance against the skyline, making them less intrusive. We have also reviewed our engineering design, which was previously indicating a maximum height of 26 metres may be required for the digesters. Responding to feedback, we have been able to reduce the height so that they will now be no taller than 20 metres.

Computer-generated image showing indicative ground level view of the proposed facility with mature planting on top of earthwork bank

The Gateway Building

The gateway building is the point at which visitors and workers will first interact with the facility. The building will serve both public and private functions, providing a welcoming arrival point and controlled access onto the earthwork bank and into the secure areas of the facility. Parking and external access to the building will be separated to help keep visitors safe. It will be visually and functionally integrated into the earthwork bank.

This is your opportunity to provide further feedback ahead of us finalising our design proposals. We will continue to develop the appearance of the new facility in a way that blends into the surrounding landscape, taking account of all feedback received during our phase two and phase three consultation before finalising our proposed design.

Illustrative visualisation of the gateway building showing a more natural entrance to the facility which blends into the earthwork bank and planted screen

The design of the gateway building has changed following phase two consultation and we present an updated proposal based on feedback showing a more natural entrance to the facility which blends into the earthwork bank and planted screen. What are your views on the revised design proposal, including its function, size and scale?

Do you have any other comments or suggestions on our proposals for the Gateway Building?

See Questions 4 and 5 in our Feedback Form or visit our digital engagement platform via our website [redacted]

Our odour mitigation measures

Minimising odour as far as possible for local communities is of paramount importance to us. While the nature of the job waste water treatment plants are designed to do means that it is difficult to eliminate odour completely, one of the benefits of the relocation project is that we can use the latest technologies and embed solutions into the design of the facility, meaning that nuisance odour will not have a negative impact on people's enjoyment of their homes or the surrounding area.

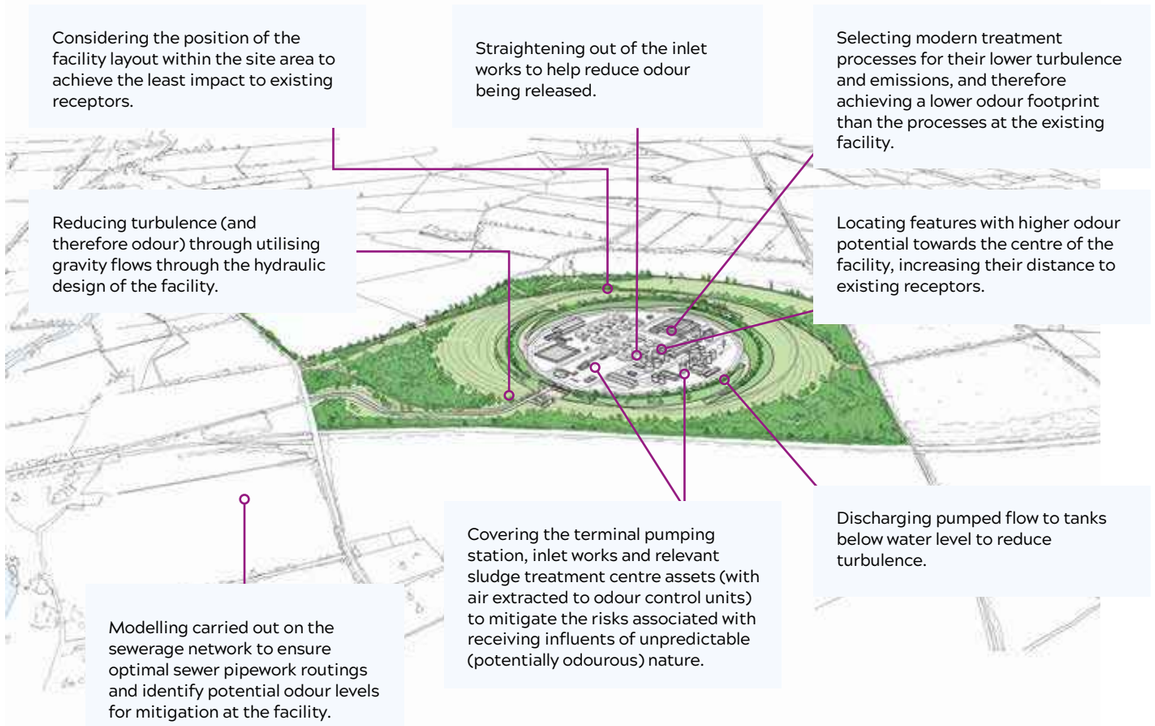
As part of our phase two consultation we set out our commitment to deliver the lowest 'negligible' odour levels for existing high sensitivity receptors (people's homes and public rights of way) in line with the Institute of Air Quality Management (IAQM) guidance. We have been continuing to carry out dedicated odour assessment and modelling as part of our design process as layout, process and technology choices for the facility continue to develop. This includes extending our odour modelling data set to include the last 5 years' weather data, continuing to assess the worst-case scenario and having the criteria we have used externally verified.

You can find out more about our odour assessments in the odour paper, forming part of our Preliminary Environmental Information, available on our website ([redacted])

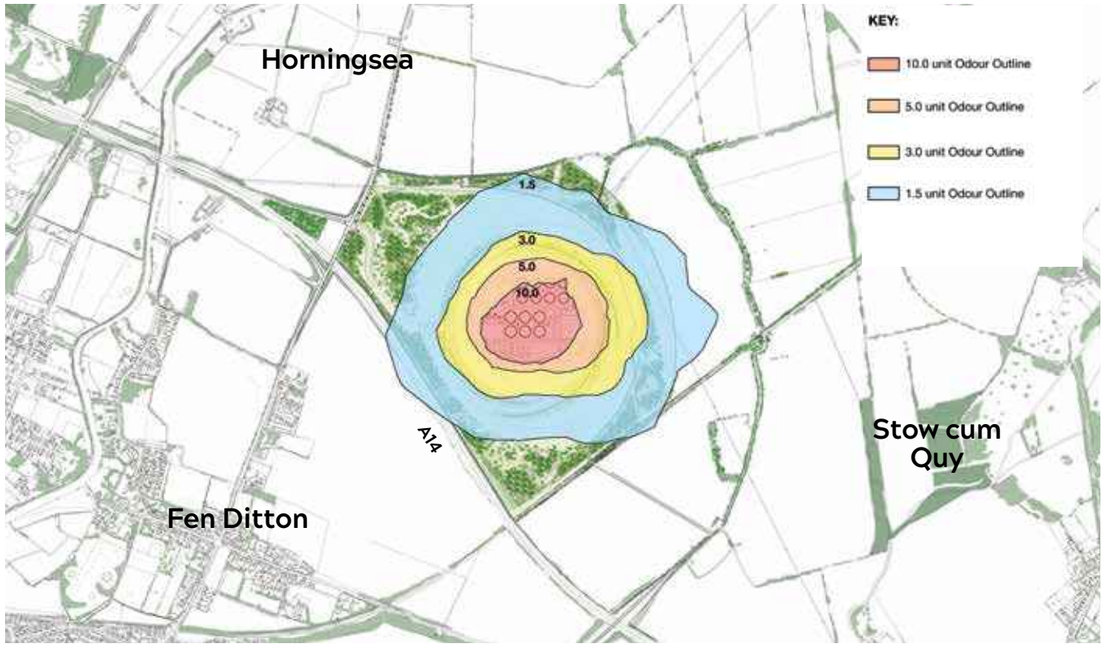
The odour model map below shows the levels of 'negligible' odour from the new facility in relation to nearby residential areas and existing walking and cycle routes. This is a level where people are unlikely to detect the odour and if they do, are unlikely to find it an annoyance or offensive.

Since our phase two consultation we have continued to evolve our designs to include additional measures which will further reduce odour including:

- reducing the footprint of the inlet works, and
- covering all sludge tanks and reducing the total number of sludge tanks required on site.



Graphic indicating how we can minimise odour at source



Indicative odour model output for the new facility

We will need to produce an Odour Management Plan (OMP) setting out the measures for monitoring, managing and controlling odour impacts as part of our Environment Agency permit for operating the facility. Typically, odour management plans include provisions and obligations for monitoring and testing to ensure that controls are properly managed for the life of the development. They may also include community engagement measures such as helplines and forums for local residents.

In our preliminary environmental information we have shown how odour from the facility will not adversely affect people's homes or enjoyment of the surrounding area, and outlined the design measures we will adopt to minimise odour. Do you have any comments or suggestions for further measures you would like to see in our Odour Management Plan?

Do you have any other comments or suggestions on our odour mitigation proposals?

See Questions 6 and 7 in our Feedback Form or visit our digital engagement platform via our website [redacted]

Discovery Centre

We want to help people understand and learn more about the vital role the water recycling process plays in supporting communities and the environment.

We will create a Discovery Centre which supports the sustainability curriculum to provide an educational resource for children and young people to interact with and learn about the importance of water and the role which water recycling plays in the circular economy. The Discovery Centre will also provide the opportunity for other interested people or groups to programme a visit to the site by appointment to learn about water recycling and wider environmental sustainability issues.

During our phase two consultation the option of a freely accessible visitor centre, creating an open destination, was least preferred. We have continued to evolve our proposals for the Discovery Centre in a way that is sensitive to the immediate communities' feedback that they do not wish to see a more expansive visitor offering, through creating a programme that is by appointment only.

The Discovery Centre will therefore have a managed education programme, targeted towards scheduled opportunities for local schools and groups to learn about sustainability and the waste water treatment process. The impact of additional traffic from these visiting arrangement will be minimal and accommodated within the proposed access and parking at the entrance of the facility.

We have explained updated proposals for a Discovery Centre to provide a managed educational resource, by appointment only, for local schools and community groups. Do you think these visitor opportunities are suitable for the new facility?

Do you have any other comments or suggestions on our proposals for visitor access to the new facility?

See Questions 8 and 9 in our Feedback Form or visit our digital engagement platform via our website [redacted]

Our landscape proposals

The delivery of the relocation project has been recognised as being of national significance by the UK government. It will be of a scale which will give rise to unavoidable effects on the local environment, and particularly the landscape character and views of the surrounding area.

We recognise and are sensitive to the site's rural setting and its location within the Green Belt that encircles the city. The location in Green Belt arises from the need for the facility to be close to its urban catchment but sufficiently distanced from areas of dense population to minimise potential impacts on our neighbours.

Our design proposals are therefore landscape-led and include extensive planting around the area surrounding the facility, seeking to mitigate potential impacts and respond to its setting. This also provides opportunities to create a positive experience for visitors to the area around the facility and increase well-being and recreation, including through the provision of quiet places for people and nature and improved connections to local footpaths, cycleways and bridleways. We consider the extent of the landscape to be an important part of mitigating our impacts and responsibly delivering an environmentally sustainable project.

An organic approach

Taking inspiration from the landscape, past and present, the landscape-led design seeks to sculpt the surrounding area in a way that is both striking and sensitive to the surrounding communities it will neighbour. It will also reduce visual impacts by screening the plant using a flowing form of natural materials that will soften and blend to screen and draw attention away from the working elements of the facility from key viewpoints.

As part of our phase two consultation we asked for your feedback on our proposals to deliver a minimum of 10 per cent biodiversity net gain. We understand that the ecology and biodiversity of the local area are important to the community and there was a strong feeling from the feedback received that we could improve on our commitment of delivering a minimum 10 per cent biodiversity net gain. We were also strongly encouraged to consider how our proposals could complement ecological networks, such as those proposed as part of the Cambridge Nature Network initiative.

We have been working hard to deliver an increased commitment of greater biodiversity net gain as part of our detailed design. We can now now confirm that our commitment is to target a minimum of 20 per cent biodiversity net gain on the area around the proposed location of the treatment facility. This would be delivered by the creation of new woodland and grassland habitats and improved and replacement hedgerows.

During our second phase of consultation a number of stakeholders requested that we provide wetland habitat as part of our biodiversity proposals. Due to the underlying geology of the site and its drainage we believe that this is unlikely to be possible. The National Trust's Wicken Fen vision supports this view, allocating the area as "dry grassland". However, areas of shallow excavations, known as swales or scrapes, will be included within the project's footprint, which under certain circumstances may form seasonal ponds.

Near the River Cam, due to the installation of pipelines and the outfall, there is the potential for the loss of small areas of grazing meadow and riverbank habitat. We are considering how to minimise those impacts and our final net gain calculation for those habitats will be presented as part of our DCO application.

Landscape plan

Aerial plan showing landscape proposals for our site

More information on these proposals is available in our Landscape, Ecological and Recreational Management Plan (LERMP) and PEIR.

Do you think the mix in our landscape proposals between providing places for people and nature is appropriately balanced?

Do you think the mix in our landscape between woodland and grassland is appropriately balanced?

Do you have any other comments or suggestions on our proposals for the landscape in the area?

See Questions 10, 11 and 12 in our Feedback Form or visit our digital engagement platform via our website [redacted]

Screening visual impacts

As well as encircling the facility with a high earthwork bank, our proposals also seek to sensitively sculpt the landscape and introduce, restore and reinforce planting in key locations to further screen views from local communities. In some strategic locations, advance planting will be prioritised early in the construction phase, to allow screening plants to grow at the earliest opportunity.

Our comprehensive landscape and planting proposals which are supported by a long-term management scheme, are described in our Landscape, Ecological and Recreational Management Plan (LERMP). The visual impacts of our proposals are outlined in the PEIR.

The Environmental Statement accompanying our DCO application will include verifiable photomontages, prepared using photography with locational information to enable the accurate scaling of the proposed new facility within the view. A list of viewpoints for photomontages has been agreed with the Greater Cambridge Shared Planning Service and Historic England as part of the scoping process. Consultation on the viewpoints has also taken place with Cambridge Past Present and Future and The National Trust.

A selection of photomontages from eight representative locations has been produced as part of our PEIR. The photomontages show the latest design of the facility, including a surrounding five metre earthwork bank. For each location, three images are provided the current view, the view of the new facility on the first day of operation and the view after 15 years has elapsed, when the planting has matured and is providing landscape integration and screening. The production of these photomontages has been carried out in accordance with the Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals.

Photomontages of views at years 1 and 15 from Horningsea Road, Fen Ditton (north from High Ditch Road) and Low Fen Drove Way are included on the following pages of this leaflet. When the photomontages are viewed at A3 they show a horizontal field of view of 39.6 degrees and have a vertical field of view of 27 degrees.

We have shown photomontages of views at years 1 and 15 of the new facility from Horningsea Road. Do you think the density and location of the planting proposed is enough to reduce the visual impact of the new facility from that location?

We have shown photomontages of views at years 1 and 15 of the new facility from Fen Ditton. Do you think the density and location of the planting proposed is enough to reduce the visual impact of the new facility from that location?

We have shown photomontages of views at years 1 and 15 of the new facility from Low Fen Drove Way. Do you think the density and location of the planting proposed is enough to reduce the visual impact of the new facility from that location.

Do you have any other comments or suggestions on our proposed visual impact mitigation measures, including the five other photomontage locations included within our Preliminary Environmental Information Report (PEIR)? This could include any further locations from which you think we should consider.

See Questions 13, 14, 15 and 16 in our Feedback Form or visit our digital engagement platform via our website [redacted]

View east from Horningsea Road near Low Fen Drove Way (year 1)

Verified photomontage year 1 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View east from Horningsea Road near Low Fen Drove Way (year 15)

Verified photomontage year 15 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View from Fen Ditton north from High Ditch Road (year 1)

Verified photomontage year 1 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View from Fen Ditton north from High Ditch Road (year 15)

Verified photomontage year 15 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View south-east from Low Fen Drove Way (year 1)

Verified photomontage year 1 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View south-east from Low Fen Drove Way (year 15)

Verified photomontage year 15 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Improving access to green spaces

Cambridgeshire has one of the lowest levels of natural green space available for public access and use in the UK. We recognise that the scale of the project means people are concerned about being able to continue to use the surrounding countryside for recreation. The design responds to this by creating quiet places for both people and nature within the landscaped areas. These areas will be connected to local communities by a series of new paths and a bridleway, creating increased opportunities for recreational access in the area. Access to Quy Fen and Anglesey Abbey will be improved. Our proposals will enable a new circular walking route from the facility of 3.5km, and a longer 9.5km loop for bridleway users.

During our phase two consultation a new bridleway along the old railway line and access through new woodland footpaths were the most preferred opportunities among the options presented. We have been continuing to explore these opportunities as we have further developed our more detailed proposals. We are proposing to deliver a series of new recreational connections including:

- a publicly accessible path along the eastern part of the site, set between hedgerows and woodland, with a surface suitable for both pedestrians and recreational cyclists,
- connections linking the site to the wider existing Public Rights of Way (PRoW) network,
- a new bridleway to the east of the site linking Low Fen Drove Way with Station Road.

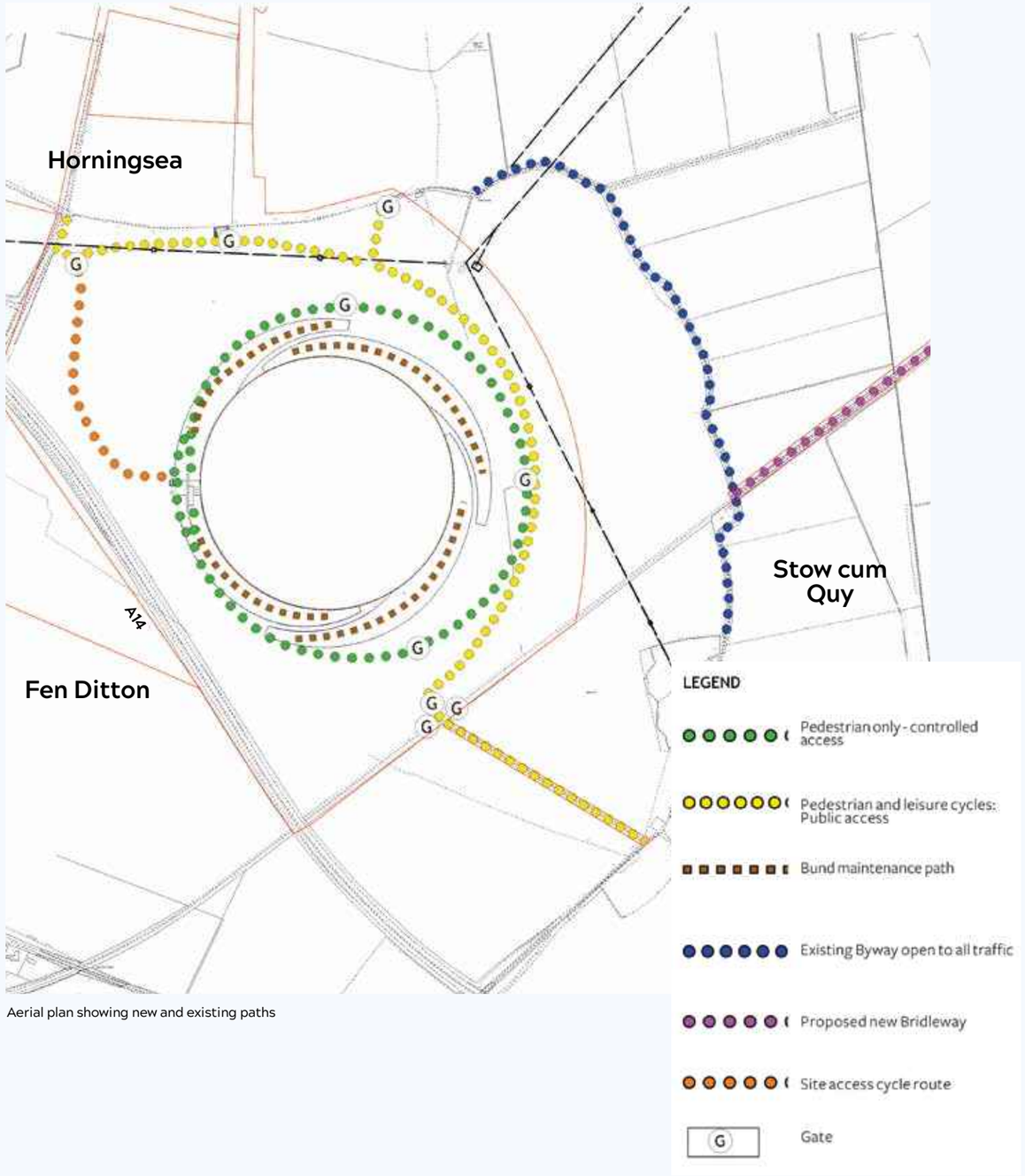
You can also find out more in our Landscape, Ecological and Recreational Management Plan (LERMP), available on our website ([redacted] This includes details of path locations, surfaces, interactions with nature and signage.

We also wish to work with others to combine our proposals with other initiatives, including tying in with the Wicken Fen Vision and opportunities arising from the promotion of other developments, including those proposed for Cambridge Airport and in the North East Cambridge Area Action Plan. Our proposals are aligned with the delivery of the Greater Cambridge Greenways project.

Do you think our proposals to enhance access to green spaces provide an inviting place to visit and improve recreational facilities for pedestrians, cyclists and equestrians?

Are there other recreational initiatives which we should be aware of when finalising our proposals?

See Questions 17 and 18 in our Feedback Form or visit our digital engagement platform via our website [redacted]



Aerial plan showing new and existing paths

The project beyond the site area

Our project needs to be connected to the wider Greater Cambridge area, the surrounding environment, and local infrastructure. This means we will need to construct a new permanent road access and tunnels and pipelines to receive waste water to the new facility for treatment and return clean water back to the River Cam.

Our permanent traffic and access proposal

The new facility will require a permanent access route for vehicles.

After consultation with National Highways and Cambridgeshire County Council as the relevant highways authorities, and feedback from the local community and stakeholders as part of our phase two consultation last year, we selected a safe and sustainable permanent access for the project from Junction 34 of the A14.

You can find out more about our access selection decision in our phase two consultation summary report on our website [redacted]

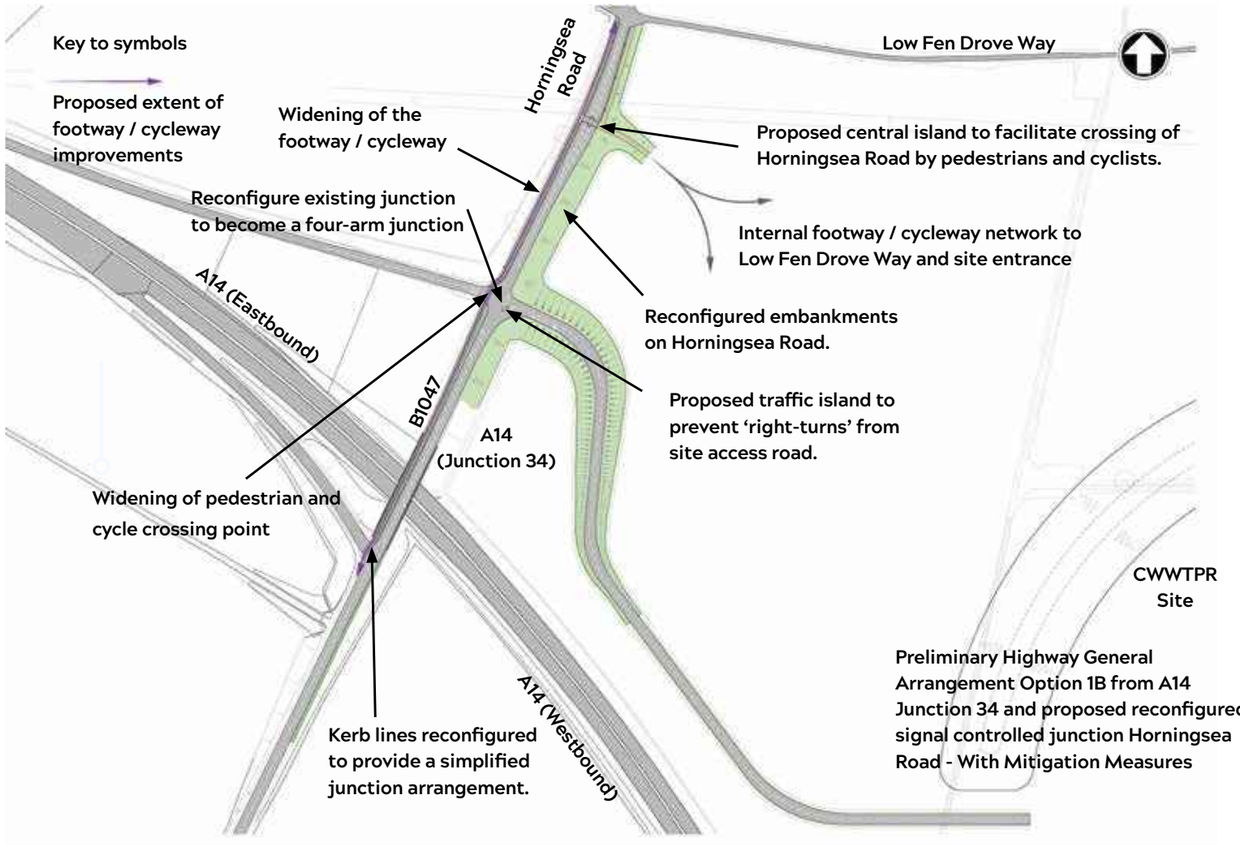
Refining our access option

We have now carried out further work to refine our proposals, including detailed traffic and access mitigation measures to reduce potential impacts on the existing road network. This includes carrying out a traffic and transport appraisal of two variations of the selected option, and further engagement with stakeholders including the relevant highways authorities and our Community Working Group. These variations were:

- Variation A, with access off Horningsea Road around 120 metres north of the junction, including road markings to create an additional lane for traffic waiting to turn right off Horningsea Road onto a new road to the facility.
- Variation B, reconfiguring the existing junction between the A14 eastbound exit slip road and Horningsea Road into a 4-arm signalised junction, also connecting to a new road to the facility.

We can confirm that we have now chosen Variation B as the best performing option for providing access off Junction 34. Following an initial four-month construction period, during which enabling activities including the construction of the permanent access would take place, this approach would mean that:

- Construction traffic will not travel northwards on Horningsea Road from junction 34.
- Construction traffic accessing the site from the A14 will proceed straight across Horningsea Road under signal control
- Low Fen Drove Way will not need to be crossed by construction traffic, avoiding impacts on ecology and recreational users of the byway.



4-arm signalised junction between the A14 and Horningsea Road with measures to control site traffic and provide separation from pedestrians and cyclists

Our traffic and access mitigation proposals

We are committed to continuing to work with the community and other stakeholders to further mitigate any impacts on the local community and the highway road network, including consideration given to pedestrians and non-motorised users. We are continuing to assess traffic impacts as part of our detailed Environmental Impact Assessment (EIA) and Transport Assessment. You can find out more about our latest traffic and transport assessments in our Preliminary Environmental Information Report (PEIR) and Construction Traffic Management Plan (CTMP), including the following proposed mitigation measures:

- Monitoring and enforcement of construction traffic routing including use of Automatic Number Plate Recognition (ANPR) equipment during construction
- Avoiding peak hours for HGVs where possible
- Construction traffic will not be permitted to travel through Horningsea or Fen Ditton villages
- Having a logistics manager in place to manage HGV deliveries in order to minimise the impact on the transport network
- Having a Traffic Management Plan that will be created in consultation with a community liaison group
- Having a reporting process set up as part of our monitoring and enforcement programme

We have shown proposals for a new 4-arm signalised junction between the A14 and Horningsea Road to provide a permanent access to the facility, with measures to control site traffic and provide separation from pedestrians and cyclists. Are there other measures you would like to see to mitigate any remaining potential impacts on road users?

We have presented estimated operational traffic volumes and types in our Preliminary Environmental Information Report (PEIR) and proposed mitigation is set out in the Travel Plan. Are there other measures you would like to see to mitigate any remaining potential operational traffic impacts?

See Questions 19 and 20 in our Feedback Form or visit our digital engagement platform via our website [redacted]

Tunnel, pipelines and supporting infrastructure

The new facility will be equipped to adapt to changing social and environmental priorities, serve a growing population, and provides a joined-up solution for treating waste water from Cambridge and Greater Cambridge. This includes taking flows from the existing Waterbeach waste water treatment facility and new flows from Waterbeach New Town. Waste water will be transferred from the existing site on Cowley Road and Waterbeach to the new facility for treatment, before clean water is returned back to the River Cam.

We will need to build tunnels and pipelines to take waste water to the new site for treatment and to take treated waste water back to the River Cam, including:

- A shaft to intercept waste water at the current site on Cowley Road and a tunnel to transfer it to the new site and terminal pumping station
- A pipeline transferring treated waste water to a discharge point on the River Cam, including a transfer pumping station
- Having a reporting process set up as part of our monitoring and enforcement programme

The construction phase

The construction of the project will cause temporary disruption to the local community for the duration of the building phase. Anglian Water takes the wellbeing of the communities within which we operate extremely seriously. We are fully committed to minimising the impact of this as far as possible. We have been working hard since our phase two consultation last year to develop a more detailed construction programme and range of proposed measures and outline plans to robustly mitigate and manage these potential impacts. These are shared in our PEIR.

Construction programme

Technical studies, environmental surveys and further consultation on the proposals will continue during 2022. Following this, if our application for a Development Consent Order (DCO) is approved, construction and decommissioning works will then begin on-site from 2024. We expect these works will take four years to complete, with most of the construction work carried out in the first two and a half years, before the new facility becomes operational in 2028.

The detailed programme for the different construction activities for the new facility has been split into 7 phases, these and the indicative duration for each are set out in the table below:

Construction Phase	Duration	Start	End
Waterbeach works including enabling works & mobilisation and decommissioning of the Waterbeach WRC	12 months	Apr-2024	Apr-2025
Enabling works & mobilisation for non-Waterbeach elements	3.5 months	Aug-2024	Nov-2024
Water Recycling Centre including water testing and dry commissioning	31 months	Oct-2024	Mar-2027
Sludge Treatment Centre including water testing and dry commissioning	19 months	Nov-2024	Jun-2026
Wet Commissioning	5.5 months	May-2027	Feb-2028
Transfer Tunnel	18 months	Nov-2024	Jun-2026
Treated and storm Effluent Main and outfall	14 months	Jul-2025	Aug-2026
De-Commissioning existing Cambridge WWTP	8 months	Oct-2027	Mar-2028

Construction mitigation

Through our construction and commissioning works we will adopt best practices that reduce our impact on the community and environment. Since our phase two consultation last year we have carefully considered all the feedback we received, to help us develop a number of focused plans to manage issues that may arise through construction. You can find out more about these plans in our Code of Construction Practice (CoCP), including our Construction Traffic Management Plan (CTMP). Detailed mitigation plans will be developed in consultation with the local community and maintained throughout the duration of the construction phase. Current mitigation measures we are proposing include:

- Identifying working hours and the types of construction activities being undertaken during those hours
- Identifying our construction access routes and limiting hours for deliveries to the site in our Construction Traffic Management Plan (CTMP)
- Communicating in advance to the local community if we need to close any roads temporarily
- Maintaining, or where not possible temporarily diverting, Public Rights of Way (PRoW) and putting in place gates to allow safe crossing where needed
- The development of a community liaison plan and appointment of a Community Liaison Officer to ensure transparent and consistent engagement throughout the construction period
- The management of emissions to air, land and water during construction works to protect the surrounding environment

In addition to the measures in our CoCP the project will also sign up to the Considerate Constructors Scheme (CCS). All Anglian Water staff and contactors will work in line with by CCS principles throughout the delivery of the construction works.

We have presented estimated construction traffic volumes and types in our Preliminary Environmental Information Report (PEIR) and proposed mitigation is set out in the Construction Traffic Management Plan (CTMP). Are there other measures you would like to see to mitigate any remaining potential construction traffic impacts?

We have presented proposed mitigation in the Code of Construction Practice (CoCP) for non-public highway construction phase impacts eg. construction site noise, dust and pollution control. Are there other measures you would like to see to mitigate any remaining potential non-public highway construction impacts?

Do you have any further comments or suggestions on mitigation measures we should consider when preparing for the construction phase?

See Questions 21, 22 and 25 in our Feedback Form or visit our digital engagement platform via our website [redacted]

How to have your say

You can access our consultation material and provide your views in the following ways:

Project website: our dedicated project website [redacted] is available for you to find out more information, including our full suite of phase two consultation documents.

By post: feedback forms have been posted together with the consultation leaflet to all homes and businesses within our core consultation zone. These can be filled in and posted back to us via FREEPOST: CWWTPR, feedback forms will also be provided on request via post.

Digital engagement platform: you can view our plans, post comments on our interactive map and see feedback from other members of the community on our digital engagement platform, accessed through our project website.

Virtual exhibition: visit our virtual exhibition to view information about the project. You can access this through our project website. Our virtual exhibition will remain open throughout the consultation period.

Community Access Points: hard copies of consultation materials are available during the consultation period from the locations listed on the back of this leaflet.

Communications lines: our free-to-use communications lines are open throughout the consultation period. You can speak to a member of our consultation team to ask questions, request information (including in alternative accessible formats), and provide feedback by calling **0808 196 1661** or emailing **info@cwwtpr.com**.

Information events: we will also be holding multiple community events in public and online. Please see below for details of the community events. If you would like to register for our online webinar, please get in touch using the contact details.

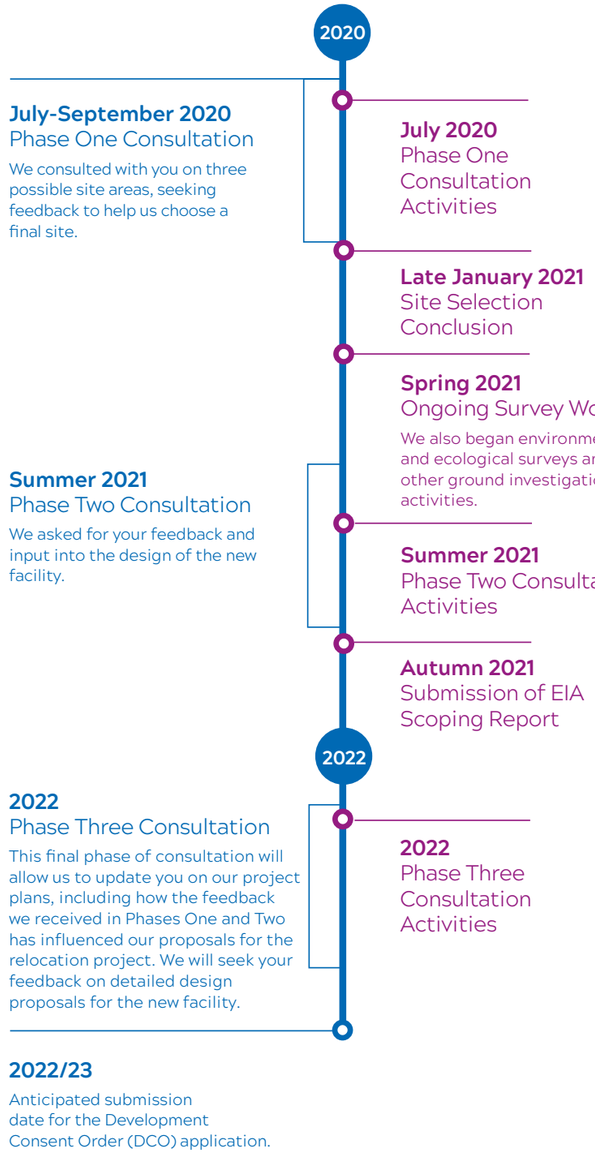
Date	Venue	Time
Wed 09 March	Online	7pm – 8:30pm
Tue 15 March	Main Hall, Milton Community Centre	2:30pm – 6:30pm
Wed 16 March	Fen Ditton Village Hall	11am – 3pm
Fri 18 March	Main Hall, Quy Village Hall	11am – 3pm
Sat 19 March	Tillage Hall, Waterbeach	11am – 3pm
Tue 22 March	Horningsea Village Hall	3pm – 7pm

What happens next?

Following the end of our phase three consultation on 27 April, we will take the time to carefully consider all feedback received as we continue to develop our final design for the new facility. We will also develop a full Environmental Statement, showing how we will mitigate any potential impacts on the local community and environment.

In autumn 2022 we will be submitting our Development Consent Order (DCO) application, including our Environmental Statement to the Planning Inspectorate (PINS). Our application will also include our full Consultation Report, setting out how we have considered the feedback received through all of our phases of consultation.

Community consultation timeline



Get in touch

Our dedicated project website, email address, Freephone information line and Freepost address are open if you have any questions.

You can contact us by:

Emailing at **info@cwwtpr.com**

Calling our Freephone information line on **0808 196 1661**

Writing to us at **FREEPOST: CWWTPR**

Visiting our website at [redacted]

Hard copies of consultation materials are available during the consultation period from the locations listed below. If you would like this document in large print, audio or braille formats, please contact us using the details above. Requests for translated summary documents will also be considered.

Community access points

South Cambridgeshire Hall,
Cambridgeshire Business Park, Cambourne, Cambridge, CB23 6EA:
Tue, Wed, Thu: 10am – 3pm via appointment only

Cambridge City Council,
Mandela House, 4 Regent Street, Cambridge, CB2 1BY:
9am – 5:15pm via appointment only

East Cambridgeshire District Council,
The Grange, Nutholt Lane, Ely, Cambridgeshire, CB7 4EE:
Mon – Thu: 8:45am – 5pm Fri: 8:45am – 4:30pm

Bottisham Library Access Point,
Bottisham Village College, Lode Road, Cambridge, CB25 9DL:
Tue: 3pm – 5pm & 6pm – 8pm, Wed: 10am – 11:30am, Thu: 3pm – 5pm, Fri: 6pm – 8pm, Sat: 10am – 12pm

Waterbeach Library,
Community Centre, High Street, Waterbeach, Cambridge CB25 9JU:
Mon: 2:45pm – 5pm, Wed: 2:45pm – 5pm & 6pm – 8pm, Fri: 2pm – 5:30pm, Sat: 10am – 12pm

Barnwell Road Library,
87 Barnwell Road, Cambridge CB5 8RQ:
Tue & Wed: 10am – 5pm, Thu & Fri: 2pm – 5pm, Sat: 10am – 1pm

St. Peter's Church,
St. John's Lane, Horningsea, Cambridge CB25 9JQ:
Wed: 10am – 3pm, Sun: 10am – 3pm

Contact us

Our dedicated project website, email address, Freephone information line and Freepost address all remain open if you have any questions.

You can contact us by:

Emailing at **info@cwwtpr.com**

Calling our Freephone information line on **0808 196 1661**

Writing to us at **FREEPOST: CWWTPR**

Visiting our website at [redacted]

If you would like this document in large print, audio or braille formats, please contact us using the details above.

All graphics and maps in this document are for illustrative purposes.

Cambridge Waste Water Treatment Plant Relocation Project

Phase three consultation 24 February – 27 April 2022

We have launched our phase three consultation on the Cambridge Waste Water Treatment Plant Relocation project. We want to hear your views on the detailed design proposals for the new facility, including our comprehensive mitigation measures and preliminary environmental information. You can access our consultation materials and provide your views at any point between 24 February and 27 April. All feedback is valued.

For this phase three consultation we have also published our Preliminary Environmental Information Report (PEIR), which has been informed by the environmental studies and assessments we have carried out to date. The PEIR is designed to help you understand the likely environmental effects of the project and inform your consultation response at this pre-application stage. Also available are our draft management plans showing how we will minimise impacts on the local community and environment, and our draft Development Consent Order (DCO) outlining the permissions we will need to construct and operate the new facility.

Copies of the phase three leaflet, the PEIR, and all associated consultation materials are available via our website ([redacted] by request via our contact channels, and at the Community Access Point locations listed on the back of the leaflet. Project information is also presented on our website via our virtual exhibition and digital engagement platform.

You do not have to supply personal details; however, it will help us to work towards engaging the community during the consultation period and to enable us to contact you regarding the Cambridge Waste Water Treatment Plant Relocation (CWWTPR) project. Your personal details will be stored in compliance with the Global Data Protection Regulation (GDPR) by Counter Context acting on behalf of Anglian Water and will not be shared with third parties.

Registration details

Name: Title: Date:

Organisation: (if applicable)

Address:

Postcode: Telephone:

E-mail address:

1) How would you describe your interest in the proposed Cambridge Waste Water Treatment Plant Relocation (CWWTPR) project? Please tick the most relevant.

- ◯ Local resident
- ◯ Local representative
- ◯ Landowner
- ◯ Local business owner
- ◯ Regular visitor
- ◯ Local interest group member (if so, please name)
- ◯ Statutory organisation
- ◯ Other (please specify):

2) Would you like to receive our community newsletters to keep up to date with the progress of CWWTPR?

◯ Yes via post ◯ Yes via email ◯ No

Part A

What's most important to you?

During our phase two consultation in summer 2021 we invited comments on the issues that were most important to you, your feedback was essential for us to develop our early design proposals.

We want to hear your views on our detailed proposals for the new facility and surrounding area and our preliminary environmental information which includes our proposed mitigation measures. We really value your feedback. This will help shape those areas where there is still scope for you to influence the project.

Updated information on the design of the new facility is available to help inform your responses to our consultation questions. This includes information on carbon, storm management, water quality and how we're proposing to manage odour, traffic and access once the site is operational, the surrounding landscape and the construction phase.

3) What environmental issues relating to the relocation project are most important to you? Please tick the relevant boxes.

You can also provide feedback using the interactive map on our digital engagement platform [redacted] which can be used to pin comments about certain issues which you think are important to specific areas of the proposals.

Local ecology and biodiversity	Landscape and views	Archaeology and local heritage	Climate change	Flood risk and water quality
◯	◯	◯	◯	◯
Air quality, noise and vibration	**Odour**	**Traffic and access**	**Local amenity**	**Other (please provide details)**
◯	◯	◯	◯	◯

4) Why do you think these things are most important?

Part B

Our Proposals

As part of this final phase of consultation, we want to hear your views on our detailed design proposals for the new facility and surrounding site area, proposed mitigation measures to minimise impacts on local communities, and the opportunities identified for environmental enhancement beyond the site boundary.

We welcome your feedback on our detailed design proposals, proposed mitigation measures and opportunities for environmental enhancement beyond the site boundary. You can view these proposals in our Main Consultation Document and online at [redacted]

5) We have presented information about how the facility will reduce carbon emissions in our Carbon Paper. Are there other measures or suggestions you would like to see us consider as we develop our plan for reducing carbon emissions during construction and operation of the new facility?

6) The design of the gateway building has changed following phase two consultation and we present an updated proposal based on feedback showing a more natural entrance to the facility which blends into the earthwork bank and planted screen. What are your views on the revised design proposal, including its function, size and scale?

Strongly support	Support	Do not support	Strongly oppose	Don't know
○	○	○	○	○

7) Do you have any other comments or suggestions on our proposals for the Gateway Building?

8) In our preliminary environmental information we have shown how odour from the facility will not adversely affect people's homes or enjoyment of the surrounding area, and outlined the design measures we will adopt to minimise odour. Do you have any comments or suggestions for further measures you would like to see in our Odour Management Plan?

9) Do you have any other comments or suggestions on our odour mitigation proposals?

10) We have explained updated proposals for a Discovery Centre to provide a managed educational resource, by appointment only, for local schools and community groups. Do you think these visitor opportunities are suitable for the new facility?

◯ Yes ◯ No

11) Do you have any other comments or suggestions on our proposals for visitor access to the new facility?

12) Do you think the mix in our landscape proposals between providing places for people and nature is appropriately balanced?

◯ Yes ◯ No

13) Do you think the mix in our landscape between woodland and grassland is appropriately balanced?

◯ Yes ◯ No

14) Do you have any other comments or suggestions on our proposals for the landscape in the area?

15) We have shown photomontages of views at years 1 and 15 of the new facility from Horningsea Road. Do you think the density and location of the planting proposed is sufficient to reduce the visual impact of the new facility from that location?

Yes No

16) We have shown photomontages of views at years 1 and 15 of the new facility from Fen Ditton. Do you think the density and location of the planting proposed is sufficient to reduce the visual impact of the new facility from that location?

Yes No

17) We have shown photomontages of views at years 1 and 15 of the new facility from Low Fen Drove Way. Do you think the density and location of the planting proposed is sufficient to reduce the visual impact of the new facility from 'that location'?

Yes No

18) Do you have any other comments or suggestions on our proposed visual impact mitigation measures, including the 5 other photomontage locations included within our Preliminary Environmental Information Report (PEIR)? This could include any further locations you think we should consider viewpoints.

19) Do you think our proposals to enhance access to green spaces provide an inviting place to visit and improve recreational facilities for pedestrians, cyclists and equestrians?

◯ Yes ◯ No

20) Are there other recreational initiatives which we should be aware of when finalising our proposals?

21) We have shown proposals for a new 4-arm signalised junction between the A14 and Horningsea Road to provide a permanent access to the facility, with measures to control site traffic and provide separation from pedestrians and cyclists. Are there other measures you would like to see to mitigate any remaining potential impacts on road users?

22) We have presented estimated operational traffic volumes and types in our Preliminary Environmental Information Report (PEIR) and proposed mitigation is set out in the Travel Plan. Are there other measures you would like to see to mitigate any remaining potential operational traffic impacts?

23) We have presented estimated construction traffic volumes and types in our Preliminary Environmental Information Report (PEIR) and proposed mitigation is set out in the Construction Traffic Management Plan (CTMP). Are there other measures you would like to see to mitigate any remaining potential construction traffic impacts?

24) We have presented proposed mitigation in the Code of Construction Practice (CoCP) for non-public highway construction phase impacts eg. construction site noise, dust and pollution control. Are there other measures you would like to see to mitigate any remaining potential non-public highway construction impacts?

25) Do you have any further comments or suggestions on mitigation measures we should consider when preparing for the construction phase?

26) Based on the information provided in our consultation material, overall how supportive are you of our developed proposals?

I strongly support the emerging masterplan proposals ◯

I support the emerging masterplan proposals ◯

I am neither supportive or unsupportive ◯

I do not support the emerging masterplan proposals ◯

I strongly oppose the emerging masterplan proposals ◯

Please explain why you think this.

27) Based on the information provided in our consultation material, in principle how supportive are you of our proposals for the relocation project, which build a new low carbon waste water treatment plant for Cambridge and unlock the development potential of North East Cambridge?

I strongly support the relocation project ◯

I support the relocation project ◯

I am neither supportive or unsupportive ◯

I do not support the relocation project ◯

I strongly oppose the relocation project ◯

Please explain why you think this.

Part C

Our consultation process

28) How did you find out about this consultation?

- ◯ I received a leaflet
- ◯ I saw it advertised in local media
- ◯ I received an email
- ◯ Via a local community group
- ◯ Word of mouth
- ◯ Other (please specify):

29) Did you visit the virtual public exhibition on our project website [redacted] or attend one of our community webinars.

- ◯ Yes
- ◯ No

30) Did you find the consultation methods and materials available were informative about our developed design proposals for the relocation project?

- ◯ Very informative
- ◯ Quite informative
- ◯ Not informative
- ◯ No opinion

31) Please provide any comments or suggestions on the consultation and what we could have done differently?

32) Do you feel your views have been considered as the proposals for the project developed? Please indicate.

Strongly agree	Agree	Disagree	Strongly disagree	Don't know
○	○	○	○	○

If you have received our feedback form in the post or downloaded it from our website, you can either send it to us via post or email it using the details below. If you have any further questions or want more information, please contact the project team using one of the channels below.

Email at
info@cwwtpr.com

Write to us at
FREEPOST: CWWTPR

Call us at
Freephone: 0808 196 1661

Visit our website at
[redacted]

Please note that the deadline for the submission of feedback for our phase three consultation is at 23:59 on **27 April 2022**. Following the close of our phase three consultation, we plan to submit our final Development Consent Order (DCO) application to the Planning Inspectorate (PINS) in late 2022.

Get in touch

Our dedicated project website, email address, Freephone information line and Freepost address all remain open if you have any questions.

You can contact us by:

Emailing at **info@cwwtpr.com**

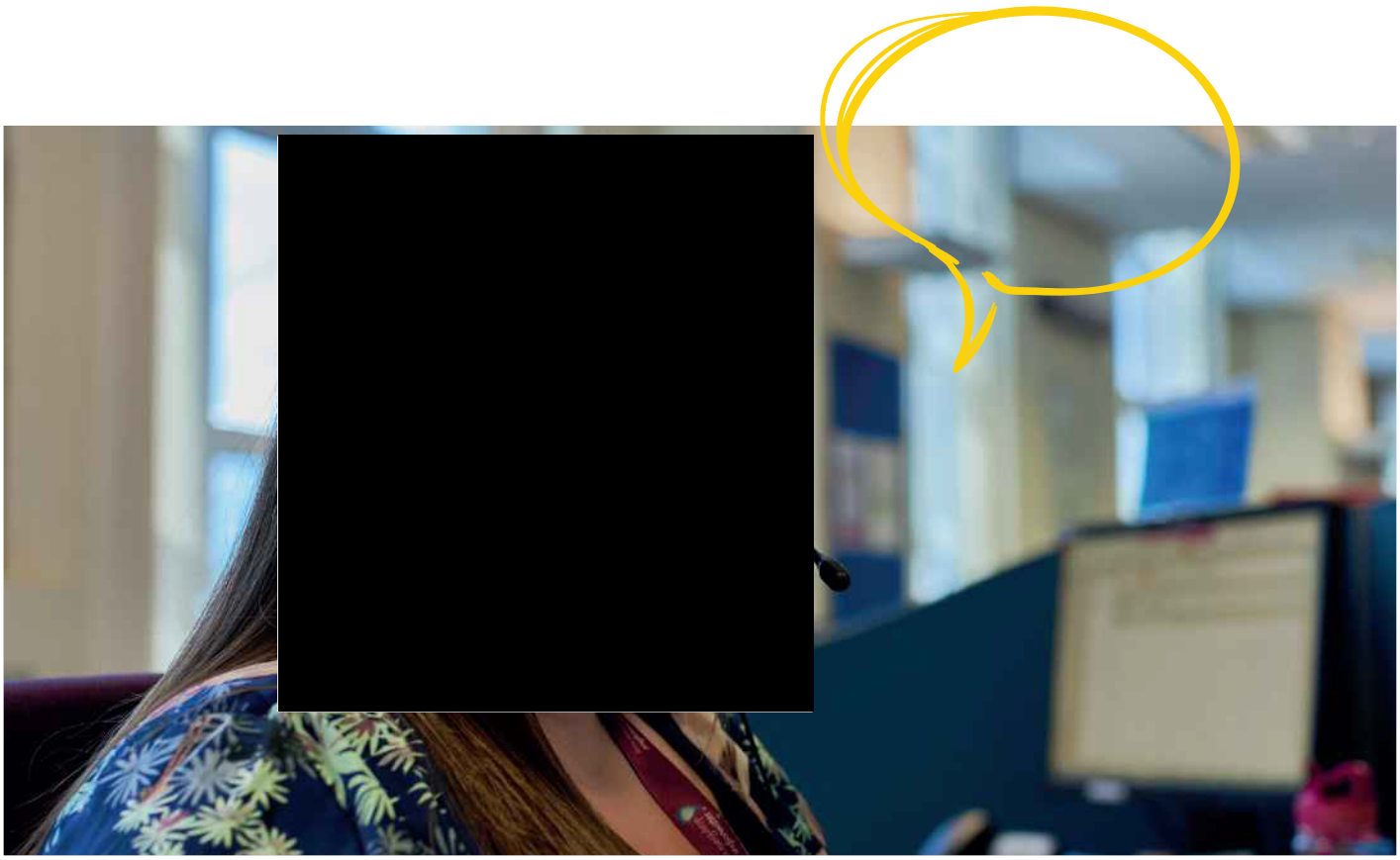
Calling our Freephone information line on **0808 196 1661**

Writing to us at **FREEPOST: CWWTPR**

Visiting our website at [redacted]

If you would like this document in large print, audio or braille formats, please contact us using the details above.

All graphics and maps in this document are for illustrative purposes.



love every drop

anglianwater

Cambridge Waste Water Treatment Plant Relocation Project

Preliminary Environmental Information (PEI) – non-technical summary

February 2022

[redacted]

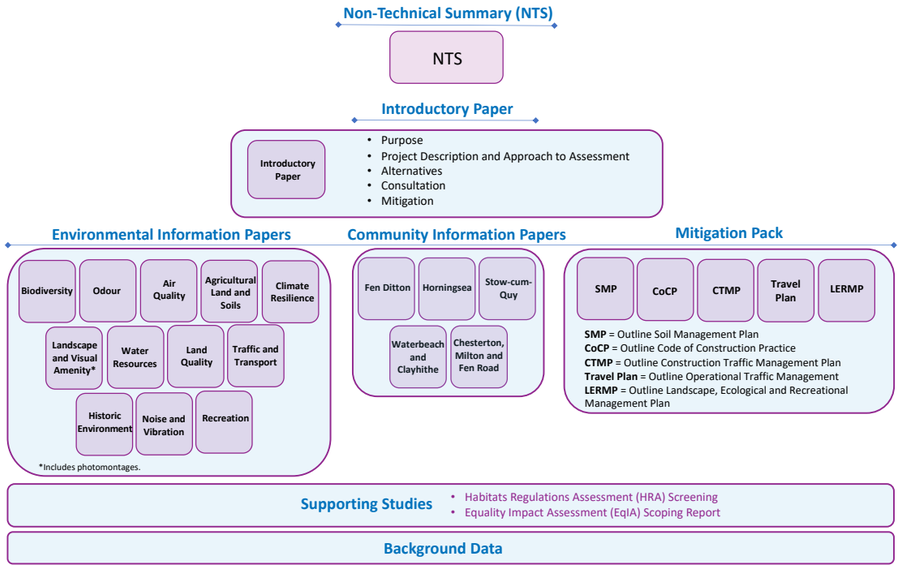
Contents

1. Introduction

This document is a non-technical summary of the Preliminary Environmental Information for Cambridge Waste Water Treatment Plant Relocation Project ("the Project"). It forms part of our consultation documentation, issued in advance of our proposed application for a Development Consent Order (DCO) for the Project.

The DCO process requires an applicant to provide Preliminary Environmental Information (PEI) to consultees so that they develop an informed view of the "likely significant environmental effects" of any proposals.

The PEI is presented as a series of papers, summarised on the document map below. PEI has also been summarised digitally and can be accessed via the Project's website: [redacted]



It is important to note that the information is "preliminary" and may be subject to change as the Project's design evolves. Anglian Water is seeking consultees' comments to inform both the final design of the Project and the further development of environmental mitigation. All comments received from consultees on the PEI will be taken into account before we submit our DCO application, which will be accompanied by a full Environmental Statement, providing the findings of the Environmental Impact Assessment process, and a Consultation Report, showing how consultation responses have been taken in account.

You can comment on the Phase Three Consultation via the website here [redacted]
For those unable to access materials digitally, hard copy materials are available at Community Access Points and via post by request.

0808 196 1661

FREEPOST: CWWTPR

1.1 How have we identified "likely significant environmental effects"?

An environmental effect is typically a function of the "importance", "value" or "sensitivity" of the receptor or resource (for example habitats for wildlife, a watercourse or a community amenity) and the "magnitude" or "scale" of the impact, meaning the change as a result of the proposed development. For some types of environmental impact, such as potential effects on landscape character or heritage assets, the assessments rely on professional judgement, drawing on technical guidance, to assess the significance of effects.

More information on the process used to identify likely significant environmental effects can be found in our scoping report, available here, and in the introduction to the PEI.

1.2 How do we propose to avoid and/or reduce negative impacts?

"Environmental mitigation" is the process of addressing impacts to the environment arising from the Project. This mitigation will be secured through the final scheme design or requirements of the Development Consent Order which grants permission for the Project to be built. The Preliminary Environmental Information papers and mitigation pack present outline details of different types of mitigation. We are especially interested in getting feedback from consultees on the mitigation we are proposing.

1.3 How have we consulted with the community, landowners and stakeholder organisations in relation to environmental effects and mitigation?

We held our Phase Two Consultation on our proposals between 23 June and 18 August 2021. A summary of the feedback from Phase two Consultation can be found here:
[redacted]

In addition, Anglian Water has established several Technical Working Groups with key technical stakeholders as part of the project's pre-application consultation process. We have also established a Community Working Group, with an independent Chair, which meets with representatives from parish councils and local community groups. These groups have contributed to the shaping of the Project and the development of mitigation. We have also discussed the Project proposals with landowners, which has allowed us to better understand their concerns and how the land is used on and around the Project.

1.4 How have we managed the potential impact of Covid-19 on our survey baseline conditions such as traffic and noise?

Stakeholders have expressed concern that the abnormal traffic conditions which arose during the Covid-19 lockdowns may not have represented an accurate sample of traffic movements. As well as reviewing historic data dating back to January 2016, to address this concern we also carried out additional traffic surveys in early December 2021 and will continue to review whether further surveys are required. We have agreed our approach to data collection and surveys with the local highway authority, Cambridgeshire County Council and with National Highways. Noise surveys used to determine the baseline for the Project were also completed over the winter of 2021. The ambient and background noise and air quality levels collected are considered to be suitably representative.

2. Project description

This section sets out a description of the Project comprising information on the site, design, size and other relevant features of the development.

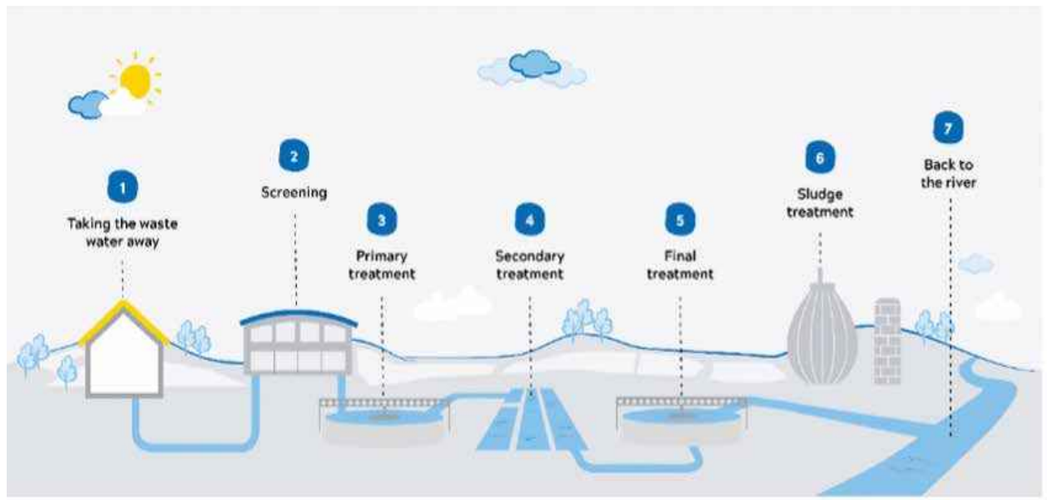
2.1 Project purpose

The Project comprises the relocation of the Cambridge Waste Water Treatment Plant (WWTP) from its existing site on land adjoining the north eastern side of the city of Cambridge, to a new location. The relocation is required to support the delivery of South Cambridgeshire District and Cambridge City Councils' Area Action Plan for a new low-carbon city district in North East Cambridge, which could create 8,350 homes and 15,000 jobs over the next 20 years.

The proposed development of Waterbeach New Town lies to the north of Cambridge. The Waterbeach new town development when built out will comprise some 11,000 new homes along with associated business, retail, community and leisure uses. Increased flows from the development of Waterbeach New Town will be transferred to the proposed WWTP. This will require a new pipeline from Waterbeach.

2.2 How will waste water and sludge be treated at the relocated Cambridge WWTP?

The proposed relocated Cambridge WWTP will treat all waste water and wet sludge from the Cambridge catchment just as the existing Cambridge WWTP currently does, plus that from population growth predicted to occur within the catchment to 2041. Flexibility in the plant design will allow growth into the 2nd half of the century to be accommodated, all within the proposed footprint.



The image above provides an overview of the treatment process steps proposed for waste water and sludge which is explained below.

1. The existing Cambridge WWTP receives waste water from the Cambridge catchment either directly from the connected sewerage network or tankered to the plant from homes and businesses that are not connected.
2. This waste water is then screened to remove solids such as grit from road run-off, and large nondegradable objects (such as nappies, face wipes and plastic bags).
3. The screened waste water then flows to primary treatment where a large proportion of the solid organic matter is separated from the water by allowing it to gravitate to the base of the primary settling tanks. The settled solids are pumped to the sludge treatment centre for further treatment and a weir near the top of the tanks then transfers the flows to the secondary treatment stage, which contains further settlement tanks.
4. Secondary treatment is the biological treatment process which relies on bacteria to further break down the solids. For the proposed WWTP the current proposal is to utilise a modern membrane aerated bioreactor (MaBR) configuration to ensure low energy utilisation for maximum oxygen transfer, however other process options remain a potential.
5. Final treatment, which incorporates a tertiary treatment plant, provides the finest grade of treatment to ensure the effluent complies with discharge consent limits.
6. Both the existing Cambridge WWTP and the proposed WWTP have been designed as "integrated treatment plants" incorporating a sludge treatment centre (STC). The STC treats the sludge derived from the waste water being treated at the plant and the "wet sludge" produced by other satellite plants which do not have an integrated STC. The sludge treatment process produces nutrient rich biosolids cake for use as bio-fertiliser for spreading on agricultural land and produce energy via anaerobic digestion as biogas is produced as a by-product.
7. The treated effluent is discharged through an outfall to the nearby River Cam. Both the quality and quantity of this treated effluent is monitored by the Environment Agency.

2.3 Construction timeline

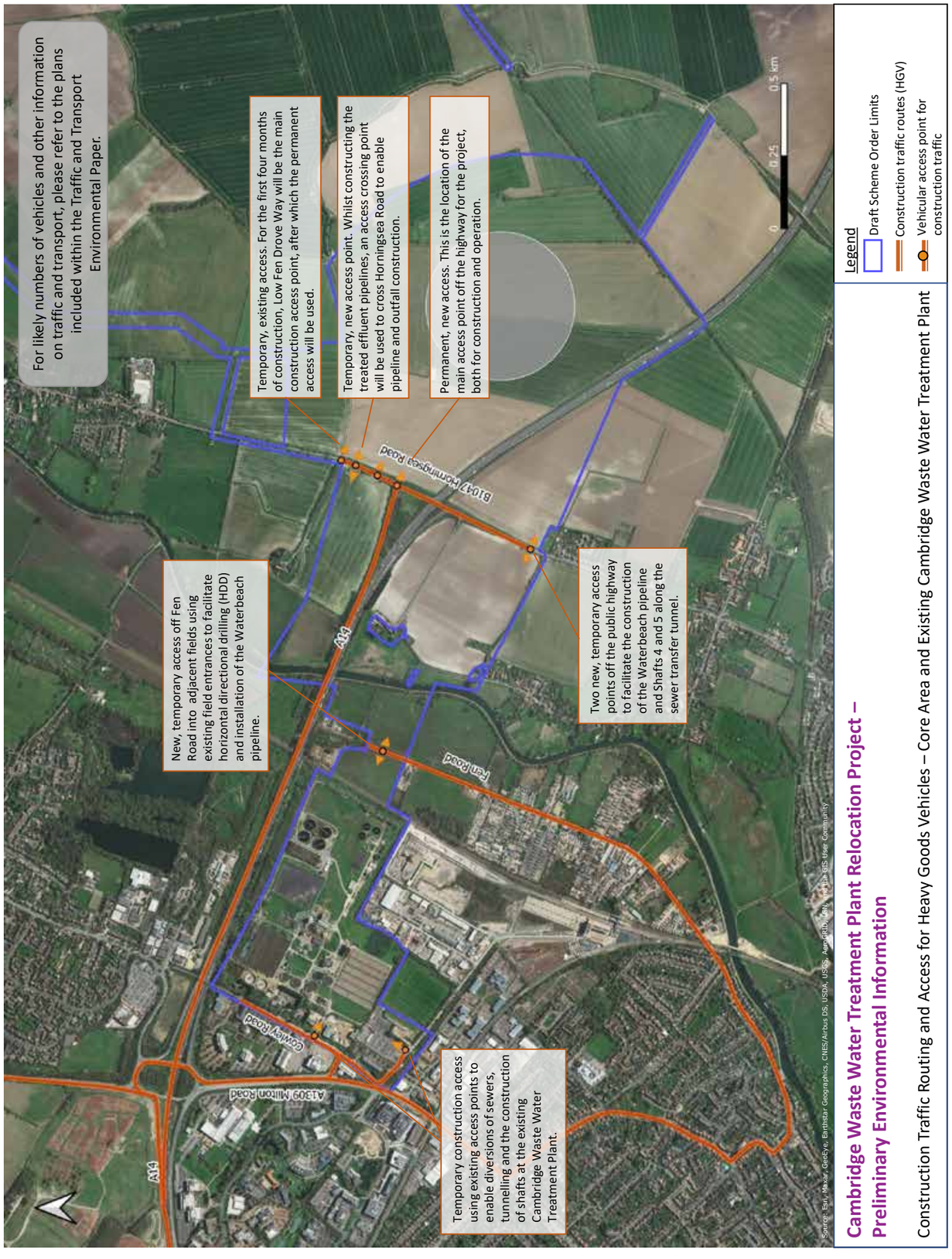
During construction of the proposed WWTP the existing Cambridge WWTP and existing Waterbeach WRC would remain in operation.

The earliest construction is expected to start is in 2024, with the Waterbeach pipeline works. The proposed WWTP is planned to be fully operational in 2028. Indicative durations of construction activities are outlined below. The indicative programme is preliminary only and will be updated in the Environmental Statement accompanying the DCO application.

Construction Phase	Duration	Start	End
Waterbeach works including enabling works & mobilisation and decommissioning of the Waterbeach WRC	12 months	Apr-2024	Apr-2025
Enabling works & mobilisation for non-Waterbeach elements	3.5 months	Aug-2024	Nov-2024
Water Recycling Centre including water testing and dry commissioning	31 months	Oct-2024	Mar-2027
Sludge Treatment Centre including water testing and dry commissioning	19 months	Nov-2024	Jun-2026
Wet Commissioning	5.5 months	May-2027	Feb-2028
Transfer Tunnel	18 months	Nov-2024	Jun-2026
Treated and storm Effluent Main and outfall	14 months	Jul-2025	Aug-2026
De-Commissioning existing Cambridge WWTP	8 months	Oct-2027	Mar-2028

2.4 Construction traffic and access

Construction traffic and access information is annotated on the plans below showing the routes construction traffic would use and the access points into working areas from the public highway.

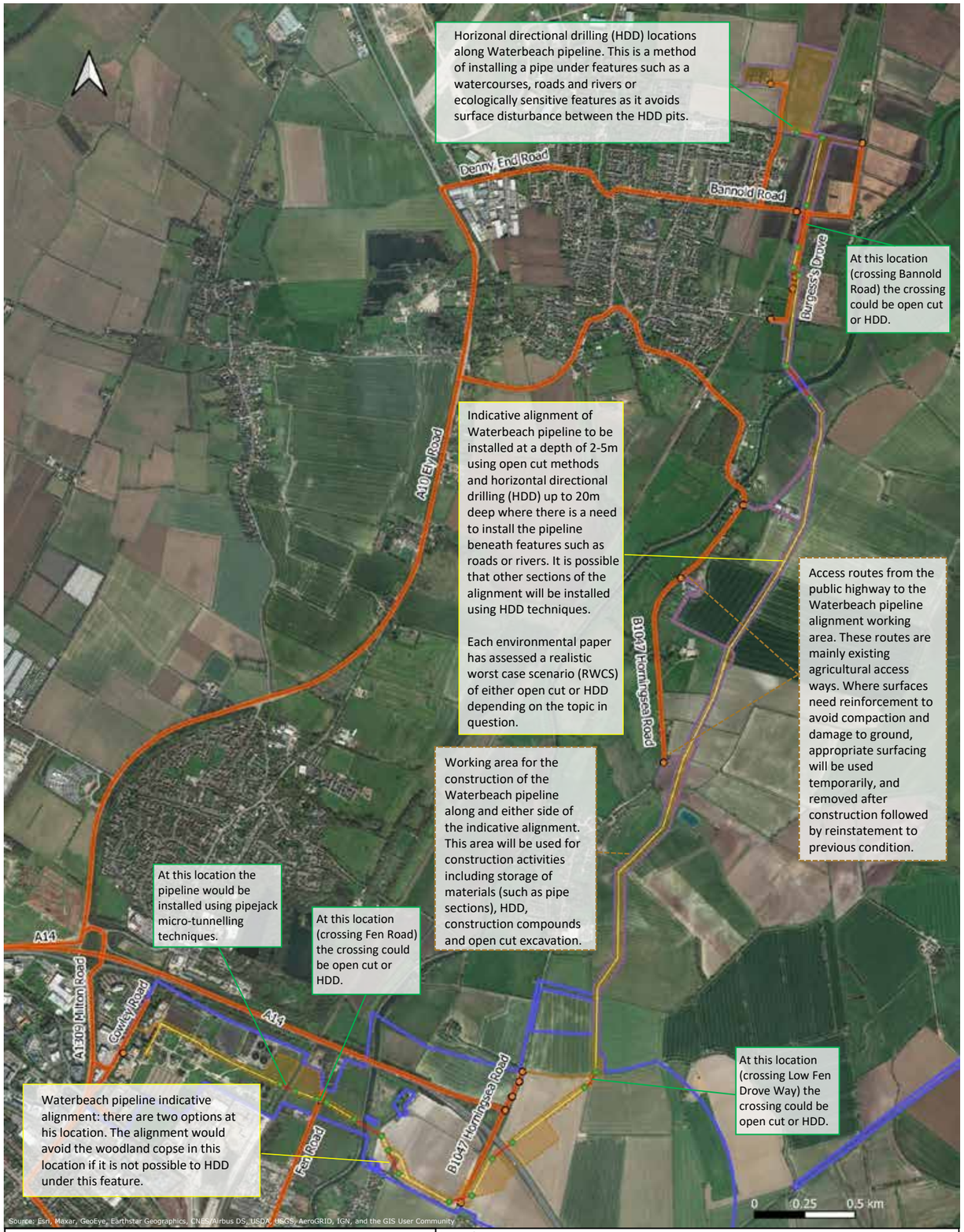


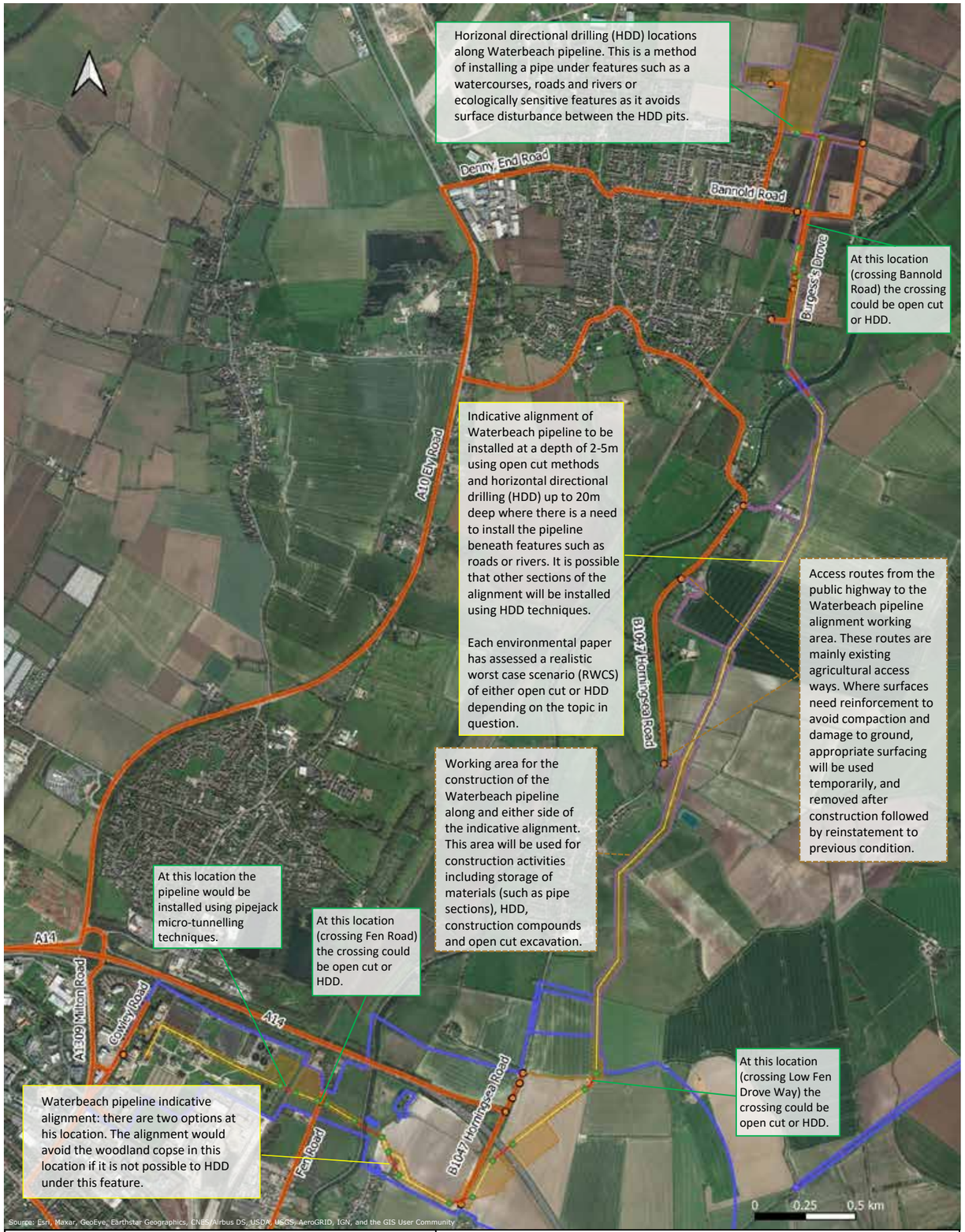
Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Construction Traffic Routing and Access for Heavy Goods Vehicles – Core Area and Existing

2.5 Construction activities

Construction activities are described on the annotated plans provided showing the working areas associated with the indicative locations of construction activities. The plans within the Environmental Information Papers add details which define durations of activities where these are relevant to defining impacts such as noise and traffic movements.



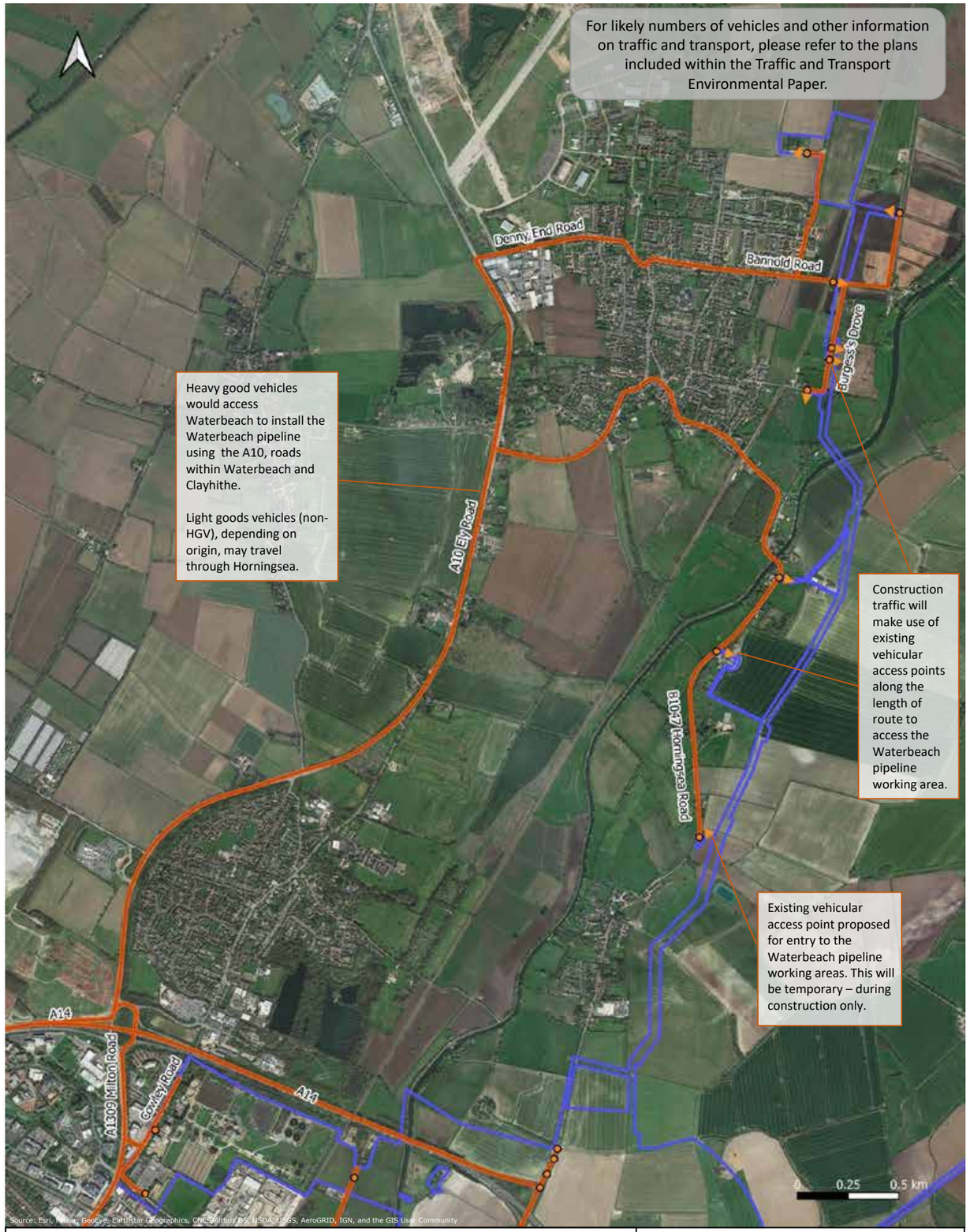


Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Working Areas During Construction – Waterbeach Pipeline Route

Legend

- Draft Scheme Order Limits
- Construction traffic routes (HGV)
- Construction traffic vehicular access point
- Waterbeach pipeline working area
- Pipeline installed using open cut methods
- HDD pipeline install below ground, unless otherwise stated

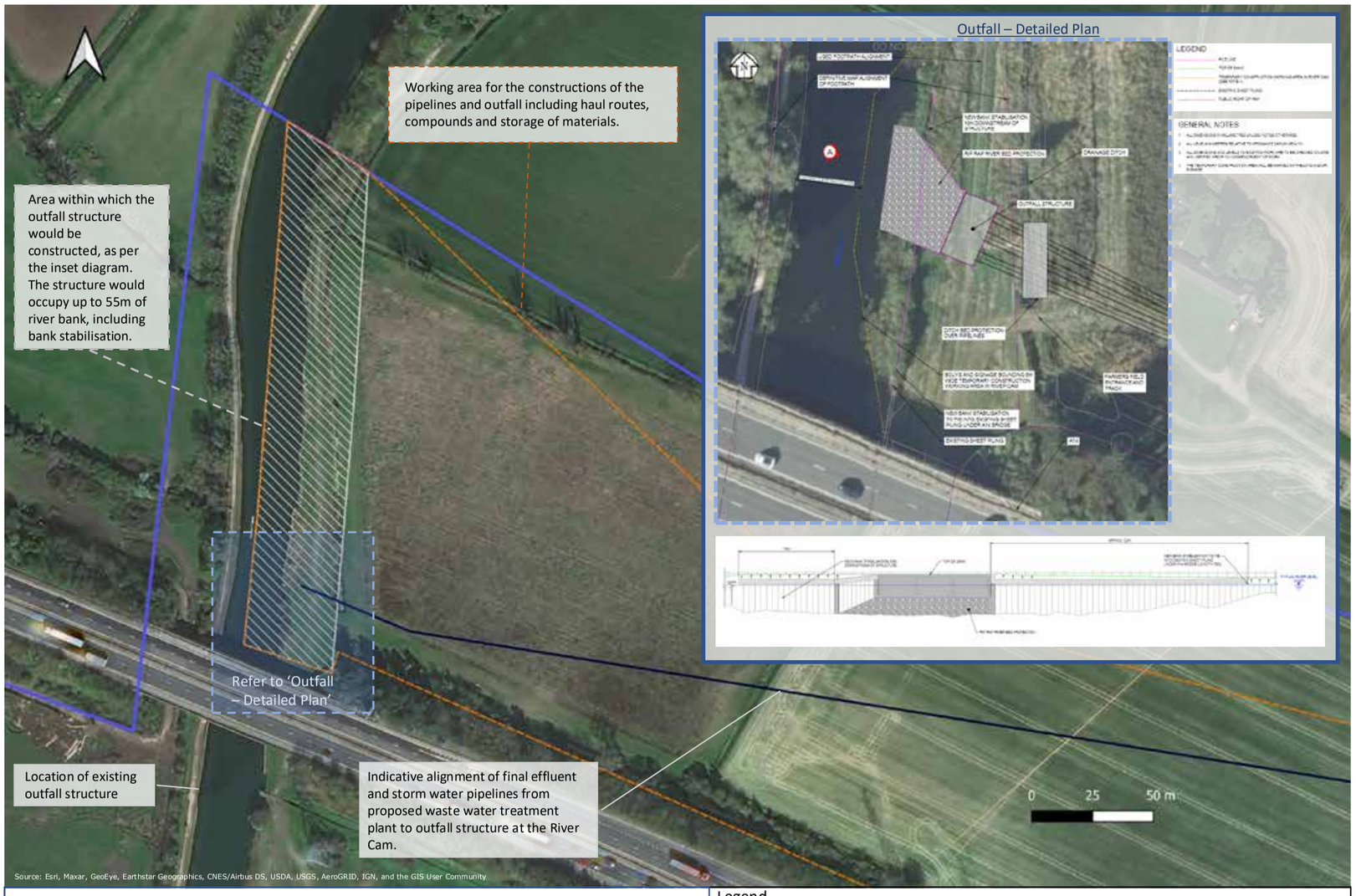


Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Construction Traffic Routing and Access for Heavy Goods Vehicles – Waterbeach Pipeline Route

Legend

- Draft Scheme Order Limits
- Construction traffic routes (HGV)
- Construction traffic vehicular access point

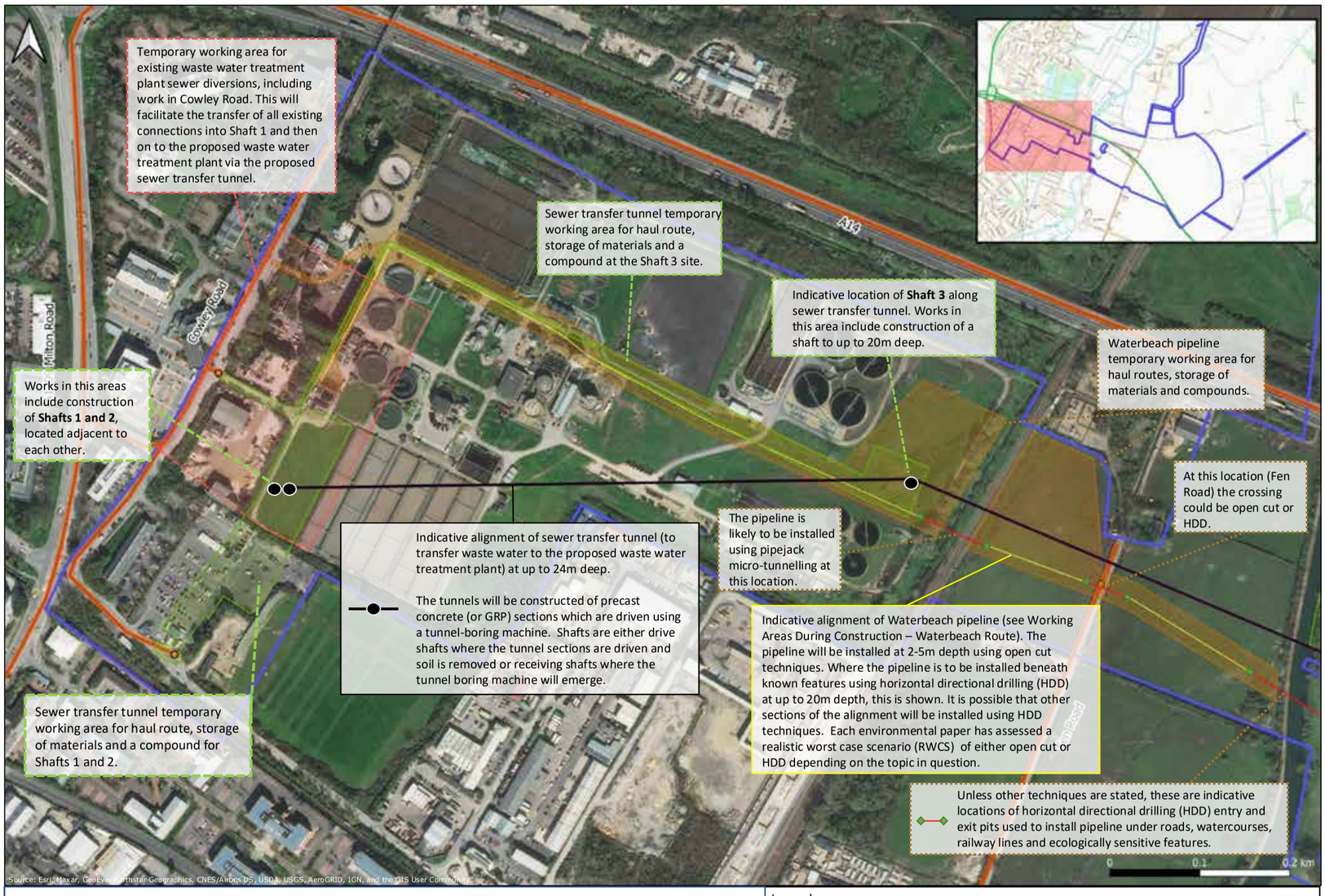


Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Permanent Features – Outfall Area

Legend

- Draft Scheme Order Limits
- Working area for construction of treated effluent pipelines and outfall
- Area within which outfall structure would be constructed

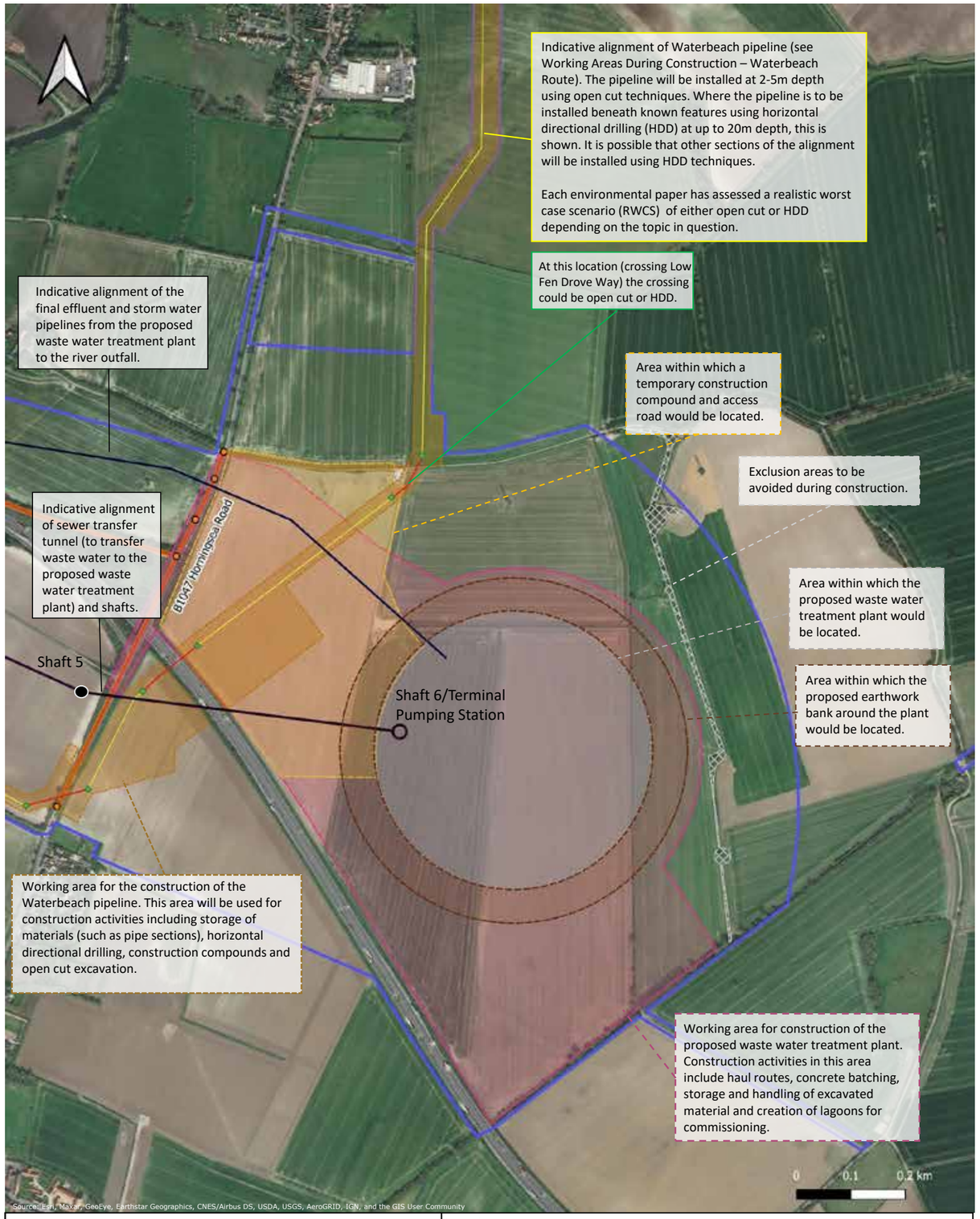


Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Working Areas During Construction - Existing Cambridge Waste Water Treatment Plant to the River Cam

Legend

- Draft Scheme Order Limits
- Construction traffic routes
- Vehicular access point off the public highway for construction traffic
- Pipeline installed using open cut methods
- Sewer tunnel and shafts working area
- Sewer diversion and connections working area
- Waterbeach pipeline working area
- HDD pipeline installed below ground unless otherwise stated

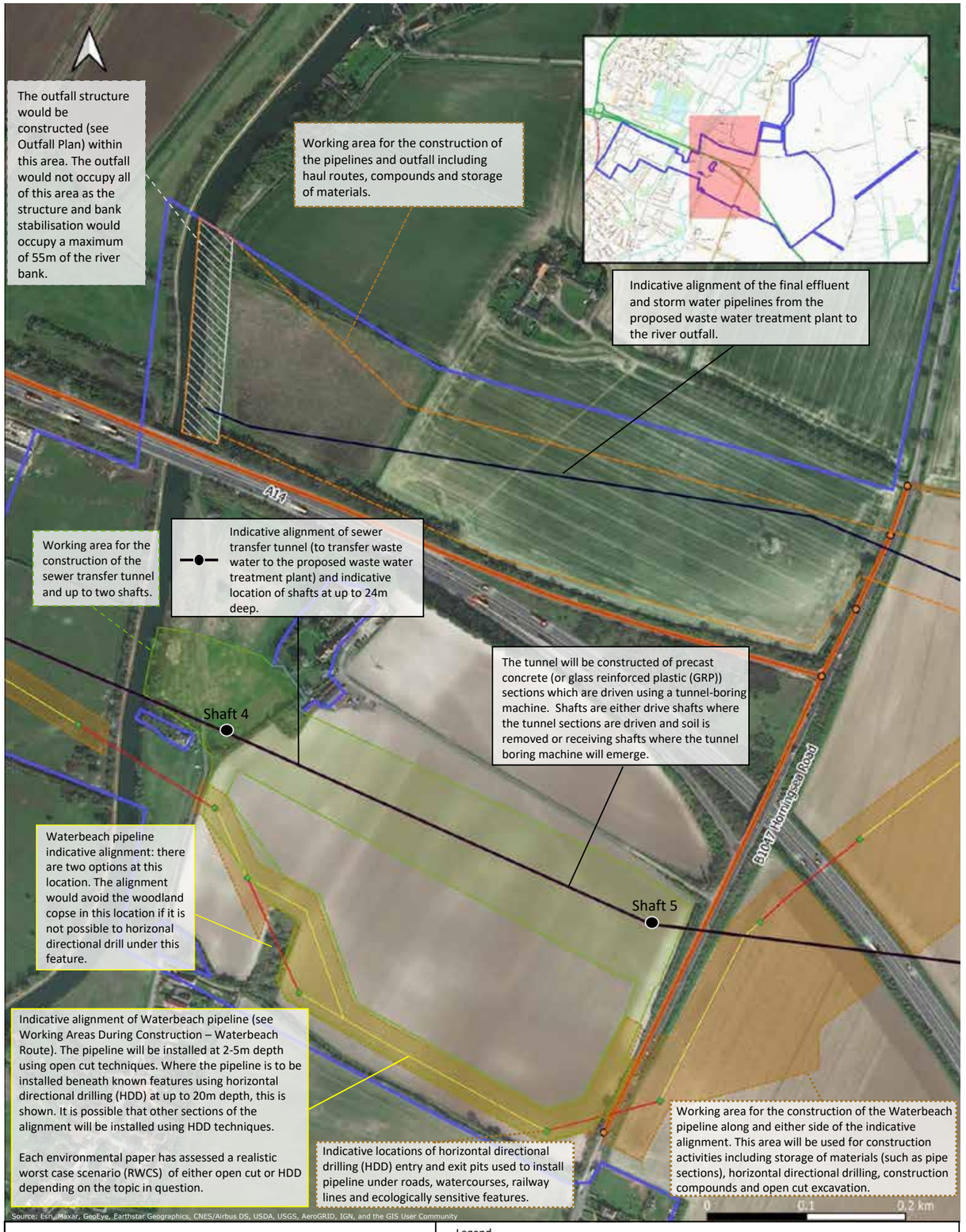


Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Working Areas During Construction – Core Area

Legend

- Draft Scheme Order Limits
- Construction traffic routes (HGV)
- Construction traffic vehicular access point
- Waterbeach pipeline working area
- Location of proposed works
- Location of proposed earthwork bank
- Working area for construction of proposed works
- Location of working compounds and access road
- Pipeline installed using open cut methods
- HDD pipeline installed below ground unless otherwise stated



Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Working Areas During Construction – River Cam to Horningsea Road

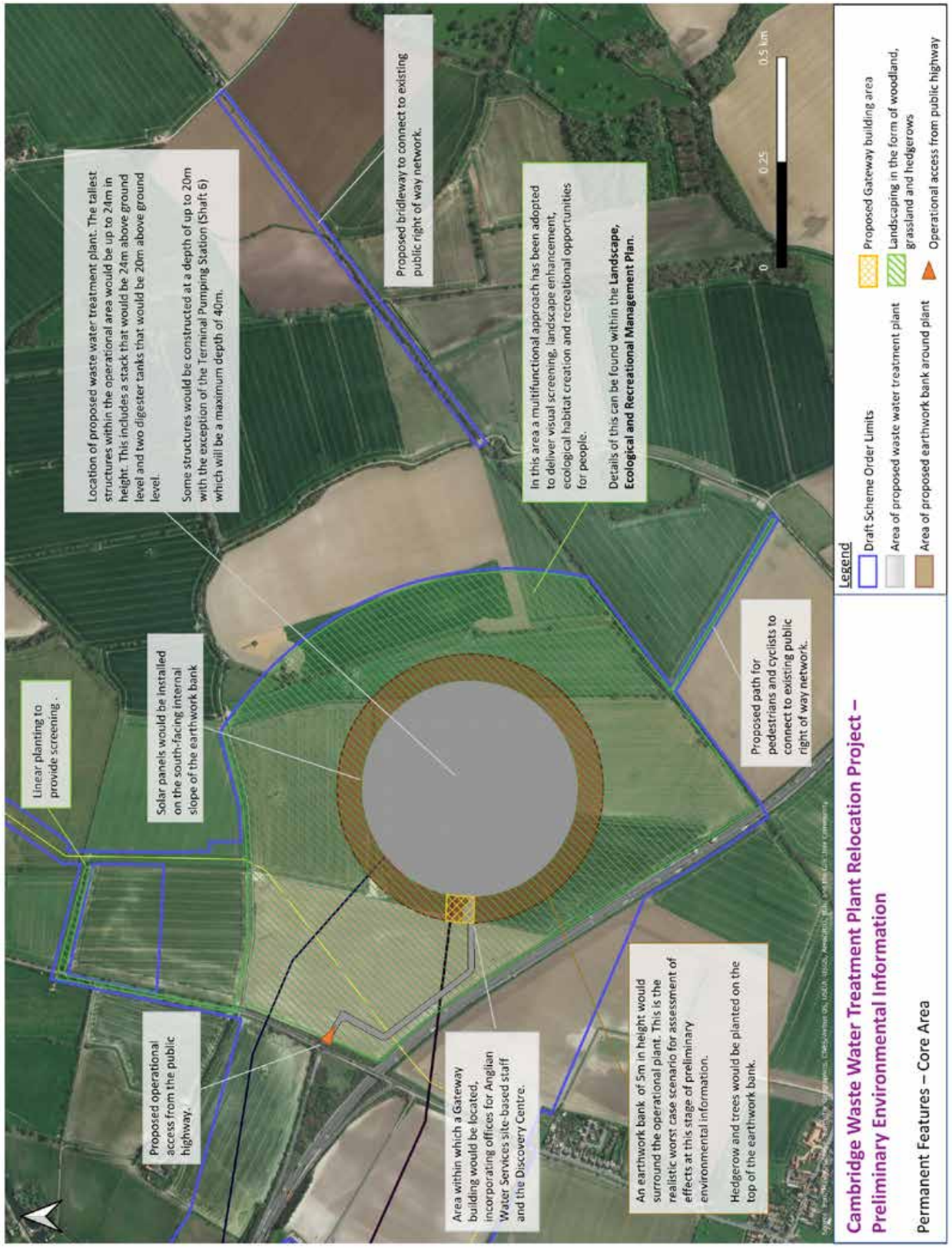
Legend

- Draft Scheme Order Limits
- Construction traffic routes (HGV)
- Construction traffic vehicular access point
- Waterbeach pipeline working area
- Pipeline installed using open cut methods
- HDD pipeline install below ground unless otherwise stated

2.6 What are the permanent features of the proposed WWTP, once operational?

The permanent features of the proposed WWTP are shown on the annotated plan below.

All of the land temporarily used in construction for the laying of pipelines, soil handling, siting of construction compounds, haul roads etc will be reinstated. Land will be reinstated as construction areas are demobilised including works such as returning land to previous levels, reseeding areas and replacing hedgerow sections where these were affected by a pipeline route. Once demobilised from the area bounded by Low Fen Drove Way and the A14 the main landscape planting work will also be possible, leading to the delivery of the landscape masterplan involving tree planting, grassland and other habitats and pathways and places for people.



The Waterbeach pipeline will transfer waste water south to the existing Cambridge Waste Water Treatment Plant.

Following construction of the Waterbeach pipeline, working areas would be reinstated to their previous condition. Permanent features include manholes along the length of the pipeline) with air valves.

Following construction of the treated effluent and storm pipelines, the pipelines would transfer treated effluent to the outfall structure on the River Cam. The working area would be reinstated to previous condition. Permanent features include manholes for maintenance access.

Indicative location of outfall structure in bank of River Cam. Following construction of the outfall, the structure and bank protection will remain as a permanent feature. The outfall will require occasional access for maintenance checks.

See separate plan – 'Permanent Features – Core Area'

The sewer tunnel will transfer waste water from the sewers of Cambridge to the proposed Waste Water Treatment Plant. The indicative location of air vents at sewer tunnel shaft locations is shown. These will vent air from the gravity tunnel and be fitted with odour control units. Each air vent will be up to 8m tall. These will require occasional access for maintenance purposes.

0 0.25 0.5 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Cambridge Waste Water Treatment Plant Relocation Project – Preliminary Environmental Information

Permanent features of the CWWTPR project

Legend

- Draft Scheme Order Limits
- Indicative air vent locations along sewer tunnel alignment
- Indicative location of permanent outfall structure
- Direction of pipeline 'flow'

Landscape plan

Aerial plan showing landscape proposals for our site

More information on these proposals is available in our Landscape, Ecological and Recreational Management Plan (LERMP) and PEIR.

3. Alternatives

This section sets out a description of the alternatives to the project proposals studied by the Anglian Water. Alternatives were considered as part of the following activities:

- **Site selection**
- **Confirmation of plant footprint**
- **Selection of treatment process**
- **Selection of preliminary concept design**
- **Location of concept design within selected site**
- **Selection of preferred vehicular access**
- **Further design refinement**

3.1 Site Selection

The site of the proposed WWTP was selected on completion of an in depth four-stage process of assessing potential sites. The first three stages of this process were consulted on during our first consultation. Full copies of the site selection reports are available in the document library on the CWWTPR website: [redacted].

The study stages (Stage 1 Initial Site Selection, Stage 2 Coarse Screening, Stage 3 Fine Screening and Stage 4 Final Site Selection) were used to assess location options in increasing levels of detail, each building on the findings of the previous stages. Less suitable options were eliminated at each stage resulting in the identification of the best performing site to progress through the consultation and environmental impact assessment processes required for a DCO application.

After consultation on three short-listed sites following Stage 3 (Fine Screening) we progressed to the final site selection (Stage 4).

The Stage 4 assessment used the information collated during the first stages of the site selection process combined with the results of further technical feasibility assessments, initial environment walkover surveys and phase one non-statutory public consultation to assess each of the site area options against one another.

The site finally selected was considered to represent the best performing site area. It was considered that it presented the greatest opportunity to deliver a development that incorporates wider benefits, rather than seeking to solely mitigate negative impacts, would contribute to Anglian Water's corporate objectives and would address many of the concerns raised by the local community and stakeholders.

Having selected the site, the design and layout of the site was refined further.

3.2 Selection of treatment processes

The treatment processes and technologies outlined in the project description have been selected through a series of "Risk, Opportunity and Value" (ROV) studies and workshops. This technical analysis considered a wide variety of technologies, concluding that Membrane Aerated Biofilm reactor technology (MABR) for secondary treatment represented a well-balanced outcome, considering a wide number of factors including carbon, reliability, odour profile, capital cost, operational cost, and operational complexity. However, the final choice of technology will be kept under review and enhanced activated sludge processes (ASP) remain under consideration.

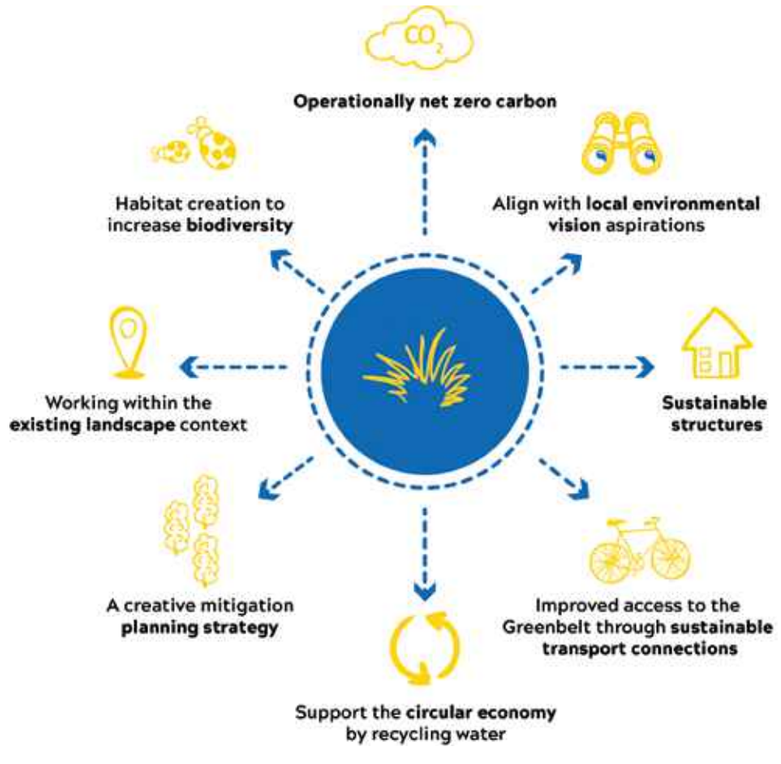
3.3 Development of Preliminary Concept Design

Guided by Anglian Water's purpose and wider commitments, and the National Infrastructure Commission's Design Principles for National Infrastructure we developed a set of project level design principles, as follows:

- to create a modern, low carbon waste water treatment plant
- to reduce the footprint of the new plant to 22 hectares, which is about half the size of the existing plant
- to create a strong identity for the site while screening the facility and reducing visual impacts on the surrounding community and landscape
- to re-use excavated material on site which can be used to screen the facility and also reduce the carbon and traffic impact from construction
- to minimise odour by incorporating solutions to address it at source and using best operational practices
- to reduce harmful carbon emissions through sustainable design, helping address climate change
- to increase biodiversity by creating new wildlife habitats
- to improve access to the countryside with new paths and accessible open spaces; and
- to connect the site into the wider landscape and establish new wildlife corridors.

Subsequently, guided by advice from architects, landscape architects, ecologists and other design professionals, further environmental objectives for the project design were developed, as shown in the figure below. We also developed a design narrative, which is set out in the Landscape, Ecology and Recreation Masterplan (LERMP), which forms part of the PEI.

Following further advice from the Design Council, including formal design panel review from independent built environmental experts of the three concept designs, and consultation with a number of technical stakeholders, a "rotunda" concept design was selected for the Project.



3.4 Vehicular access

In parallel with the design processes outlined above, a range of potential permanent vehicle access options to the site were explored, including through engagement with National Highways (formerly Highways England) and Cambridgeshire County Council as the relevant highway authorities. Issues considered as part of this work included the safety of road users, the management of potential disruption to local communities and the existing road network and project economics (the relative costs of different options). As a result of this work, three potential permanent access options were taken forward to Phase Two Consultation (June to August 2021).

These were:

- Option 1: Access off Junction 34 of the A14 (Fen Ditton) which consisted of two sub options (1A and 1B);
- Option 2: Access off Junction 35 (Quy); and
- Option 3: A new junction on the north side of the A14.

Highway and transport technical advice concluded that:

- There were significant Department of Transport (DfT) policy challenges to the delivery of Option 3.
- National Highways and Cambridgeshire County Council, as the relevant highways authorities, advised throughout the early consultation on the site access assessment that Option 3 did not pass the policy tests of DfT Circular 02/2013.

A highway safety audit concluded that all the options considered could be safely delivered.

Option 1 was found to be the best performing access option in comparison to Options 2 and 3 across a range of other, non-highways, criteria including land use, biodiversity, green belt, air quality, carbon, operational management, and cost.

Option 1 was therefore selected as the preferred permanent access option for the project. This option has subsequently been refined, as presented in the Phase Three consultation materials.

3.5 Climate resilience

The design of the proposed WWTP has taken into account the potential effects of the changing climate into the 2080s.

Climate change will mean changes in annual and seasonal averages as well as an increase in the frequency and intensity of extreme weather events such as storms, high winds, and heavy rainfall. As well as higher average maximum and minimum temperatures, we are likely to see more frequent heatwaves, with the temperature on the hottest days of the year increasing more than the average values.

4. Likely significant environmental effects

4.1 Overview

The relocation of Cambridge WWTP has been recognised by the Secretary of State for Environment, Food and Rural Affairs as being a Nationally Significant Infrastructure Project. It will be a large-scale construction project spanning several years.

The construction of the Project will give rise to temporary changes to traffic volumes and types as well as noise and vibration. It will also be visible at this time, particularly because landscaping and planting will not have fully established. These changes are likely to affect community amenity.

The scale of the infrastructure needed to ensure the long-term resilience of waste water treatment capacity in Greater Cambridge inevitably means impacts will be felt. Anglian Water recognises and are sensitive to the community's concerns and questions about this. To assist with understanding these potential impacts, we have presented them both by topic and by community areas. Mitigation to avoid or reduce these construction impacts is presented, supported by a draft set of management plans for consultation.

Once operational the proposed Cambridge WWTP will continue to be visually prominent as a large infrastructure project with associated operational changes such as traffic movements. Mitigation for these impacts is also presented, supported by a draft set of long-term operational management plans for consultation, including a Landscape, Ecological and Recreational Management Plan (LERMP).

4.2 Communities

Change in views

There would be significant visual effects during construction on views from or close to Horningsea Road, High Ditch Road, Low Fen Drove Way, on Public Rights of Way (PRoW) and from isolated residential properties along the Waterbeach pipeline route. The construction works will be prominent in some views over the farmland.

Some changes in views will be temporary only – for example following the construction of the buried pipelines and tunnels and the re-instatement of the agricultural land those elements would not be visible. However, the visual impact of the proposed WWTP would remain significant at the commencement of the plant's operation, reducing over time as the tree, hedge and scrub planting became more established. By year 15, when the planting scheme would be mature, impacts would potentially remain significant on a small number of receptors on Horningsea Road (through hedgerow gaps), High Ditch Road and Low Fen Drove Way due to the prominence of the proposed WWTP in views and the shortening of long views over the open landscape arising from woodland planting.

Photomontages have been produced to show the changes in time from selected locations, an example from a viewpoint on Horningsea Road in year 1 and year 15 of operation is shown on the following pages. These images were created to be viewed at A3. The PEI on landscape impacts provides further photomontages together with advice on how the photomontages should be viewed.

View east from Horningsea Road near Low Fen Drove Way (year 1)

Verified photomontage year 1 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

View east from Horningsea Road near Low Fen Drove Way (year 15)

Verified photomontage year 15 (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Fen Ditton

During the construction period additional traffic and congestion could occur along Horningsea Road and adjoining roads, contributing to temporary delays as well as affecting pedestrians and cyclists, including those travelling to Fen Ditton Primary School. A limited number of construction vehicles will use Horningsea Road south of the A14 to access tunnelling and pipeline works. Some residents may also experience temporary noise, vibration, and visual impacts during construction of these works, including around Red House Close and Poplar Hall.

In the long term, the proposed WWTP may be visible from some locations. The PEI landscape paper presents photomontages for views from High Ditch Road and from the Horningsea Road bridge over the A14. Other viewpoints will be considered as part of the ongoing EIA process and presented as part of our DCO application.

Our Landscape Masterplan proposals are intended to benefit the wider local area. These benefits are further outlined in the Recreation Environmental Information Paper.

Horningsea

Although none of our construction traffic will enter Horningsea Village, there will be construction vehicle access to the north (accessed via the A10) and south of Horningsea, which may cause temporary journey delays for road users during the construction phase. Some locations, including land around Low Fen Drove Way, Horningsea Road, Biggin Abbey and The Gatehouse, may be affected by visual impacts during the construction of the Project. Combined traffic, noise and visual effects associated with construction activity are likely to arise in some locations. The new outfall structure on the bank of the River Cam will lead to a temporary diversion of footpaths south of Horningsea, which may impact users' amenity and convenience. The construction of the Waterbeach pipeline to the east of Horningsea Village may also affect residential amenity temporarily.

The location of the proposed WWTP means that there will be few properties close to the WWTP component of the Project, meaning any operational noise or odour effects are not expected to be significant. Mitigation measures have been identified to minimise any adverse visual effects, although some of these will not become fully effective until landscaping and planting has matured. Some limited advance planting of trees and hedgerows will help to reduce the immediate prominence of the Proposed Development in views following construction.

In the PEI landscape paper a number of photomontages are presented for views from the Horningsea area, including from near Biggin Abbey, from Horningsea Road, from Low Fen Drove Way and from footpath 130/6, around 1km from the site boundary.

The footway and cycleway along Horningsea Road will be improved as a result of the Project. Further community benefits include improved recreational access arising from our Landscape Masterplan proposals. These benefits are further outlined in the Recreation Environmental Information Paper.

Stow-cum-Quy

Construction impacts on residents of Stow-cum-Quy, other than visual impacts, are unlikely to be significant. During construction and operation, the changes to the existing farmland would be largely screened from views from the village and adjoining properties, and therefore have minimal impact on the landscape in this location. In the long term, the Landscape Masterplan proposals will benefit the local area, including the community of Stow cum Quy. Direct access to Low Fen Drove Way and footpaths to Fen Ditton and the River Cam will be improved by the provision of the new bridleway.

Waterbeach and Clayhithe

The communities of Waterbeach and Clayhithe are located closest to the Waterbeach pipeline component of the Project. During construction, there is anticipated to be increased traffic around the local road network in Waterbeach and along Clayhithe Road. Residents and community facilities on the roads where construction traffic routes are proposed may experience a combination of changes from an increase in traffic and construction noise. Measures have been identified to avoid or reduce impacts during construction. These measures will be secured via management plans including a Construction Traffic Management Plan and Code of Construction Practice.

Following construction there is unlikely to be any significant long-term effect. The pipeline will be buried and agricultural land re-instated. Long distance views of the WWTP itself will be limited and likely only fleeting. The PEI does not present a photomontage of the proposed WWTP from Waterbeach; the ongoing EIA process will consider likely long-term visual impacts in more detail. However, the photomontage in the PEI showing the view south from footpath 130/6 near Horningsea provides a useful indicative and preliminary indication of such longer distance views.

Chesterton, Milton and Fen Road

During construction, there may be potential delay and disruption to the community from construction vehicles using roads to access construction sites. This could result in temporary traffic delays. Construction traffic will also be present on Cowley Road and Fen Road.

Measures have been identified to avoid or reduce impacts during construction. These measures will be secured via management plans and include a Construction Traffic Management Plan and Code of Construction Practice.

Once operational the working areas will be reinstated and therefore there will be no longer term impacts.

4.3 Recreation - walkers, cyclists and horse riders

Temporary adverse effects on users of public rights of way (PROWs) may arise during the construction phase, as described in the community sections above.

At the end of the construction period the provision of new paths and recreational areas within the landscaped setting of the plant, and a new bridleway linked Low Fen Drove Way to the wider PROW network serving Quy Fen and Anglesey Abbey, may give rise to significant beneficial (positive) effects.

4.4 Recreation - users of the River Cam

Significant adverse temporary effects are likely for users of the River Cam due to disruption during construction of the outfall structure near the A14 bridge over the river.

The works at this location is likely to take up to 3 months. The outfall construction will require temporary restrictions along a 50m stretch of the Cam, reducing the navigational width from over 20 metres to approximately 12 metres during the works. This narrowing is needed to ensure a safe working area and will be marked out by a string of buoys in the river. The River Cam will remain navigable throughout.

Phasing and management of works to minimise the impact of construction on specific events in the rowing calendar. This will be discussed and agreed with stakeholders including event organisers as part of the community engagement strategy.

Users of the Cambridge Sailing Club and Cambridge Motorboat Club are likely to experience temporary noise, and potentially visual impacts, during installation of the Waterbeach pipeline underneath the River Cam by horizontal directional drilling, but navigation will not be affected.

The sections of riverbank within which construction activities are proposed will result in temporary disturbance to the river (noise, presence of construction, visual changes) which may deter use by anglers. Due to this temporary disturbance, anglers may experience a short-term temporary disturbance and may not to choose to fish in locations close to construction activities.

Once construction of the outfall and the Waterbeach pipeline under the River Cam is complete there are not anticipated to be any significant operational impacts on river users from the project.

4.5 Landscape and historic environment

Eastern Fen Edge Landscape Character

As with the construction of any infrastructure project there will be significant landscape effects, in this case on the Eastern Fen Edge Landscape Character Area. The Eastern Fen Edge is an open landscape of low-lying farmland separated by drainage ditches, hawthorn hedges, tree-lined farm tracks and woodland belts. This is a rural area where the introduction of a large-scale construction works will change the character of the farmland. Once constructed the introduction of the large-scale infrastructure into the rural area would change the character of the Eastern Fen Edge Landscape Character Area. Adverse landscape effects would reduce by year 15 of operation, but they would potentially remain significant on the Eastern Fen Edge Landscape Character Area due to the presence of large-scale infrastructure and introduction of more woodland in the currently open landscape.

The Landscape Masterplan

The Project would result in adverse landscape effects during construction and operation. These effects would be reduced through the implementation of a landscape masterplan which aims to create a green setting for the proposed waste water treatment plant that would contribute positively to the local landscape context. It responds to the landscape guidelines in the Greater Cambridge Landscape Character Assessment (2021) with new hedgerows, woodland and tree belts, linear sustainable drainage features and substantial new areas of grassland.

Built heritage

There will be indirect temporary effects during construction on Biggin Abbey, Poplar Hall, the Fen Ditton Conservation Area and the Baits Bite Lock Conservation Area. The magnitude of these effects is likely to be minor, but as the assets are of high value, the significance of effect is considered to be moderate to slight. This is due to the presence of construction compounds, cranes and other activity within or within the setting of these assets.

The heritage value of Biggin Abbey and, to a lesser extent, Baits Bite Lock Conservation Area will be impacted by permanent changes to their setting. The introduction of the proposed WWTP into the agricultural landscape surrounding Biggin Abbey will adversely affect the rural setting which contributes to the property's heritage value. The PEI includes a photomontage of the view east from Biggin Abbey towards the proposed WWTP.

Archaeological remains

Extensive archaeological surveys have taken place on the site of the proposed WWTP and surrounding landscaping, wastewater transfer corridor and outfall to the River Cam. Surveys of the Waterbeach pipeline route are currently ongoing.

Impacts on archaeological remains, especially any of national importance, will be avoided or reduced through the design of the Project. Where it is not possible to mitigate the loss of archaeological remains a programme of archaeological recording, through excavation or watching briefs will be undertaken.

4.6 Biodiversity

There will be a positive impact on natural habitats across the Project area. A preliminary Biodiversity Net Gain (BNG) assessment indicates that our Landscape Masterplan will deliver a net gain of at least 20% for both habitat and linear features (hedgerows).

In the vicinity of the River Cam, due to the installation of the Waterbeach pipeline and construction of the outfall, there is the potential for the loss of small areas of floodplain grazing marsh and river bank habitat. We are considering how to minimise those impacts and our final net gain calculation for those habitats will be presented as part of our DCO application.

The landscape and ecology design proposals create a range of new habitats, including species-rich grassland, woodland, and hedgerows. The new habitats will complement the proposed Cambridge Nature Network, providing a new component and potential extension to the stepping stones, corridors and core areas described in that vision. The Project therefore has the potential to contribute towards a functioning ecological network. The proposed waste water treatment plant sits within the drier areas of the southern area of the National Trust's Wicken Fen Vision, which proposes rough grassland, new woodland and coppice belts. The landscape design proposals have incorporated these concepts.

4.7 Agricultural land and soils

The development of the project will involve the permanent loss of around 90ha of land from agricultural use, including 30 hectares of Grade 2 ("Very good") land. This represents a significant impact on agricultural activities.

The soils from the area of the proposed WWTP within the landscaping bund (amounting to around 22ha) will be reused within the landscaping scheme. A draft Soil Management Plan has been produced as part of the PEI, explaining how sustainable soil handling will take place during construction. Due to these measures no permanent likely significant impacts to soil resources will arise.

4.8 Water and pollution control

The River Cam

The relocated Cambridge WWTP will result in reduced concentrations of all regulated water quality components in final treated effluent entering the River Cam under non-storm conditions. This means that when the new facility starts to operate, water quality in the River Cam will improve.

Storm overflows play a vital role in our combined waste water network systems as they work like pressure release valves to protect homes and businesses from flooding during periods of extreme rainfall. The Environment Agency (EA) issues permits for our storm overflows.

The new facility will provide greater resilience and improved storm management, meaning storm overflows and Combined Sewer Overflows (CSOs) are far less likely to occur. This means that, as Greater Cambridge continues to grow, the facility will be able to treat a greater volume of storm flows to a higher standard than would be the case at today's facility.

Groundwater

Detailed technical discussions, supported by extensive studies, including a Hydrological Impact Assessment Report (HIA) and ground investigations, on the protection of ground water have taken place with the Environment Agency.

The Hydrological Impact Assessment Report (HIA), which included transport contaminant modelling, considered the potential hydrogeological effects of the proposed scheme, including impacts to ground and surface waters associated with dewatering, discharge and contamination, through both the construction and operational phases of the scheme. It also considered impacts associated with construction of permanent foundations and below ground structures, construction and operation of tunnel shafts and waste water transfer pipelines, including potential impacts to Stow-cum-Quy Fen SSSI.

The Project will be constructed and operated without adversely affecting groundwater quality, including groundwater within aquifers used for water supply. The low permeability, clay-like or silty materials in the Grey Chalk underlying the proposed WWTP would be a major factor in limiting any potential contaminant movement, with contamination in any event considered unlikely to arise.

Changes to groundwater levels during construction would be temporary and would be mitigated by rigorous protection measures including the need for additional consents for works that could affect surface water or ground water and the implementation of measures to protect springs, boreholes and watercourses, including control of surface water runoff.

Regular contact with owners of private groundwater abstractions will be maintained while construction is in progress, in order to monitor their water supply.

Surface Water

Final effluent currently flows from the Waterbeach Water Recycling Centre to Bannold Drain. These flows will cease, increasing water quality in the drain and into the River Cam but potentially affecting any surface water abstractions dependent on the flow in the drainage ditches, which would decrease.

Contaminated Land

Preliminary Risk Assessment has only identified localised existing sources of contamination generally associated with limited areas of the existing Cambridge WWTP where shafts will be excavated. New contamination sources and/or pathways will not be introduced as these will be avoided through the measures as set out in the Outline Code of Construction Practice. Following mitigation there are therefore unlikely to be significant land contamination effects.

5 Conclusions

This Non-Technical Summary has presented a summary of the significant environmental impacts likely to arise from the construction and operation of the proposed WWTP.

The table below summarises the main conclusions of the PEI papers:

Significance level	Environmental topic	Temporary or short term effect	Permanent or long term effect
Effects of major adverse significance	Landscape		✓
	Construction noise and vibration (Shaft 4)	✓	
Effects of moderate adverse significance	Agricultural land and soils		✓
	Recreation (river users and users of public rights of way)	✓	
	Historic Environment		✓
Effects of minor adverse significance	Construction Traffic and Transport	✓	
	Construction Noise and vibration (excluding Shaft 4)	✓	
Effects of negligible adverse significance	Odour		✓
	Air Quality (during construction)	✓	
Neutral effects (neither adverse nor beneficial)	Operational Traffic and Transport		✓
	Operational Air Quality		✓
Effects of negligible beneficial significance	Not applicable		

Significance level	Environmental topic	Temporary or short term effect	Permanent or long term effect
Effects of minor beneficial significance	River Cam Water Quality		✓
Effects of moderate beneficial significance	Recreation		✓
	Biodiversity		✓
Effects of major beneficial significance	Not applicable		

Email at
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Write to us at
FREEPOST: CWWTPR

Call us at
Freephone: 0808 196 1661

Visit Our Website at
[redacted]

Get in touch

Our dedicated project website, email address, Freephone information line and Freepost address all remain open if you have any questions.

You can contact us by:

Emailing at **info@cwwtpr.com**

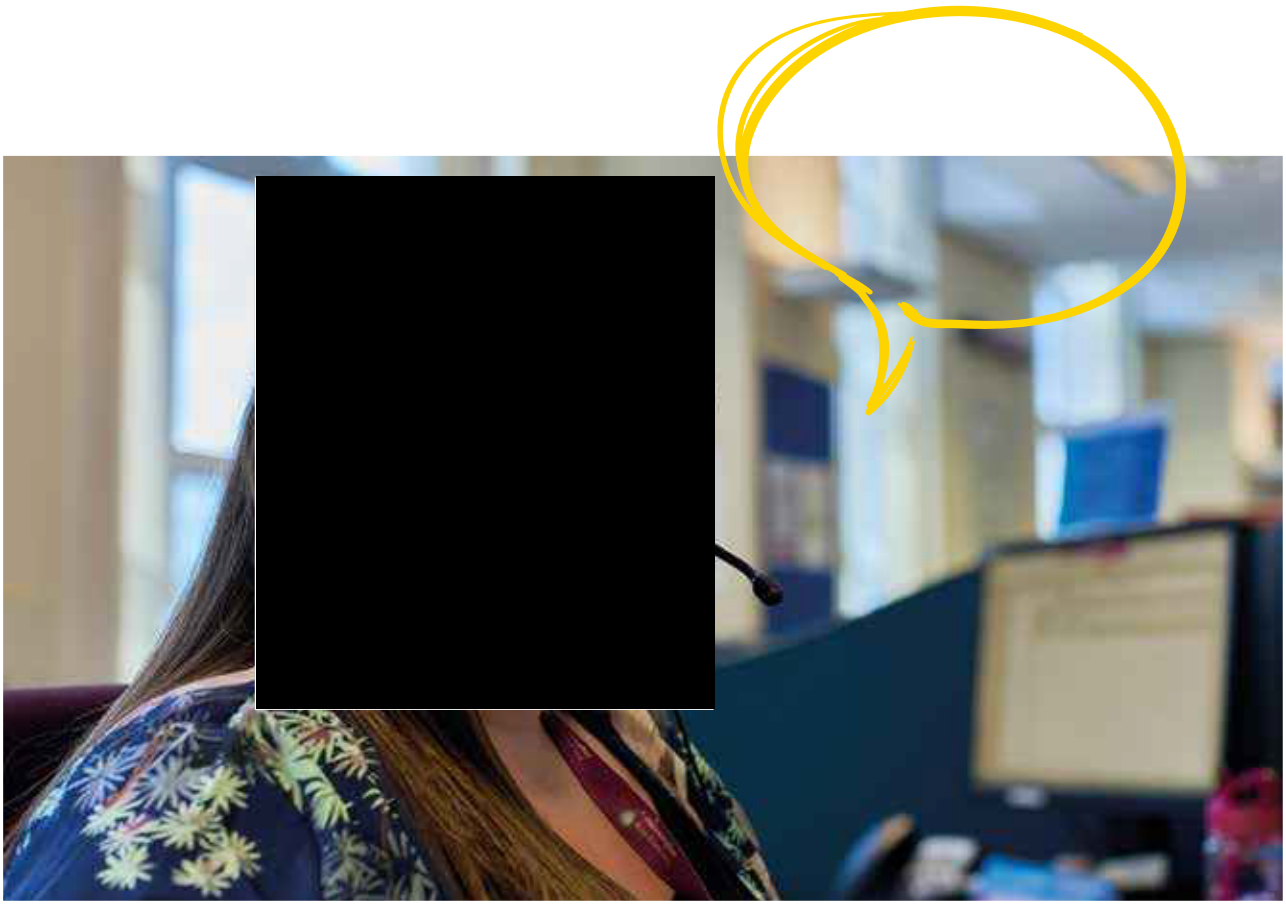
Calling our Freephone information line on **0808 196 1661**

Writing to us at **Freepost: CWWTPR**

Visiting our website at [redacted]

If you would like this document in large print, audio or braille formats, please contact us using the details above.

All graphics and maps in this document are for illustrative purposes.



love every drop
anglianwater

Welcome to our consultation exhibition

Have a look around and learn more about our proposals for the Cambridge Waste Water Treatment Plant Relocation project.

We welcome your views and comments which can be provided through our feedback form or digital engagement platform.

Our Preliminary Environmental Information Report and other supporting documents are also available, providing more detail on key areas of our proposals. These are available on the document library and at this exhibition.

About the relocation project

Anglian Water is planning to build a modern, low carbon water recycling centre for Greater Cambridge. The new facility will provide vital services for the community and environment, recycling water and nutrients, producing green energy, helping Cambridge to grow sustainably.

Closing the facility at the current site on Cowley Road will:

Allow the existing site to be redeveloped, delivering around 5,600 of the 8,350 much-needed **new homes** in North East Cambridge, including around 40 per cent affordable housing (rented and shared ownership)

Enable the vision of an inclusive, walkable, low-carbon new city district with a lively mix of homes, workplaces, services and social spaces with **good connectivity**, that are fully integrated with surrounding communities

Enable improvements to walking, cycling and public transport connectivity, helping to address climate change through **reducing car use**

Create **new parks and open spaces** that will form an accessible green space network with a wide range of plants and wildlife, linked with parks in the wider area

Reduce pressure for housing development in greenfield locations, where it would take up far more land and be less sustainable in terms of transport emissions. A **low-carbon city district** can achieve higher densities of housing than housing developed on greenfield or Green Belt sites and achieve a higher proportion of non-car journeys

The journey so far

2011

Cambridge City Council and South Cambridgeshire District Councils agreed to develop an Area Action Plan (AAP) for North East Cambridge, following consideration of options for the area through earlier Local Plan studies.

2014

The Councils held a public consultation on Issues and Options for the North East Cambridge Area Action Plan.

2017

Bid prepared by Cambridge City Council in partnership with Anglian Water for submission to Homes England for Government Housing Infrastructure Fund (HIF) funding to unlock the site for high density residential and mixed-use development.

2018

Both councils allocated the North East Cambridge area as a major development location in their adopted 2018 Local Plans. Closure of the current facility will unlock the regeneration potential of the area which has great walking, cycling and public transport links, including the new Cambridge North station, making it a highly sustainable location for new homes.

2019

HIF funding bid allocated by Homes England.

2020

- The Government's Housing Infrastructure Fund (HIF) funding was awarded to the relocation project to accelerate housing delivery through the AAP in recognition of the regional and national significance of the redevelopment opportunity.
- Anglian Water held phase one consultation on the relocation project on three potential site options for the new facility. We received 1,683 visitors to our virtual exhibition, 5,780 to our digital engagement platform and 559 feedback forms by mail and email.
- Feedback from previous local plan consultations was used by the councils to help develop the draft North East Cambridge AAP, which was published for full public consultation.

2021

- Anglian Water concluded the site selection process. The chosen site was found, on balance, to perform best across a range of key assessment criteria and presented greater opportunities to restore and enhance the surrounding environment.
- In addition to ongoing survey works, Anglian Water also began environmental and ecological surveys and other ground investigation activities.
- The Secretary of State for Environment, Food and Rural Affairs made a direction under Section 35 of the Planning Act 2008, recognising the relocation project's national significance.
- Anglian Water held phase two consultation on the relocation project on emerging proposals for the new site. We received 450 visitors to our virtual exhibition, 1201 visitors to our digital engagement platform and 353 feedback forms by mail and email.
- Environmental Impact Assessment (EIA) Scoping Report submitted to the Planning Inspectorate (PINS) and scoping opinion received.
- Anglian Water published feedback received showing a preference for a more natural design to help the new site blend into the surrounding landscape. In addition to a traffic assessment, we also assessed against 22 different criteria and considered feedback from the local community and other stakeholders, including the relevant highways authorities, before choosing Junction 34 off the A14 for a new permanent access to the facility.

2022

Cambridge City Council and South Cambridgeshire District Council issued their preferred options (Reg.18) greater Cambridge Local Plan for consultation in 2021. They agreed and published the North East Cambridge AAP in its Proposed Submission (Reg.19) form in 2022. The NECAAP process has now been paused until a decision has been made on the separate Development Consent Order (DCO) for Anglian Water's proposed Greater Cambridge waste water treatment facility.

Environmental mitigation measures and commitments

Since our phase two consultation last year we have continued to develop our proposals, which have been informed by the feedback we have received.

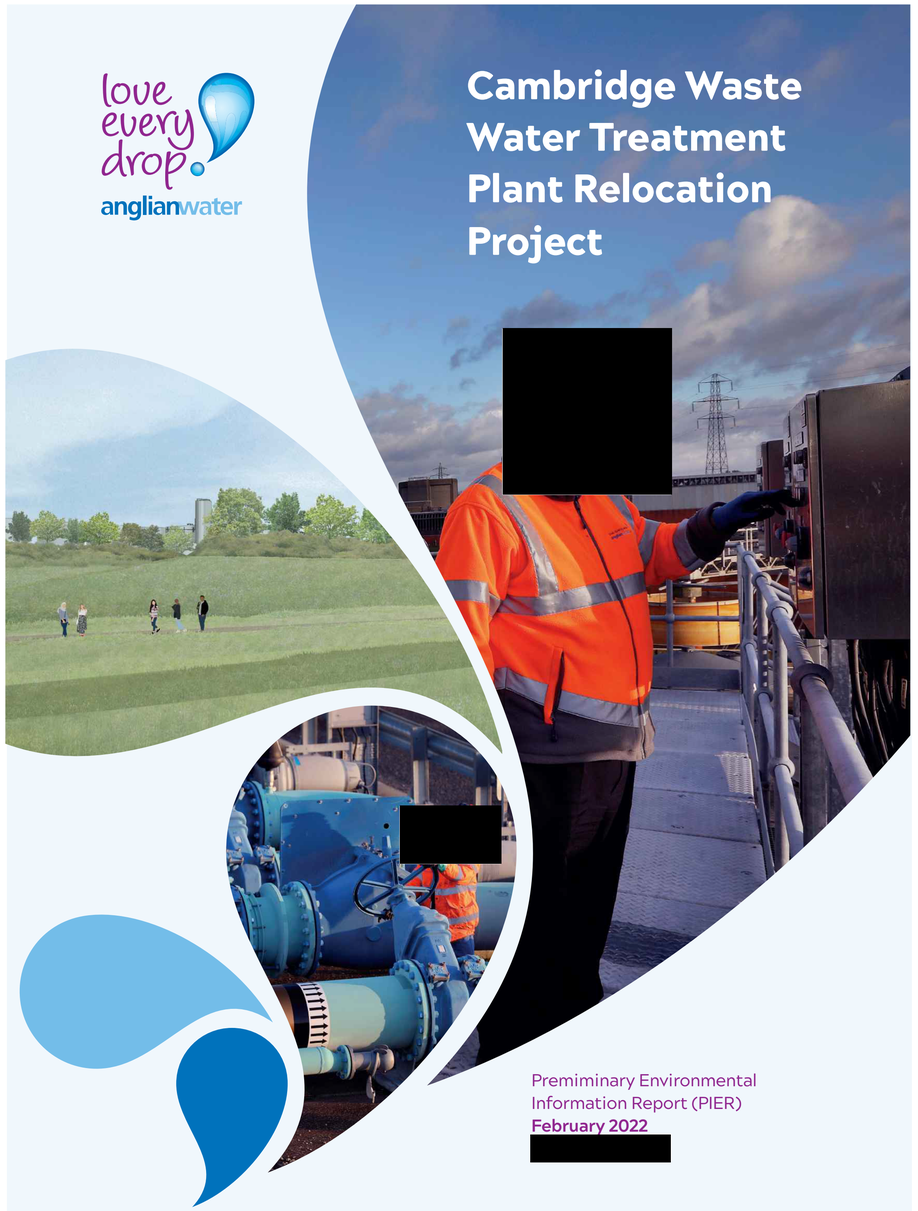
We are undertaking a full Environmental Impact Assessment (EIA) for the relocation project, to inform our detailed design.

Our EIA Scoping Report was submitted to the Planning Inspectorate (PINS) in October 2021. PINS have now reviewed our EIA Scoping Report and have published their Scoping Opinion, available on the project's page on the national infrastructure planning website here **https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/**

As part of this phase three consultation, we are presenting the findings of the environmental studies undertaken to date in our Preliminary Environmental Information Report (PEIR).

Also available are our draft management plans which show how we will minimise impacts on the local community and environment, and our draft Development Consent Order (DCO), which outlines the powers we will be seeking to construct and operate the new facility.

We are asking for your feedback on our environmental information, some elements of the design of the new facility where changes can still made, and comprehensive environmental mitigation measures to help shape our final detailed proposals.

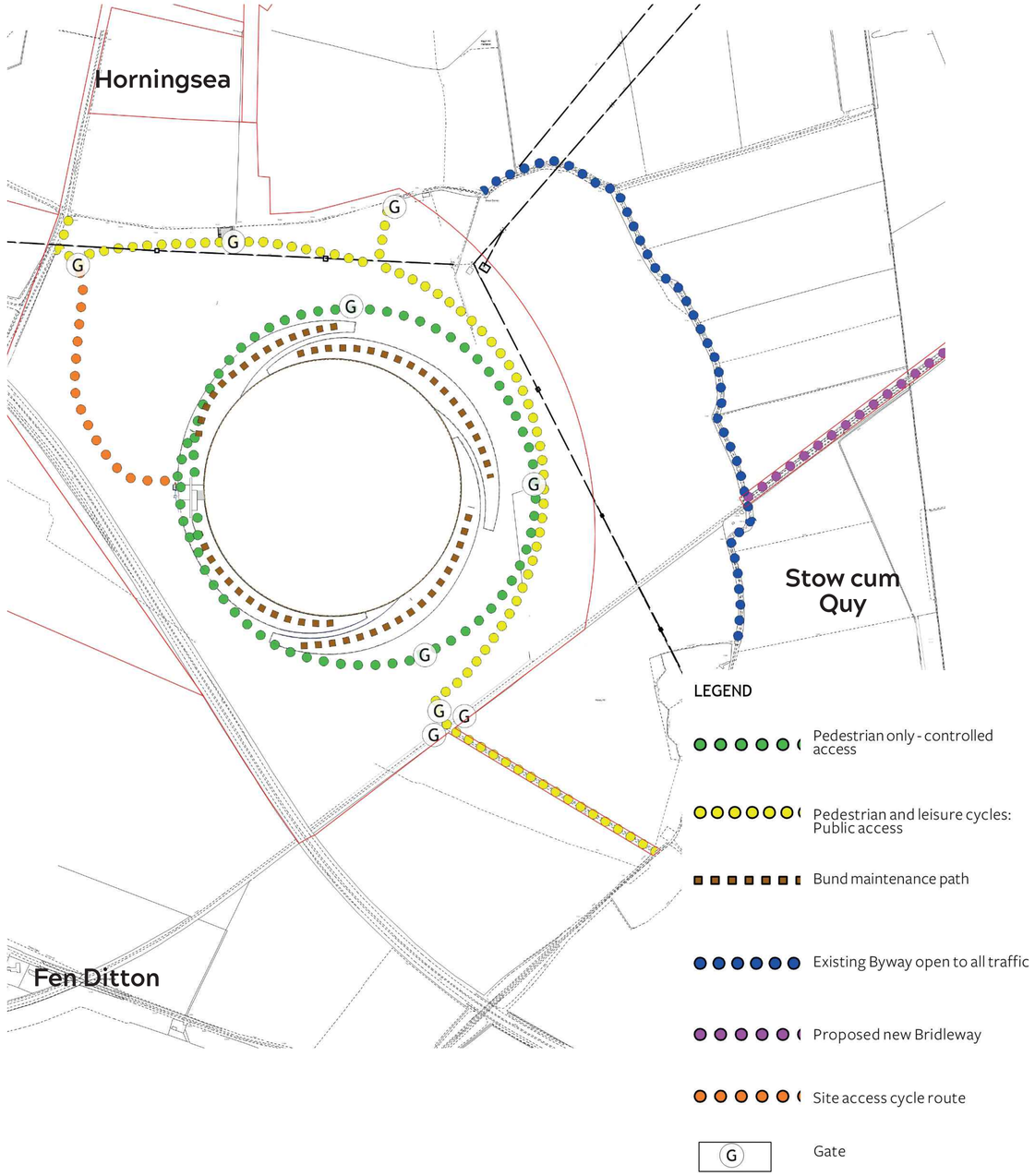


Improving access to green spaces

Cambridgeshire has one of the lowest levels of natural green space available for public access and use in the UK. We recognise that the scale of the project means people are concerned about being able to continue to use the surrounding countryside for recreation. The design responds to this by creating quiet places for both people and nature within the landscaped areas. These areas will be connected to local communities by a series of new paths and a bridleway, creating increased opportunities for recreational access in the area. Access to Quy Fen and Anglesey Abbey will be improved. Our proposals will enable a new circular walking route from the facility of 3.5km, and a longer 9.5km loop for bridleway users.

During our phase two consultation a new bridleway along the old railway line and access through new woodland footpaths were the most preferred opportunities among the options presented. We have been continuing to explore these opportunities as we have further developed our more detailed proposals. We are proposing to deliver a series of new recreational connections including:

- a publicly accessible path along the eastern part of the site, set between hedgerows and woodland, with a surface suitable for both pedestrians and recreational cyclists
- connections linking the site to the wider existing Public Rights of Way (PRoW) network
- a new bridleway to the east of the site linking Low Fen Drove Way with Station Road



Tunnel, pipelines and supporting infrastructure

The new facility will be equipped to adapt to changing social and environmental priorities, serve a growing population, and provides a joined-up solution for treating waste water from Cambridge and Greater Cambridge. This includes taking flows from the existing Waterbeach waste water treatment facility and new flows from Waterbeach New Town. Waste water will be transferred from the existing site on Cowley Road and Waterbeach to the new facility for treatment, before clean water is returned back to the River Cam.

We will need to build tunnels and pipelines to take waste water to the new site for treatment and to take treated waste water back to the River Cam, including:

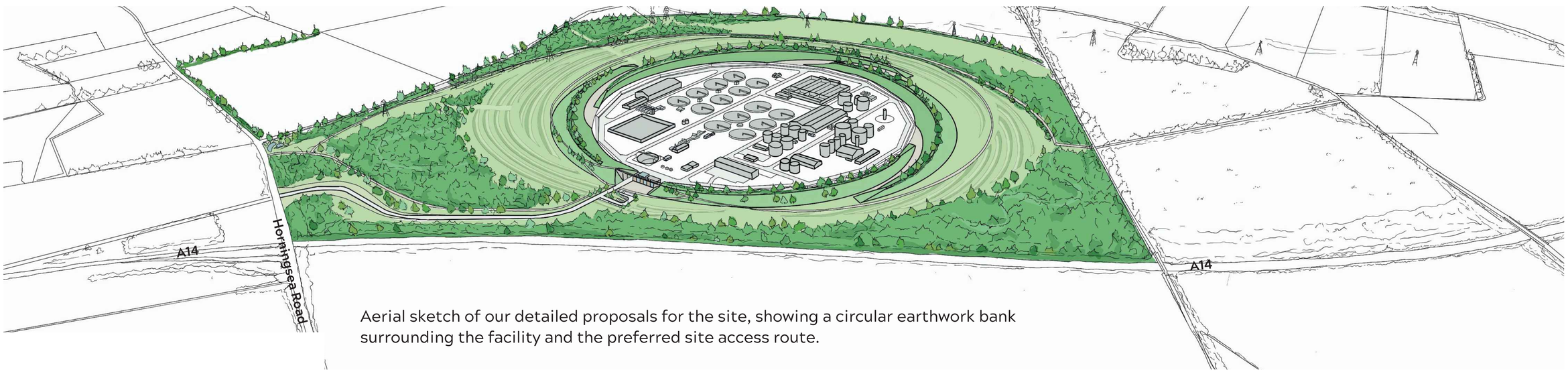
- A shaft to intercept waste water at the current site on Cowley Road and a tunnel to transfer it to the new site and terminal pumping station
- A pipeline transferring treated waste water to a discharge point on the River Cam, including a transfer pumping station
- Having a reporting process set up as part of our monitoring and enforcement programme

Our phase three consultation

Last year, during our phase two consultation, we shared our early design principles and emerging design for the relocation project.

As part of this final phase of consultation, we want to hear your views on our detailed design proposals for the new facility and surrounding site area, proposed mitigation measures to minimise impacts on local communities, and the opportunities identified for environmental enhancement beyond the site boundary. See our Feedback Form or visit our digital consultation platform via our website [redacted]

- This exhibition presents and summarises our updated proposals following two earlier phases of consultation.
- We have also published our Preliminary Environmental Information Report (PEIR), which has been informed by the environmental studies and assessments we have carried out to date. The PEIR is designed to help you understand the likely environmental effects of the project and inform your consultation response at this pre-application stage.



Aerial sketch of our detailed proposals for the site, showing a circular earthwork bank surrounding the facility and the preferred site access route.

What we are consulting on

We want to hear your views on our detailed proposals for the new facility and surrounding area and our preliminary environmental information, which includes our proposed mitigation measures (that is, the steps we're taking to minimise the impact of this scheme). We really value your feedback. This will help shape those areas where there is still scope for you to influence the project.

Specifically, we are asking for your feedback on options which you can influence directly:

- Our landscape proposals including the extent of proposed planting and the mix of species
- The appearance of the Gateway Building
- Opportunities to influence how visitors will experience the area around the facility and its mproved connections to local footpaths, cycleways, bridleways and improved recreational connectivity

We also present information on some of our preferred approaches to how the plant will be built and operated. These have evolved following earlier consultation but there are opportunities to influence the detailed design through your feedback:

- The design of the proposed vehicle access utilising junction 34 off the A14 to the site together with modifications to the local road network and the level of environmental mitigation required
- The environmental mitigation measures to be adopted for the construction phase of the project, including for the tunnels and pipelines, needed to connect to the new facility and the outfall to the River Cam
- Our preliminary environmental information, including our assessment of environmental effects and proposed mitigation identified at this pre-application stage

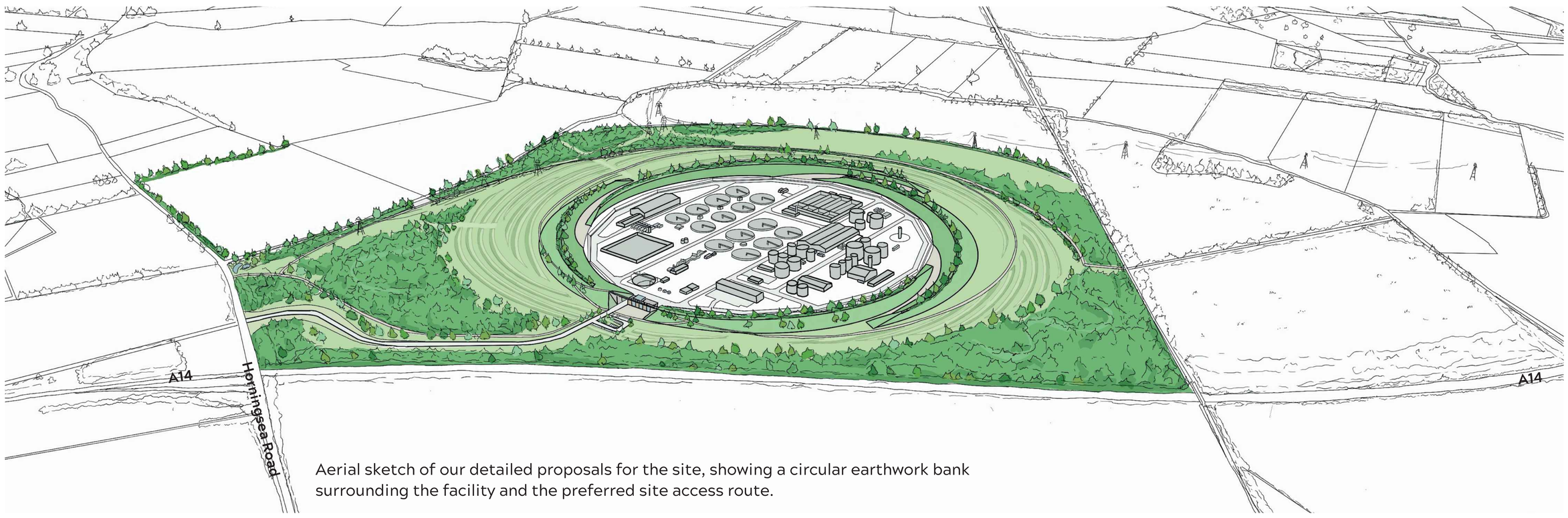
It's important to understand that we are not consulting on earlier decisions we have made about the project and which we have already communicated, or decisions made by other parties, including local authorities, including:

- The need for the relocation project
- Other development proposals including the North East Cambridge Area Action Plan
- The suitability of our site for the new facility and our site selection process
- The use of Junction 34 to provide a new permanent access off Horningsea Road

Our proposals

Last year, during our phase two consultation, we shared our early design principles and emerging design for the relocation project.

As part of this final phase of consultation, we want to hear your views on our detailed design proposals for the new facility and surrounding site area, proposed mitigation measures to minimise impacts on local communities, and the opportunities identified for environmental enhancement beyond the site boundary. See our Feedback Form or visit our digital engagement platform.



Aerial sketch of our detailed proposals for the site, showing a circular earthwork bank surrounding the facility and the preferred site access route.

Maximising public value and supporting the circular economy

The efficient and effective recycling and re-use of waste resources, including waste water, is core to public health and the circular economy. The design of the facility further supports a circular economy by:

- more effectively recycling nutrients, in the form of phosphorous and ammonia, found in waste water
- treating the biosolids captured as part of the wastewater treatment process, creating an enhanced soil conditioner for use by local agriculture
- generating biogas which, when processed and exported into the local gas network, will be used to heat the homes of the local community as a renewable fuel source

Building a modern, low carbon waste water treatment facility

The design of the facility will contribute to Anglian Water's goal to reach net zero carbon emissions by 2030 by reducing energy consumption and contributing towards the circular economy. The new facility will significantly reduce carbon emissions compared to the existing Cambridge facility and will be operationally net zero and energy neutral.

We will also target a 70 per cent reduction in "capital" or "embedded" carbon during the construction phase compared to a 2010 baseline by adopting sustainable construction techniques including:

- careful material selection
- material reuse and recycling
- and the reduction of carbon intensive structures such as concrete tanks.

Examples of this include using techniques such as 'pre-casting' where concrete is the only option and Design for Manufacture and Assembly (DfMA) which significantly reduce the amount of embedded carbon we use during construction.

Helping Cambridge to grow sustainably

The relocation provides an opportunity to develop a modern, forward-looking water recycling facility, using the latest technology and operational practices. This means we can continue to serve the growing population of Greater Cambridge for years to come, in a more sustainable and resilient way.

Improving storm resilience and the quality of the recycled water we return to the River Cam

Storm overflows play a vital role in our combined waste water network systems as they work like pressure release valves to protect homes and businesses from flooding during periods of extreme rainfall. The Environment Agency (EA) issues permits for our storm overflows.

The new facility will provide greater resilience and improved storm management, meaning storm overflows and Combined Sewer Overflows (CSOs) are far less likely to occur. This means that, as Greater Cambridge continues to grow, the facility will be able to treat a greater volume of storm flows to a higher standard than would be the case at today's facility.

The new facility is being designed to reduce concentration in final treated effluent discharges of phosphorus, ammonia, total suspended solids and biological oxygen demand (BOD), compared to the existing Cambridge facility. This means that when the new facility starts to operate, water quality in the River Cam will improve.

The final treated effluent discharge from the existing Waterbeach Water Recycling Centre (WRC) to Bannold Drain will cease. Water quality in the drain should improve as a result, although flows will decrease.

You can find out more in our Preliminary Environmental Information Report (PEIR), available on our website ([redacted]

[1]You can view more information on the CSO process here: [redacted]

The new facility

The waste water treatment facility

The facility is described in greater detail in the introductory PEI paper, however key features include:

- Improved treated water quality, delivered by modern efficient processes and increased storm management measures
- A 22 hectare integrated waste water and sludge treatment plant, designed to utilise Membrane Aerated Biofilm Reactor (MABR) technology for secondary treatment, an advanced process which performs well in terms of reliability, odour, carbon reduction and cost
- Advanced sludge treatment including optimised digesters returning nutrients to the land
- The position of the facility layout and selection of processes within the site area minimises odour to surrounding homes and existing walking and cycling routes
- The tallest structure within the operational plant would be a narrow chimney 'stack' up to 24 metres in height. The next tallest buildings, including the two anaerobic digesters, would be no taller than 20 metres
- An earthwork bank will encircle the operational plant. Hedgerows and trees planted on top of the earthwork bank will shield views of the buildings
- Solar panels placed on the internal slope of the bank, facing the facility, along with generating biogas which, when processed and exported into the local gas network, will be used to heat the homes of the local community as a renewable fuel source

The Gateway Building

The gateway building is the point at which visitors and workers will first interact with the facility. The building will serve both public and private functions, providing a welcoming arrival point and controlled access onto the earthwork bank and into the secure areas of the facility. Parking and external access to the building will be separated to help keep visitors safe. It will be visually and functionally integrated into the earthwork bank.

This is your opportunity to provide further feedback ahead of us finalising our design proposals. We will continue to develop the appearance of the new facility in a way that blends into the surrounding landscape, taking account of all feedback received during our phase two and phase three consultation before finalising our proposed design.

Illustrative visualisation of the gateway building showing a more natural entrance to the facility which blends into the earthwork bank and planted screen

Appearance of the new facility

As part of our phase two consultation last year, we asked for your views on the architectural finish of the externally facing buildings and features of the new facility. This included a gateway building, the anaerobic digesters, and any screening on top of the earthwork bank. The feedback we received was helpful, and we have developed our proposals further in line with it. This is reflected in the design which is more sensitive to the landscape and surrounding communities it will neighbour. The architectural and landscape design takes its inspiration from the landscape, past and present and the rural setting. As it matures it will soften and blend into the wider landscape. Bolder or more striking finishes will not be included in the project design.

Here, we are presenting a near final design for what the new facility could look like. This includes a more natural finish to the gateway building and a planted screen on top of the earthwork bank, with sky-like finishes on the digester towers to help soften their appearance against the skyline, making them less intrusive. We have also reviewed our engineering design, which was previously indicating a maximum height of 26 metres may be required for the digesters. Responding to feedback, we have been able to reduce the height so that they will now be no taller than 20 metres.

Computer-generated image showing indicative ground level view of the proposed facility with mature planting on top of earthwork bank

Discovery Centre

We want to help people understand and learn more about the vital role the water recycling process plays in supporting communities and the environment.

We are exploring additional screening on top of the earthwork bank, which could utilise a variety of materials and forms, to further reduce visual impacts and create a welcoming place for visitors.

We will create a Discovery Centre which supports the sustainability curriculum to provide an educational resource for children and young people to interact with and learn about the importance of water and the role which water recycling plays in the circular economy. The Discovery Centre will also provide the opportunity for other interested people or groups to programme a visit to the site by appointment to learn about water recycling and wider environmental sustainability issues.

During our phase two consultation the option of a freely accessible visitor centre, creating an open destination, was least preferred. We have continued to evolve our proposals for the Discovery Centre in a way that is sensitive to the immediate communities' feedback that they do not wish to see a more expansive visitor offering, through creating a programme that is by appointment only.

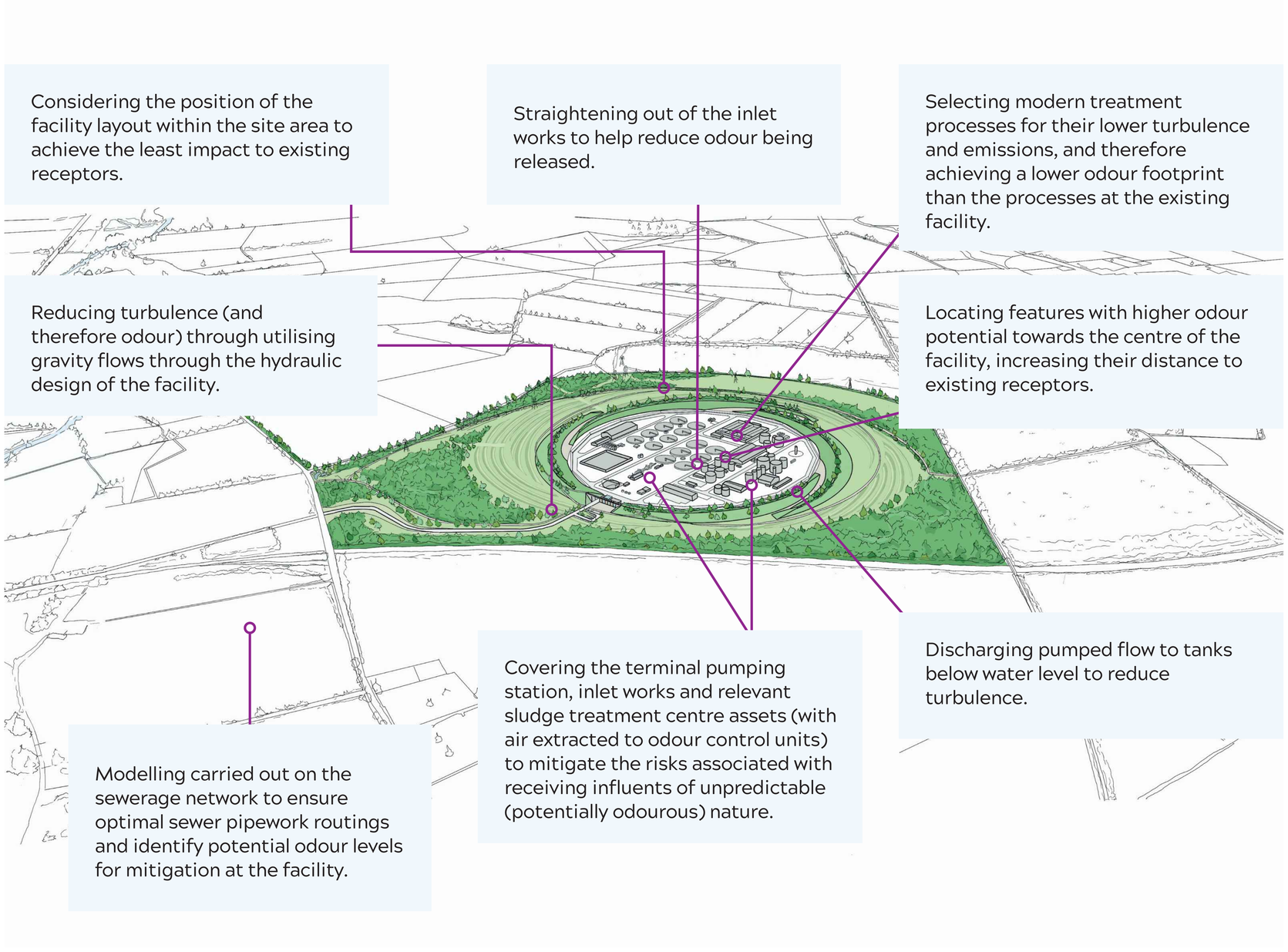
The Discovery Centre will therefore have a managed education programme, targeted towards scheduled opportunities for local schools and groups to learn about sustainability and the waste water treatment process. The impact of additional traffic from these visiting arrangement will be minimal and accommodated within the proposed access and parking at the entrance of the facility.

Odour mitigation

Our odour mitigation measures

Minimising odour as far as possible for local communities is of paramount importance to us. While the nature of the job waste water treatment plants are designed to do means that it is difficult to eliminate odour completely, one of the benefits of the relocation project is that we can use the latest technologies and embed solutions into the design of the facility, meaning that nuisance odour will not have a negative impact on people's enjoyment of their homes or the surrounding area.

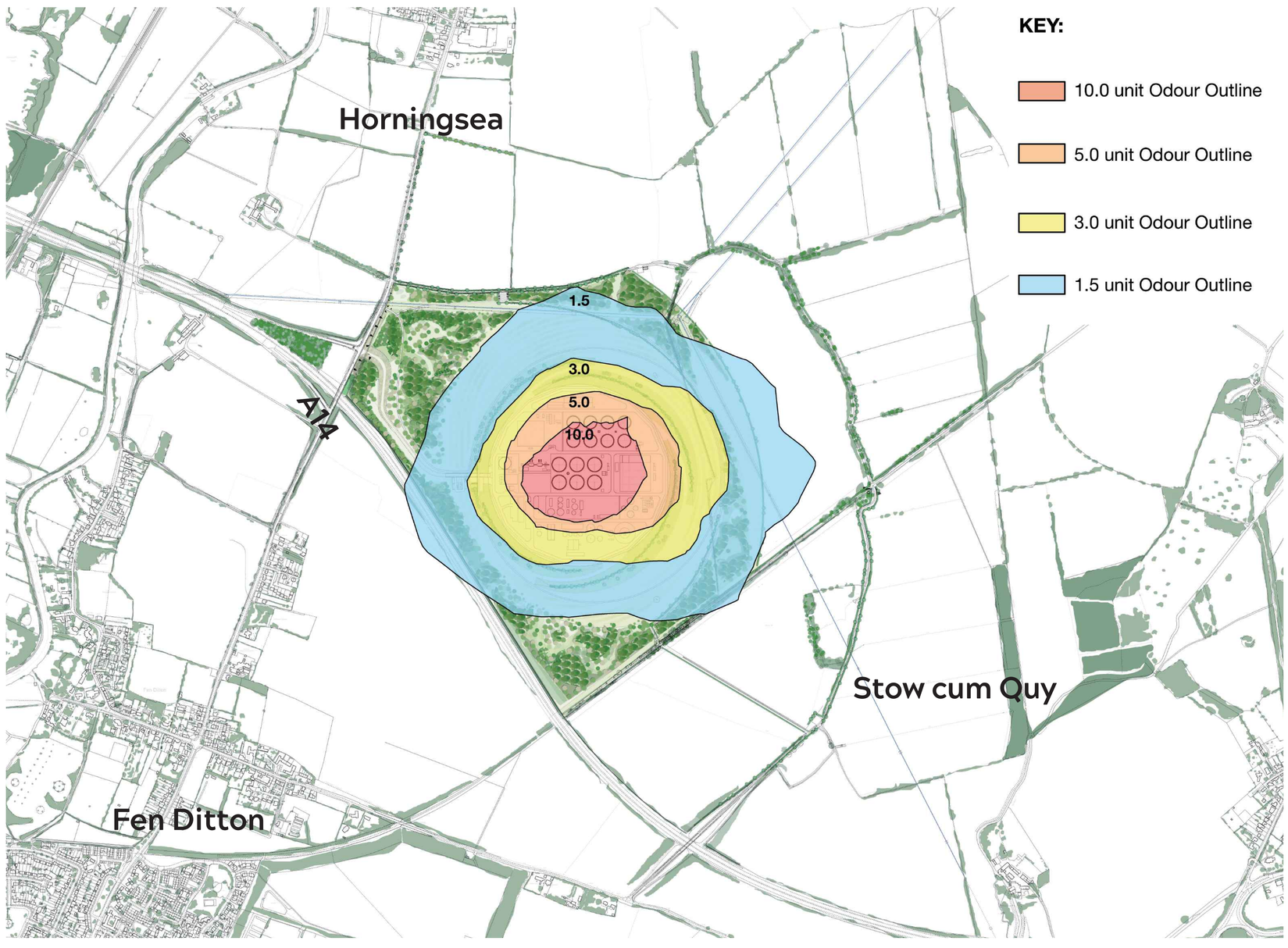
The graphic indicates how we are proposing to minimise odour at source.



As part of our phase two consultation we set out our commitment to deliver the lowest 'negligible' odour levels for existing high sensitivity receptors (people's homes and public rights of way) in line with the Institute of Air Quality Management (IAQM) guidance. We have been continuing to carry out dedicated odour assessment and modelling as part of our design process as layout, process and technology choices for the facility continue to develop. This includes extending our odour modelling data set to include the last 5 years' weather data, continuing to assess the worst-case scenario and having the criteria we have used externally verified.

You can find out more about our odour assessments in the odour paper, forming part of our Preliminary Environmental Information, available on our website (

The odour model map below shows the levels of 'negligible' odour from the new facility in relation to nearby residential areas and existing walking and cycle routes. This is a level where people are unlikely to detect the odour and if they do, are unlikely to find it an annoyance or offensive.



Indicative odour model output for the new facility

Traffic and access

After consultation with National Highways and Cambridgeshire County Council as the relevant highways authorities, and feedback from the local community and stakeholders as part of our phase two consultation last year, we selected a safe and sustainable permanent access for the project from Junction 34 of the A14.

We have now carried out further work to refine our proposals, including detailed traffic and access mitigation measures to reduce potential impacts on the existing road network. This includes carrying out a traffic and transport appraisal of two variations of the selected option, and further engagement with stakeholders including the relevant highways authorities and our Community Working Group.

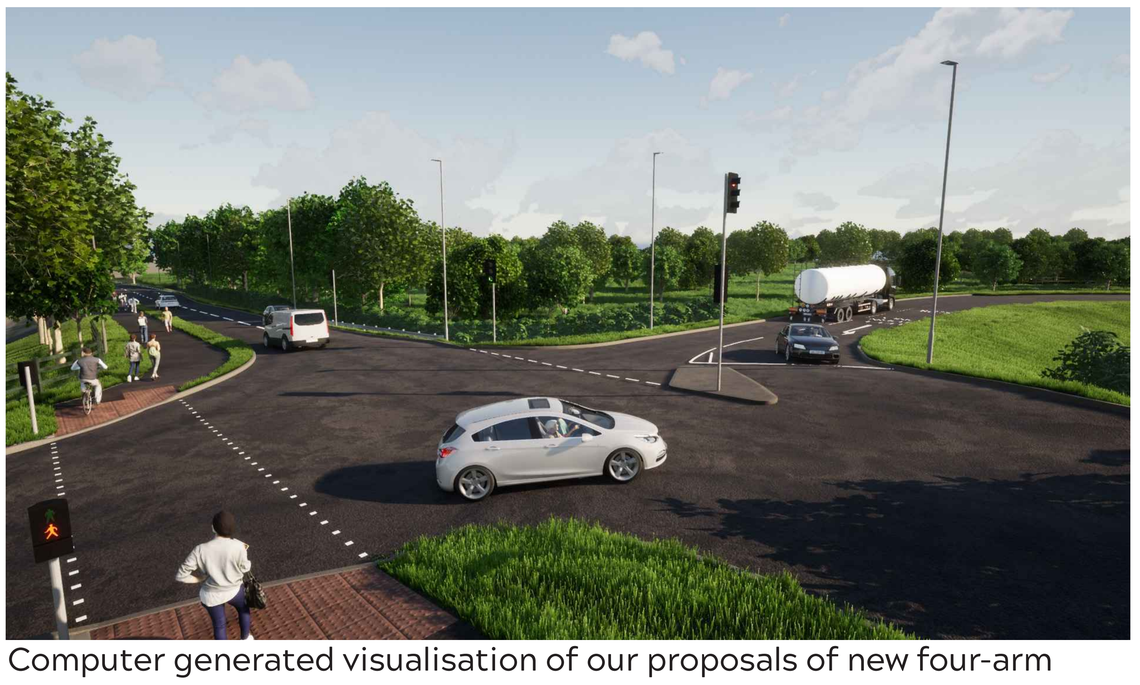
These variations were:

- Variation A, with access off Horningsea Road around 120 metres north of the junction, including road markings to create an additional lane for traffic waiting to turn right off Horningsea Road onto a new road to the facility.
- Variation B, reconfiguring the existing junction between the A14 eastbound exit slip road and Horningsea Road into a 4-arm signalised junction, also connecting to a new road to the facility.

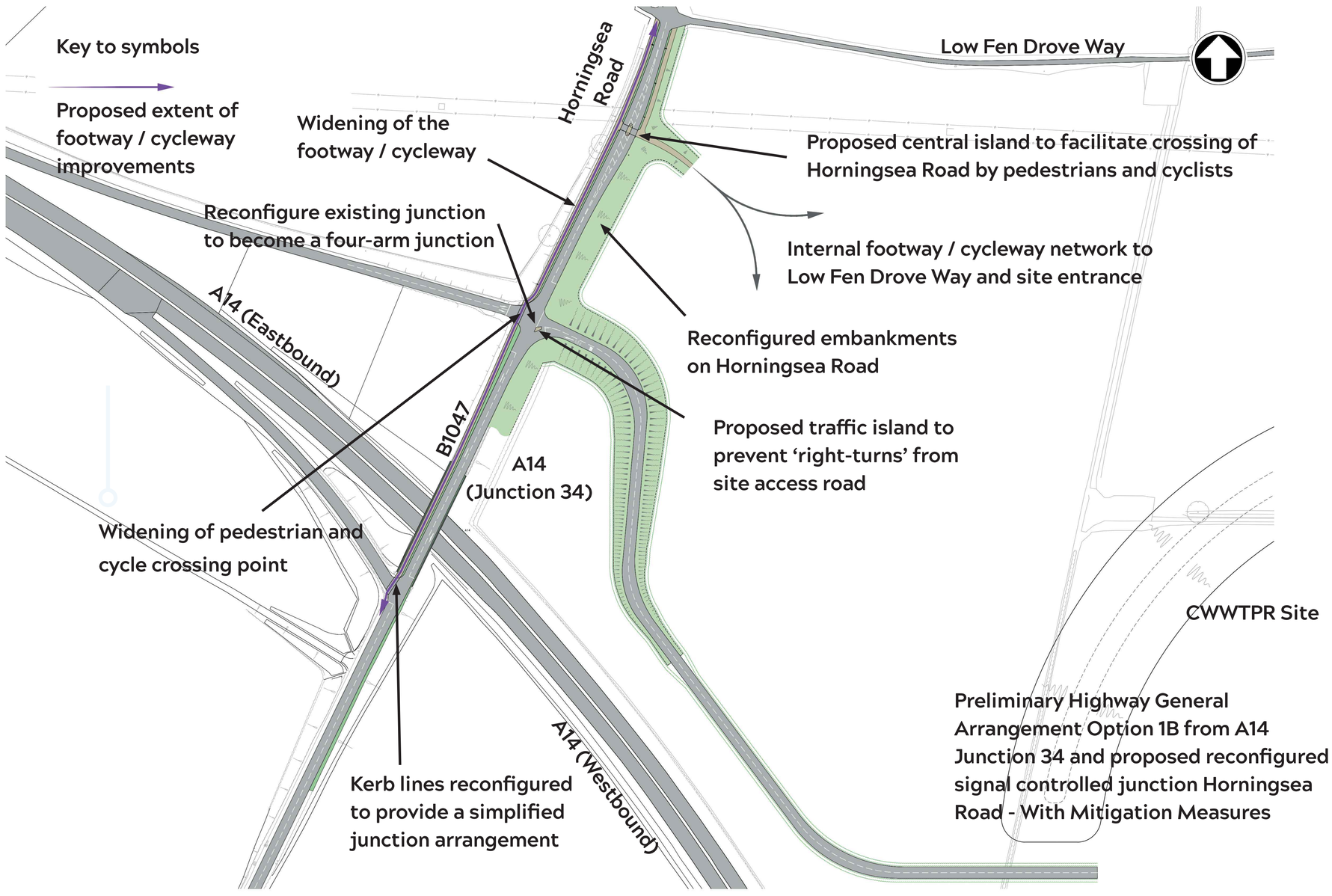
We can confirm that we have now chosen Variation B as the best performing option for providing access off Junction 34. Following an initial four-month construction period, during which enabling activities including the construction of the permanent access would take place, this approach would mean that:

- Construction traffic will not travel northwards on Horningsea Road from junction 34.
- Construction traffic accessing the site from the A14 will proceed straight across Horningsea Road under signal control.
- Low Fen Drove Way will not need to be crossed by construction traffic, avoiding impacts on ecology and recreational users of the byway.

Computer generated visualisation of our proposals south of the bridge on Horningsea Road



Computer generated visualisation of our proposals of new four-arm signalised junction



Construction programme

Technical studies, environmental surveys and further consultation on the proposals will continue during 2022. Following this, if our application for a Development Consent Order (DCO) is approved, construction and decommissioning works will then begin on-site from 2024. We expect these works will take four years to complete, with most of the construction work carried out in the first two and a half years, before the new facility becomes operational in 2028.

The detailed programme for the different construction activities for the new facility has been split into 7 phases, these and the indicative duration for each are set out in the table:

Construction Phase	Duration	Start	End
Waterbeach works including enabling works & mobilisation and decommissioning of the Waterbeach WRC	12 months	Apr-2024	Apr-2025
Enabling works & mobilisation for non-Waterbeach elements	3.5 months	Aug-2024	Nov-2024
Water Recycling Centre including water testing and dry commissioning	31 months	Oct-2024	Mar-2027
Sludge Treatment Centre including water testing and dry commissioning	19 months	Nov-2024	Jun-2026
Wet Commissioning	5.5 months	May-2027	Feb-2028
Transfer Tunnel	18 months	Nov-2024	Jun-2026
Treated and storm Effluent Main and outfall	14 months	Jul-2025	Aug-2026
De-Commissioning existing Cambridge WWTP	8 months	Oct-2027	Mar-2028

Through our construction and commissioning works we will adopt best practices that reduce our impact on the community and environment. Since our phase two consultation last year we have carefully considered all the feedback we received, to help us develop a number of focused plans to manage issues that may arise through construction.

You can find out more about these plans in our Code of Construction Practice (CoCP), including our Construction Traffic Management Plan (CTMP). Detailed mitigation plans will be developed in consultation with the local community and maintained throughout the duration of the construction phase.

In addition to the measures in our CoCP the project will also sign up to the Considerate Constructors Scheme (CCS). All Anglian Water staff and contactors will work in line with by CCS principles throughout the delivery of the construction works.

Current mitigation measures we are proposing include:

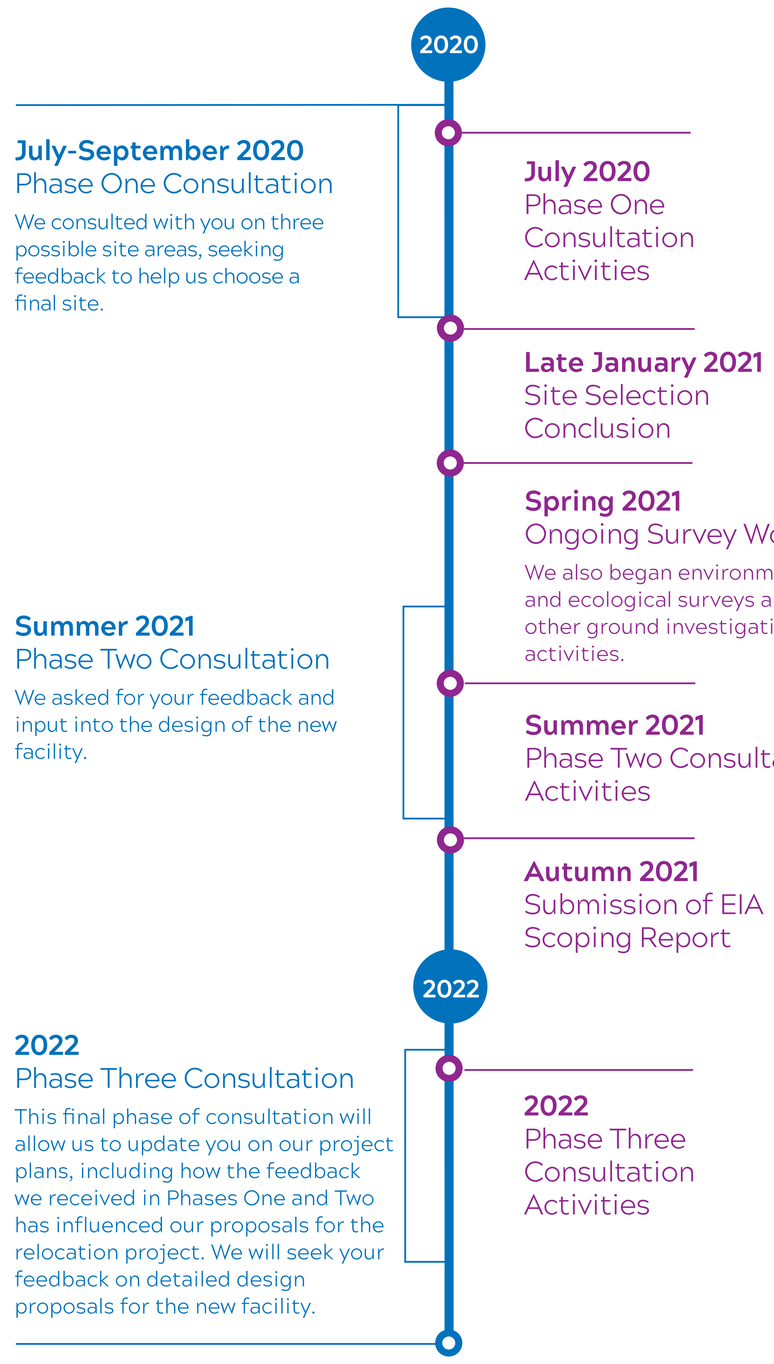
- Identifying working hours and the types of construction activities being undertaken during those hours
- Identifying our construction access routes and limiting hours for deliveries to the site in our Construction Traffic Management Plan (CTMP)
- Communicating in advance to the local community if we need to close any roads temporarily
- Maintaining, or where not possible temporarily diverting, Public Rights of Way (PRoW) and putting in place gates to allow safe crossing where needed
- The development of a community liaison plan and appointment of a Community Liaison Officer to ensure transparent and consistent engagement throughout the construction period
- The management of emissions to air, land and water during construction works to protect the surrounding environment

Next steps

Following the end of our phase three consultation on 27 April, we will take the time to carefully consider all feedback received as we continue to develop our final design for the new facility. We will also develop a full Environmental Statement, showing how we will mitigate any potential impacts on the local community and environment.

In autumn 2022 we will be submitting our Development Consent Order (DCO) application, including our Environmental Statement to the Planning Inspectorate (PINS). Our application will also include our full Consultation Report, setting out how we have considered the feedback received through all of our phases of consultation.

Community consultation timeline



Get in touch

We want to hear your views on our early proposals.

Once you have finished reading the information boards, don't forget to provide your feedback using our digital engagement platform or feedback form.

Our dedicated project website, email address, Freephone information line and Freepost address are open if you have any questions.

You can contact us by:

Emailing at **info@cwwtpr.com**

Calling our Freephone information line on **0808 196 1661**

Writing to us at **FREEPOST: CWWTPR**

Visiting our website at [redacted]

Community access points

Hard copies of consultation materials are available during the consultation period from the locations listed below. Alongside the Community Consultation Leaflet and Feedback Form, this includes a copy of the PEIR, Management Plans, Draft Development Consent Order and a Non-Technical Summary of the PEIR.

South Cambridgeshire Hall,
Cambridgeshire Business Park, Cambourne, Cambridge, CB23 6EA:
Tue, Wed, Thu: 10am – 3pm via appointment only

Cambridge City Council,
Mandela House, 4 Regent Street, Cambridge, CB2 1BY:
9am – 5:15pm via appointment only

East Cambridgeshire District Council,
The Grange, Nutholt Lane, Ely, Cambridgeshire, CB7 4EE:
Mon – Thu: 8:45am – 5pm Fri: 8:45am – 4:30pm

Bottisham Library Access Point,
Bottisham Village College, Lode Road, Cambridge, CB25 9DL:
Tue: 3pm – 5pm & 6pm – 8pm, Wed: 10am – 11:30am, Thu: 3pm – 5pm, Fri: 6pm – 8pm, Sat: 10am – 12pm

Waterbeach Library,
Community Centre, High Street, Waterbeach, Cambridge CB25 9JU:
Mon: 2:45pm – 5pm, Wed: 2:45pm – 5pm & 6pm – 8pm, Fri: 2pm – 5:30pm, Sat: 10am – 12pm

Barnwell Road Library,
87 Barnwell Road, Cambridge CB5 8RQ:
Tue & Wed: 10am – 5pm, Thu & Fri: 2pm – 5pm, Sat: 10am – 1pm

St. Peter's Church,
St. John's Lane, Horningsea, Cambridge CB25 9JQ:
Wed: 10am – 3pm, Sun: 10am – 3pm

Landscape plan

The delivery of the relocation project has been recognised as being of national significance by the UK government. It will be of a scale which will give rise to unavoidable effects on the local environment, and particularly the landscape character and views of the surrounding area.

We recognise and are sensitive to the site's rural setting and its location within the Green Belt that encircles the city. The location in Green Belt arises from the need for the facility to be close to its urban catchment but sufficiently distanced from areas of dense population to minimise potential impacts on our neighbours.

Our design proposals are therefore landscape-led and include extensive planting around the area surrounding the facility, seeking to mitigate potential impacts and respond to its setting. This also provides opportunities to create a positive experience for visitors to the area around the facility and increase well-being and recreation, including through the provision of quiet places for people and nature and improved connections to local footpaths, cycleways and bridleways. We consider the extent of the landscape to be an important part of mitigating our impacts and responsibly delivering an environmentally sustainable project.

As part of our phase two consultation we asked for your feedback on our proposals to deliver a minimum of 10 per cent biodiversity net gain. We understand that the ecology and biodiversity of the local area are important to the community and there was a strong feeling from the feedback received that we could improve on our commitment of delivering a minimum 10 per cent biodiversity net gain. We have been working hard to deliver an increased commitment of greater biodiversity net gain as part of our detailed design and can now confirm that our commitment is to target a minimum of 20 per cent biodiversity net gain on the area around the proposed location of the treatment facility.

Aerial plan showing landscape proposals for our site

More information on these proposals is available in our Landscape, Ecological and Recreational Management Plan (LERMP) and PEIR.

Screening visual impacts

As well as encircling the facility with a high earthwork bank, our proposals also seek to sensitively sculpt the landscape and introduce, restore and reinforce planting in key locations to further screen views from local communities. In some strategic locations, advance planting will be prioritised early in the construction phase, to allow screening plants to grow at the earliest opportunity.

Our comprehensive landscape and planting proposals which are supported by a long-term management scheme, are described in our Landscape, Ecological and Recreational Management Plan (LERMP). The visual impacts of our proposals are outlined in the PEIR.

The Environmental Statement accompanying our DCO application will include verifiable photomontages, prepared using photography with locational information to enable the accurate scaling of the proposed new facility within the view. A list of viewpoints for photomontages has been agreed with the Greater Cambridge Shared Planning Service and Historic England as part of the scoping process. Consultation on the viewpoints has also taken place with Cambridge Past Present and Future and The National Trust.

A selection of photomontages from eight representative locations has been produced as part of our PEIR. The photomontages show the latest design of the facility, including a surrounding five metre earthwork bank. For each location, three images are provided the current view, the view of the new facility on the first day of operation and the view after 15 years has elapsed, when the planting has matured and is providing landscape integration and screening. The production of these photomontages has been carried out in accordance with the Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals.

Photomontages of views at years 1 and 15 from Horningsea Road, Fen Ditton (north from High Ditch Road) and Low Fen Drove Way are included ons how. When the photomontages are viewed at A3 they show a horizontal field of view of 39.6 degrees and have a vertical field of view of 27 degrees.

Get in touch

You can contact us by:

Emailing at **info@cwwtpr.com**

Calling our Freephone information line on **0808 196 1661**

Writing to us at **Freepost: CWWTPR**

Visiting our website at [redacted]

You can view all our DCO application documents and updates on the application on The Planning Inspectorate website:

https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/