Hampshire Water Transfer and Water Recycling Project

Consultation Report Appendix F – Statutory Summer 2024 Consultation 1 of 7 Documents

VOLUME NUMBER: 5

PLANNING INSPECTORATE SCHEME NUMBER: WA010002

APPLICATION DOCUMENT REFERENCE: 5.1

APFP REGULATION: 5(2)(q)

May 2026

Version 0

from Southern Water

Contents

F.1 Website

Welcome to our dedicated website for the Hampshire Water Transfer and Water Recycling Project.

Project Overview

The Project would create a new source of water to supply homes and businesses in Hampshire, so less water needs to be taken from the county's chalk stream rivers. Our proposal is to tap into the highly treated wastewater that we currently waste and use advanced treatment techniques to turn it into purified recycled water.

This approach, called water recycling, is widely used around the world and will enable us to take significantly less water from the environment – especially during a drought, when nature needs it most. The Project will transform the way we source, treat and supply water across Hampshire for many generations to come.

Creating a new, resilient and sustainable water supply will protect and enhance the county's rare and sensitive chalk streams, while maintaining supplies for our communities and the local economy.

This Consultation

Our Summer 2024 Consultation runs from **29 May to 23 July 2024**. During this time, we will actively seek feedback from community members on the following aspects of the Project:

- The Project overall
- The proposed pipeline routes
- The proposed water recycling plant and associated pumping stations
- The proposed sites for the above ground plant along the pipeline route
- The process we have undertaken to develop the Project up to this consultation
- The preliminary environmental and other impacts of the Project and initial proposals for mitigation.

This consultation is an opportunity to learn more about the Project and how it may affect you. We want to know what you think about our proposals as we develop them further.

The consultation period ends at **11:59pm on July 23rd 2024**. The easiest way to share your thoughts, suggestions, and questions is through **our online feedback form.**

Have your say on our proposals

Our Summer 2024 Consultation gives you the opportunity to learn more about the Project. The consultation closes at **11:59pm on 23 July 2024**.

View our document library

You can view or download any of the documents submitted for consultation.

Our Interactive Map

Use our interactive map and find out how the Project might affect you.

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Introduction to the project

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For general queries related to the Project, please contact:
HampshireWTWRP@SouthernWater.co.uk
FREEPOST Hampshire WTWRP Consultation | 0800 254 5138

The Project aims to leave a lasting legacy for both the environment and local communities.

Overview

The Project would deliver a number of benefits at a national, regional and local level, including:

Contributing to Government environmental objectives

Through our Water Industry National Environment Programme, we are working with the Environment Agency, landowners, and key stakeholders to meet the objectives of the Water Framework Directive Regulations. This directive commits England and Wales to ensuring sufficient water of suitable quality in all water bodies to prevent the deterioration of the water environment. The Project will play a major role in meeting this national objective in Hampshire.

Enabling economic growth

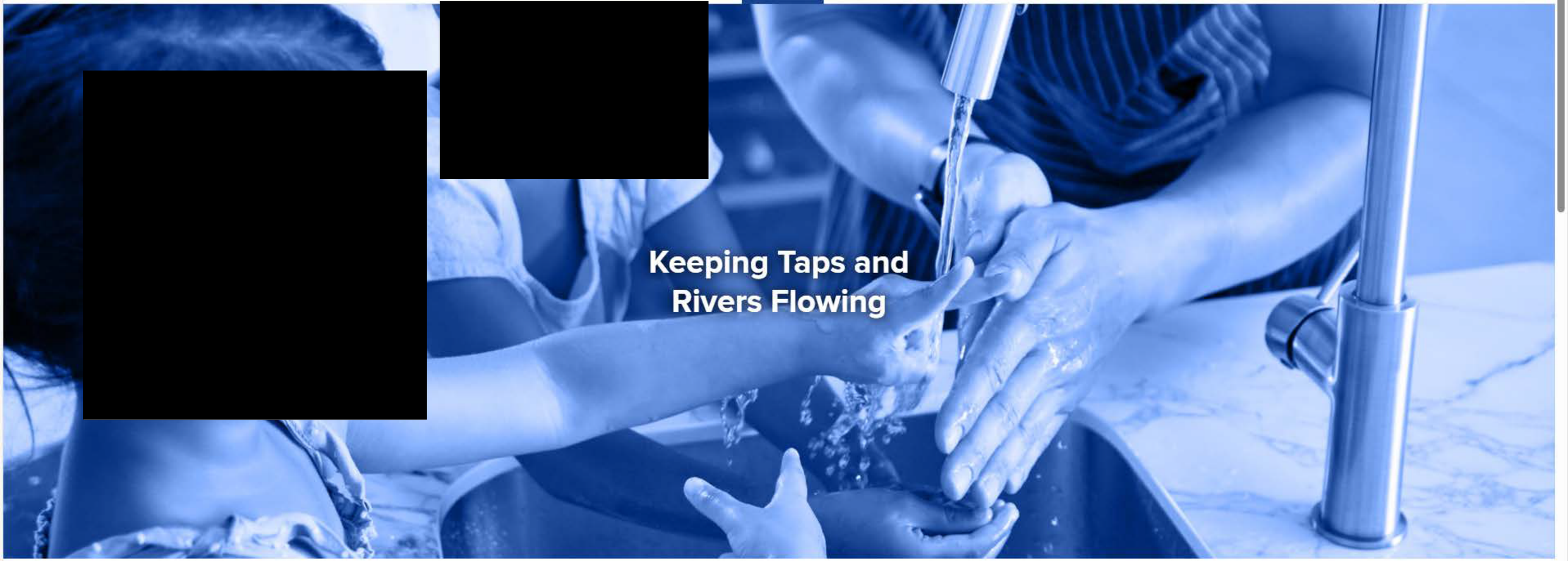
The Project will help deliver economic and social benefits in the Hampshire area, including new jobs and skills training as part of the construction phase and increased spending in our local economies. We are producing an Outline Skills and Employment Plan that will accompany our Development Consent Order application to identify and maximise local benefits in terms of employment, supply chain and training opportunities. The plan will provide further information regarding the skills that will be needed, how they will be sourced and how these could provide opportunities to people in Hampshire.

Facilitating housing growth

Southern Water supplies water to more than 2 million homes and businesses across the South East. With communities expanding and populations growing, we have a duty to ensure every home in our region has access to a clean and wholesome water supply. The Project will help us maintain supplies for existing customers and build capacity for future housing growth.

Environmental Net Gain and Biodiversity Net Gain

Environmental Net Gain can ensure that new developments have a positive impact by leaving the natural environment in a significantly better state than before the project was constructed. Biodiversity Net Gain is a crucial part of Environmental Net Gain. We are actively seeking to create environmental opportunities throughout the project and are exploring ways to achieve a 10% increase in biodiversity. Potential opportunities could include tree planting, landscaping enhancements, improvements to riverside and wildlife habitats, and enhancements to woodland and grassland. These opportunities may involve on-site and off-site measures and collaborating with others to support existing or planned initiatives. A strategy for achieving Environmental Net Gain and Biodiversity Net Gain will be included in our Development Consent Order application.



PROJECT NEED | STORY SO FAR

As a water company, it is our responsibility to provide our

As a water company, it is our responsibility to provide our customers with a reliable and safe supply of water while also protecting the environment.

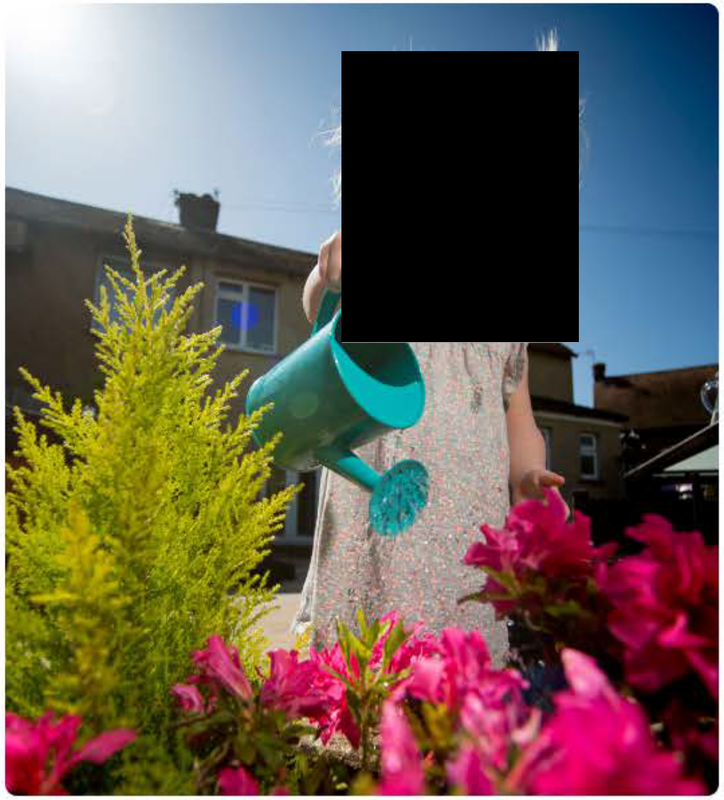
The need for the project

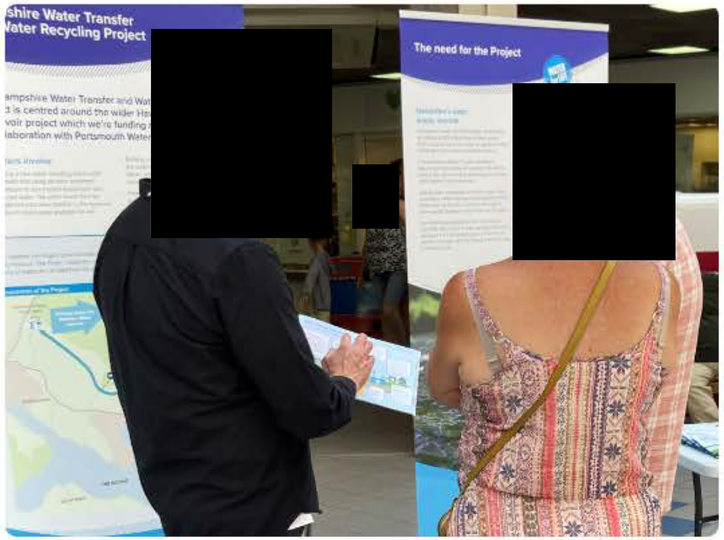
Hampshire has always depended on its chalk stream rivers and the underground chalk aquifers that feed them to supply its water.

The UK is home to 85% of the world's chalk streams and Hampshire's River Test and River Itchen are two of the finest examples. Their rare and sensitive ecosystems are home to a wide variety of wildlife and are often referred to as "England's rainforests". But new limits on the amount of water that can be taken from them for public supply have been introduced to protect these rare and sensitive ecosystems.

This situation is made more challenging by our growing population and changing climate. It means we need to find new sources of water for our communities and the local economy, especially during a drought.

In Hampshire, we already need to find at least 166 million litres of water a day that's not from a river or from an aquifer. So, we need to use technology to provide water where the environment has previously.





Previous Consultation

The story so far

Engagement and consultation on the future of Hampshire's water resources has been ongoing as the plans to provide a new source of water have developed.

In 2021, we consulted on a proposal for a desalination plant in the New Forest alongside water recycling and water transfer as a back-up. The desalination plant was found to be the least preferable solution due to its potential environmental impact on the Solent. Water recycling and water transfer was selected as the preferred option and supported by our regulators.

We consulted on our emerging proposals for the Hampshire Water Transfer and Water Recycling Project in our Summer 2022 Consultation. In that consultation we asked for feedback on topics such as the location of the proposed water recycling plant, the preferred pipeline corridors and the concept of water recycling.

Using the valuable feedback gained from this consultation, alongside our own further studies, we have been able to develop and advance our proposals in readiness for this consultation. Feedback from this consultation will play an important role in helping us refine our proposals in preparation for submitting our application for a Development Consent Order in 2025.

For general queries related to the Project, please contact:
HampshireWTWRP@SouthernWater.co.uk
FREEPOST Hampshire WTWRP Consultation | 0800 254 5138

CONSTRUCTION | OPERATION

We recognise that our proposals have the potential to impact

We recognise that our proposals have the potential to impact local communities in a numbers of ways. Both positive and negative effects may occur during construction and operation of the Project. These will be fully assessed through the Environmental Impact Assessment process. Our Preliminary Environmental Information Report sets out our initial assessments on what those impacts could be and how we propose to manage them.

Construction

Our construction programme for the Project is proposed to start in 2029 and last about four years. Each part of the Project could involve different construction activities, from tunnelling of pipelines to construction of plant, some of which could take place at the same time. Impacts on local communities are likely to be most noticeable during the construction period.

Possible impacts could include noise and vibration from construction works, temporary impacts on people's views while works take place, and temporary disruption to land and roads/footpaths where pipelines would be laid or plant built. Positive effects could include the opportunity for up to 350 jobs in Hampshire from the Project's construction.

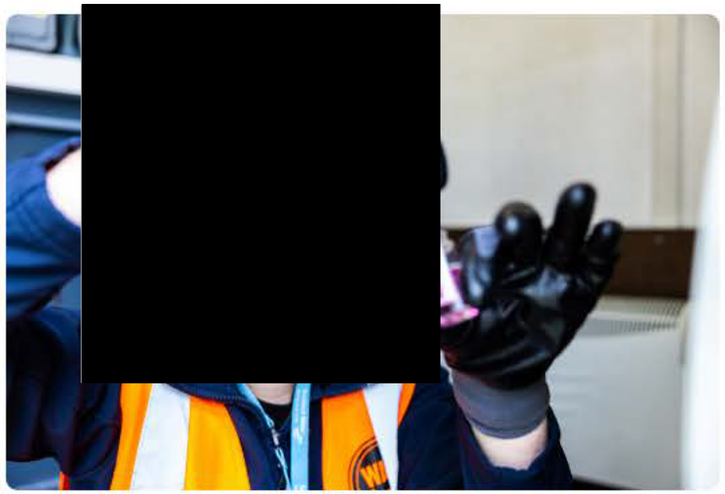
The Project has been carefully designed to avoid built up areas through careful routing of the pipelines and by using tunnelling where necessary. Our extensive assessments will continue to look at where impacts could arise and we will put various management plans in place to ensure impacts are avoided and mitigated as much as possible.

Our Outline Construction Environmental Management Plan, available as part of

Construction Programme Timeline (click to enlarge)

OPEN INTERACTIVE MAP

Our Outline Construction Environmental Management Plan, available as part of this consultation, sets out industry best practice measures and techniques to ensure the effects of the Project's construction on local communities are minimised.



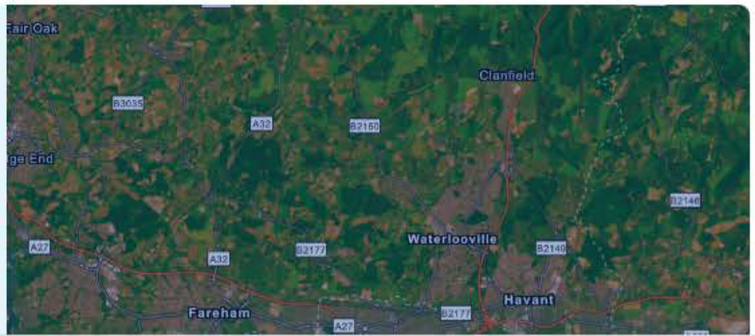
Operation

Once operational, the Project will run 24 hours a day. As the pipelines will be predominantly buried, most people will only see the water recycling plant and above ground plant along the pipeline route to Otterbourne.

Through careful design and landscaping, we are looking to ensure these permanent buildings are sensitively integrated into the local environment and impacts on views minimised. Maintenance activities at these sites and along the pipeline routes will be minimal, largely relying on remote monitoring and controls.

OPEN INTERACTIVE MAP

Click to view our interactive map and find out how construction and operation might affect you



Protecting the Environment

OPEN INTERACTIVE MAP

OVERVIEW | EIA | MITIGATION

We are committed to providing our customers with a reliable

We are committed to providing our customers with a reliable and safe supply of water in a way that protects and enhances the environment.

Overview

In Hampshire, this means taking significantly less water from the River Test and River Itchen and the underground aquifers that feed them. Protecting these precious habitats for future generations of wildlife and people, while maintaining supplies for our customers, is the core driver of this project.

We recognise that an infrastructure project of this scale and nature is not without its own effects on the environment, especially during its construction phase but also during its operation. The construction phase involves the building of large-scale plant and various buildings as well as the installation of pipelines. Construction activities, albeit temporary, could give rise to impacts on the landscape, the water environment and on the wildlife that lives there.

The operational phase, when the water recycling plant and other plant and pipelines would come into use, could also have potential effects on the environment. Buildings and plant, for example, will remain as permanent features in the landscape.

We are carefully considering these effects at every step of the process. We are undertaking a comprehensive Environmental Impact Assessment process to assess the potential effects that the Project could have on the environment, and consider any mitigation measures necessary to manage these impacts.

OPEN INTERACTIVE MAP

Environmental Impact Assessment

The Preliminary Environmental Information Report, included as part of this consultation, presents our initial assessments undertaken as part of this process. It considers the potential effects of the Project across a variety of different topics and outlines our initial proposals for mitigation.

Following this consultation, and further refinement of the Project, our assessments will be finalised as part of an Environmental Statement to be submitted with our Development Consent Order application.

OPEN INTERACTIVE MAP

Impacts and mitigation

The design of the Project has been developed with a particular focus on avoiding and minimising impacts on the environment. This has included avoiding, where practicable, designated conservation sites, habitats, ancient woodland and flood zones. We've also proposed using trenchless pipeline techniques to avoid impacts on rivers and other sensitive areas.

Our Outline Construction Environmental Management Plan sets out how construction effects on the environment can be effectively managed. Other management plans will be developed, as part of a comprehensive suite of mitigation measures, to control any impacts of the Project.

We are also looking at delivering positive environmental benefits too, such as incorporating opportunities for biodiversity and environmental enhancements. Our draft Illustrative Outline Environmental Masterplan provides further details of these opportunities.

Click to view our interactive map and find out how the Project might affect the environment

OPEN INTERACTIVE MAP

If you would like to receive updates directly, please take a couple of minutes to register with us.

Name

Address

Address Line One

City/Town

County

Postcode

Phone

Email

Please tick if you would NOT like to be kept up to date on the progress of the project

SUBMIT

OPEN FEEDBACK FORM

EVENTS | NEXT STEPS | FAQS | LIBRARY

Our consultation is open from 29 May 2024 and closes at

Our consultation is open from 29 May 2024 and closes at 11:59pm on 23 July 2024. You can respond using the channels below. The easiest way to respond is by completing a feedback form but you can also respond by email or by post.

Please note that feedback received late, after 11:59pm on 23 July 2024, may not be considered.

Feedback Form

OPEN FEEDBACK FORM

Click here for a PDF copy to download and print

By Email

FeedbackHWTWRP@southernwater.co.uk

Write to us

FREEPOST HAMPSHIRE WTWRP CONSULTATION

OPEN FEEDBACK FORM

We're hosting six events

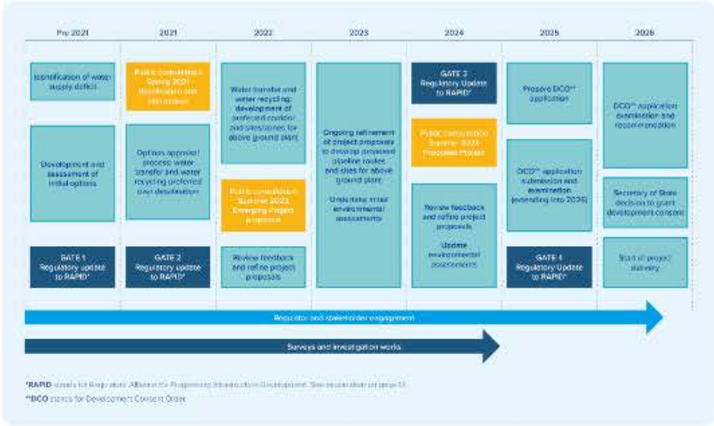
We're looking forward to seeing you soon at one of our drop-in sessions listed below:

Date	Time	Location	Accessibility - Venue Overview
Monday **10 June**	2pm - 8pm	Havant Rugby Football Club, Hooks Lane Ground, Fraser Road, Havant, Hampshire. PO9 3EJ	Four accessible parking bays are available. Step free access is present. An accessible toilet is available on the first floor via a lift, where the event will take place.
Saturday **15 June**	10am - 4pm	Meridian Shopping Centre, Elm Lane, Havant. PO9 1UN	Accessible parking bays with free bays for Blue Badge Holders available. Customer lifts are accessible and accessible toilets are also provided.
Thursday **20 June**	2pm - 8pm	Southwick D-Day Memorial Hall, Priory Road, Southwick. PO17 6ED	Two accessible parking bays are available. The venue has ground level entry with step free access.
Saturday **22 June**	10am - 4pm	Jubilee Hall, Little Shore Lane, Bishops Waltham. SO32 1ED	Three accessible parking bays are provided. The venue has ground level entry with step free access and automatic opening doors. The Ruby Room has a hearing loop for those who are hard of hearing and an accessible toilet is also provided.
Thursday **27 June**	2pm - 8pm	Colden Common Community Centre, Saint Vigor Way, Colden Common. SO21 1UU	Two accessible parking bays are provided. The venue has ground level entry with step free access. One accessible toilet is also available.
Friday **28 June**	2pm - 8pm	Wickham Community Centre, Mill Lane, Wickham. PO17 5AL	Two accessible parking bays are provided. The building has ground level entry with step free access. An accessible toilet is also available.

What happens next?

We're currently in the pre-application stage of the Development Consent Order process, where we consult on our proposals.

Click here to find out more.



The process so far and next steps (Click to Enlarge)

FAQS

+ What is Southern Water's Water for Life – Hampshire Programme?
+ What is the Hampshire Water Transfer and Water Recycling Project?
+ How long will you continue to take water from Hampshire's chalk stream rivers?
+ How is the Project being funded and how will this affect my water bill?
+ What approvals will be required for the Project?

OPEN FEEDBACK FORM

- What approvals will be required for the Project?
- How are you considering the potential effects the Project could have on the environment?
- Will I be able to see the pipelines?
- How will you install the pipelines?
- How long will construction take?
- How will construction affect me and what are the typical working hours?
- What is water recycling?
- Is water recycling the same as stormwater releases?
- Is water recycling safe?
- Where would the purified recycled water be treated?
- How will water recycling be used when we are not in a drought?
- How will recycled water affect water quality in the Havant Thicket Reservoir?
- Does water recycling use a lot of energy and will you use renewable energy sources?
- What alternatives have you explored alongside water recycling?
- Why did Southern Water change its plan to deliver a desalination plant in Fawley?

- Why did Southern Water change its plan to deliver a desalination plant in Fawley?
- When does the consultation take place?
- What are you consulting on?
- Are you holding in-person events?
- How can I find out more about the Project?
- How can I make comments on the Project?
- What if I have any general questions?
- Where can I read more about the Project?
- What happens after the consultation closes on 23 July 2024 and how will you use my feedback?
- Where can I get further information on the topics covered in this document?

Click to open the full document library and view or download any of the documents submitted for consultation (will open in new window)

OPEN FEEDBACK FORM

If you would like to receive updates directly, please take a couple of minutes to register with us REGISTER

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F.2 Brochure

Hampshire Water Transfer and Water Recycling Project

Consultation Brochure

Summer 2024 Consultation

Please note there is a minor amendment on page 65

from Southern Water

Contents

Scan the QR code to view our website and give your feedback

Foreword from Lawrence Gosden

Thank you for taking the time to engage with this consultation on our Hampshire Water Transfer and Water Recycling Project. This brochure explains why the Project is needed, the benefits it will bring to Hampshire's iconic chalk stream rivers and local people, alongside how we plan to deliver it.

Water is a precious resource that needs to be used wisely so there's enough for people and the planet. Using water wisely means minimising leakage and maximising water efficiency in homes and businesses – both of which are key priorities for us. But it also means looking at new ways of using the water we have available. This includes the treated wastewater that, currently, we waste by pumping it out to rivers or the sea – only to take it again further along the water cycle to be treated and supplied to customers.

When we take water from rivers and the underground aquifers that feed them, it means there's less available for wildlife. So, as you'll see in the following pages of this document, we plan to take some of our treated wastewater and treat it to a much higher standard so it can be used as a source for drinking water supplies.

This approach, called water recycling, is widely used around the world. Tapping into this new source of, currently wasted, water will mean we can significantly reduce the amount we need to take from the environment – especially during a drought.

Using this technology to provide water where nature has previously will bring huge benefits to wildlife in and around Hampshire's rare and sensitive chalk stream rivers. Meanwhile, providing a resilient, sustainable source of water for the county's growing population will keep taps flowing whatever the weather and support the local economy.

We're working alongside Portsmouth Water to develop this Project as the scheme will make use of the already-approved Havant Thicket Reservoir being constructed by Portsmouth Water. The reservoir will be paid for, over time, through Southern Water's drinking water bills. This partnership is a great example of cross-company collaboration to provide new strategic water resources for our region.

Thank you again for getting involved and helping us create a new sustainable source of water for Hampshire that will help keep taps and rivers flowing for many generations to come. Your views are helping shape our plans and will continue to do so – we look forward to hearing from you.

Lawrence Gosden, CEO, Southern Water

from Southern Water®

Water Crowfoot © Wessex Rivers Trust

What we do

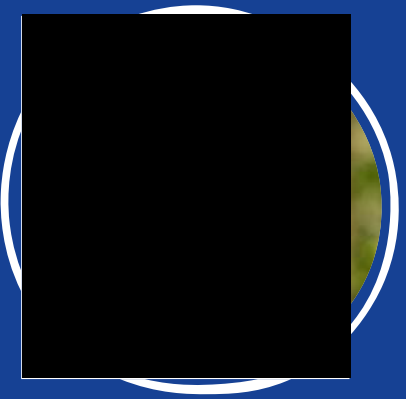
from Southern Water®

About Southern Water

We supply water and wastewater services to over four million customers in the South East. Our operations cover Hampshire, Kent, Isle of Wight and East and West Sussex, traversing over 700 miles of coastline, national parks, forests and Areas of Outstanding Natural Beauty.

Upper Itchen Headwater

Working in collaboration with Portsmouth Water



Historically, here at Portsmouth Water, we've been in a fortunate position with regards to water – with plentiful supplies coming from the large chalk aquifer and springs in our area.

However, the situation is changing and a rapidly growing population, a less predictable climate and the need to reduce abstractions from the environment, means new, sustainable sources are urgently needed for the South East.

This will particularly impact Southern Water, which has committed to take significantly less from two world-renowned chalk streams in its supply area – the River Test and River Itchen.

As a community orientated company, we pride ourselves on doing the right thing. This includes helping our neighbours to supply their customers with water.

We're already building the new Havant Thicket Reservoir, which will be filled with surplus water from the springs in Havant and Bedhampton. This will enable us to share 21 million litres per day with Southern Water for its customers in Hampshire.

The Hampshire Water Transfer and Water Recycling Project would mean the reservoir could supply a further 90 million litres per day, providing future resilience for our region and helping to protect our precious chalk rivers.

It's important to be clear that these proposals are separate to the current, approved plans for Havant Thicket Reservoir. If these plans go ahead, we will ensure the environmental and community commitments made in the original application for the reservoir are maintained.

We are working closely with Southern Water on developing these proposals and believe that well-tested water recycling technology could prove a valuable solution to the challenges facing our region. We would like to encourage our customers to find out more and take part in the consultation.

Bob Taylor, CEO, Portsmouth Water

1. Introduction

from Southern Water

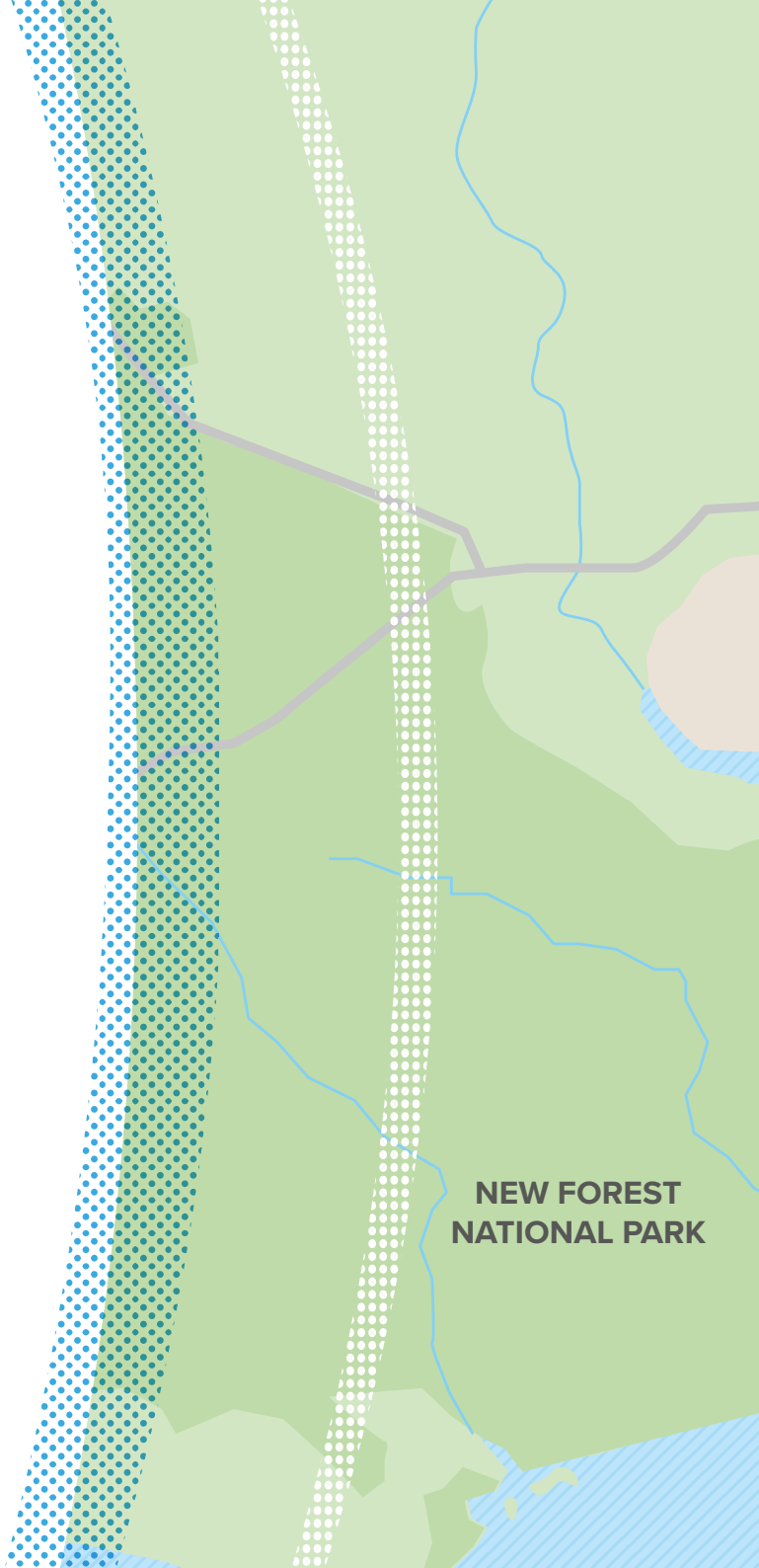
About the project

The Hampshire Water Transfer and Water Recycling Project (the 'Project') is primarily a drought resilience scheme – it would ensure we can maintain essential water supplies to our customers, especially during times of drought.

Climate change, population growth and increasing environmental restrictions, which severely limit the amount of water we can take from Hampshire's rivers, mean that we are facing a significant water supply shortfall in Hampshire.

We already have a shortfall of a 166 million litres a day and this figure is only set to rise. The Project would provide a new sustainable source of water, delivering up to 90 million litres of water a day into our Hampshire supply network.

The Project would use advanced treatment techniques to turn treated wastewater, normally pumped far out to sea, into purified recycled water at a new water recycling plant in Havant. New pipelines would be installed underground to take the purified recycled water to the Havant Thicket Reservoir where it would mix with spring water. Water from the reservoir would then be pumped along a new pipeline to our Otterbourne Water Supply Works where it would undergo further treatment to strict drinking water standards prior to going into supply.




Winchester
Otterbourne Water Supply Works
SOUTH DOWNS NATIONAL PARK
Not to scale, for indicative purposes only
Existing
Proposed
Water supplied to customers following full drinking water treatment process
Bishop's Waltham
Southampton
Wickham
Havant Thicket Reservoir
Southwick
Havant
Budds Farm Wastewater Treatment Works
Chichester
Water Recycling Plant
Wastewater input from Southern Water network
Portsmouth
THE SOLENT
Eastney Long Sea Outfall
Isle of Wight
NORTH

Why we are consulting

Because the Secretary of State has directed that the Project is one of “national significance”, we will apply for a Development Consent Order to grant planning and other consents and powers needed to deliver it.

As part of the process of applying for a Development Consent Order, we will consult with a wide variety of stakeholders, including landowners, local residents and businesses, environmental organisations, parish councils, local authorities and other statutory bodies who might be affected by, or interested in, the Project.

We previously consulted on our emerging proposals for the Project during our Summer 2022 consultation and considered the valuable feedback we received to further develop the Project ahead of this consultation. We now want to hear your views on our proposals during this eight-week consultation that will end on the 23rd July 2024.

You can find out more about how you can get involved in Section 8 of this brochure.

What we are consulting on

Following the summer 2022 consultation, we have had regard to the feedback received to develop the Project, including selecting proposed pipeline routes and locations for the above ground plant. We now want to know what you think about the following to enable the proposals to be further shaped and refined:

- The Project overall.
- The proposed pipeline routes.
- The proposed water recycling plant and associated pumping stations.
- The proposed sites for the above ground plant along the pipeline route.
- The process we have undertaken to develop the Project up to this consultation.
- The preliminary environmental and other impacts of the Project and initial proposals for mitigation.

We have provided further information, as part of the consultation material, that helps explain the need for the Project and the use of water recycling as a new source of water.

We will ask you questions throughout this brochure - look out for the green coloured circles. You can use the feedback form available online or in print version to give us your views or email us at **HampshireWTWRP@southernwater.co.uk**

What we are not consulting on

Havant Thicket Reservoir Scheme

Portsmouth Water obtained planning approval for the Havant Thicket Reservoir in October 2021. The reservoir is being constructed by Portsmouth Water and will be paid for, over time, through Southern Water’s drinking water bills.

We are not consulting on the development of the Havant Thicket Reservoir itself as part of this consultation. Portsmouth Water ran a consultation on its updated proposals for tunnelled pipelines between its Bedhampton Springs site and the Havant Thicket Reservoir at the end of 2023. The consultation ran from 6 November to 18 December 2023. Portsmouth Water is due to submit its planning application to Havant Borough Council at the same time as this consultation.

We are working closely with Portsmouth Water to consider how the Havant Thicket Reservoir can incorporate the required connections to our Project should development consent be granted by the Secretary of State. Further information on these connections can be found in Section 3 of this brochure.

You can find more information on the Havant Thicket Reservoir Project by visiting **havant-thicket-reservoir.uk.engagementhq.com**

Draft Water Resources Management Plan 2024

Like all water companies, we must prepare and update a Water Resources Management Plan, which is renewed every five years and sets out how we will meet our water supply duties for the next 50 years. Consultation on our draft Water Resources Management Plan took place in November 2022, with our statement of response to the consultation published on 31 August 2023.

We are holding a further consultation on our revised draft Water Resources Management Plan 2024 from July to September 2024. The Project is a key part of the draft plan. However, the draft plan covers a much wider area than just the Project and, therefore, includes other solutions in relation to Southern Water's duty to supply water across its whole supply area. Those wider water resources solutions in the draft plan do not form part of this consultation - any comments on the principle of those solutions, both in Hampshire and our wider supply area, should be directed to the consultation on the draft plan.

You can find out more about our draft Water Resources Management Plan in Section 2.

Navigating this brochure

This brochure is arranged in the following Sections:

Section 1 – Introduction

Section 2 – Keeping rivers and taps flowing

Section 3 – The proposed Project

Section 4 – Environmental Impact Assessment process

Section 5 – How the Project could affect you

Section 6 – Protecting the environment

Section 7 – Project benefits and legacy

Section 8 – Have your say on our proposals

We have put together a number of consultation documents to help you understand our proposals at this stage of the Project's development. Our consultation documents consist of, but are not limited to:

- **Consultation brochure –** provides the key information about the proposals, the consultation and how to get involved
- **Feedback form –** a survey designed to collect feedback on the proposals
- **Frequently Asked Questions –** a document answering a range of questions about the Project
- **Statement of Community Consultation (SoCC) –** outlines how we plan to engage with the local community about the Project
- **Preliminary Environmental Information Report –** a report to enable consultees (both specialist and non-specialist) to understand the likely environmental effects of the Project.
- **Preliminary Environmental Information Report Non-Technical Summary –** a summary of the Preliminary Environmental Information Report
- **2024 Scheme Development Summary –** a summary of how the Project has developed to date, including design development following the Summer 2022 Consultation
- **Book of Plans –** plans and illustrations of the proposed pipeline routes and above ground plant.

2. Keeping taps and rivers flowing

from Southern Water®

Why we need the Project

As a water company, it is our responsibility to provide our customers with a reliable and safe supply of water while also protecting the environment.

Hampshire has always depended on its chalk stream rivers and the underground chalk aquifers that feed them to supply its water. The UK is home to 85% of the world's chalk streams and Hampshire's River Test and River Itchen are two of the finest examples. Chalk streams are home to a wide variety of wildlife and are such rare and sensitive ecosystems that they're often referred to as "England's rainforests".

To protect these precious habitats, the amount of water that can be taken from them for public supply has been significantly reduced, a situation made more challenging by our growing population and changing climate. Droughts are becoming more frequent and severe and continuing to take water from these rivers when flows are already low poses a real risk to these precious ecosystems. This means that we have to find new sustainable sources of water for our communities and the local economy.

In Hampshire, we already need to find at least 166 million litres of water a day that's not from a river or from an aquifer and that figure is only set to rise with further environmental restrictions expected in the future. Our draft Water Resources Management Plan, which looks at how we'll maintain water supplies for the next 50 years, predicts that this shortfall will grow to 200 million litres per day by 2050 and that essential daily supplies will also be under threat, as well as during times of drought, unless we can find alternative sources of water.

We've looked to the sea for a solution, but our investigations showed that a plan to remove the salts and other impurities from sea water to turn it into drinking water at a desalination plant in the solent was not the right solution for this area given its likely adverse impacts on the Solent and the New Forest National Park.

The preferred solution is to use advanced treatment techniques to turn treated wastewater, that is usually pumped far out to sea from our Budds Farm Wastewater Treatment Works, into purified recycled water.

This new source of water won't solve Hampshire's water resources challenge alone – we are developing a range of wider solutions to help meet the shortfall we face. These include reducing leakage (up to 50% by 2050) and improving water efficiency to ensure we're all using water wisely. We're also working with Portsmouth Water to deliver the new Havant Thicket Reservoir.

The Project will transform the way we source, treat and supply water across Hampshire for many generations to come. Not delivering the Project would place continued additional pressure on an already seriously water stressed area. This would risk undermining planned housing and economic growth, prolonging and extending the duration of the deficit in water resources for customers and extend reliance on abstractions from Hampshire's rivers with risks to the sensitive chalk stream habitats that the Project is actively seeking to protect.

We're not the only water company in the South East facing a shortage in its water supply. All of our neighbouring water companies also face reductions in the amount of water they can take from the environment, alongside pressures from population growth and climate change. Some are also looking at water recycling as a sustainable way of delivering new water sources for their areas.

The Government's water regulator, Ofwat, has set up a specific regulatory process (RAPID*) to support the delivery of the Project and other large, complex water resource solutions in recognition of the critical role they play in delivering sustainable water supplies for the future.

Water Resources Management Plan

Our current Water Resources Management Plan (WRMP 2019) established the need for a major new strategic water resource solution in Hampshire to address the significant water supply shortfall. Our investigation of this solution through the RAPID regulatory process identified the Project as the most preferred solution to help tackle this shortfall.

Alongside plans for other water recycling and water transfer schemes across our wider supply area, our draft Water Resources Management Plan, that will replace WRMP 2019, firmly identifies the Project as a key strategic solution in addressing the water supply challenge in Hampshire.

Taken together, WRMP 2019 and our emerging new Water Resources Management Plan establish the need for the Project. This consultation is focused on the delivery of that solution.

"The Hampshire Water Transfer and Water Recycling Project is one of six water recycling schemes identified across the South East to be delivered before 2040. Water recycling schemes are a critical part of the regional solution and used extensively in other parts of the world such as California and Australia. They are not dependent on rainfall or impacted by weather conditions so can provide a reliable source of water as the climate changes and to help reduce our reliance on the region's sensitive habitats for our water supplies."

Lee Dance, Organisational Director, WRSE

Water Resources South East Regional Plan

Water Resources South East (WRSE) is an alliance of the six water companies that cover the South East region of England. It was established to secure future water supplies through a collaborative regional approach to managing water resources, principally through a strategic regional water resources plan that looks ahead to 2075. The plan, which is currently awaiting publication, selects the Hampshire Water Transfer and Water Recycling Project as a new regional water resource solution to be in use by 2035. While not a statutory document, the plan plays a crucial role in identifying regional important water resources schemes that offer best value to customers, society and the environment, while providing a strategic framework for the development of water resources management plans.

***RAPID stands for Regulator's Alliance for Progressing Infrastructure Development and was set up to support the initial funding and development of Strategic Resource Options – regionally significant water supply schemes needed to address imminent deficits in UK water supplies. It's made up of representatives from the Environment Agency, Drinking Water Inspectorate and water industry regulator, Ofwat.**

Progress to date

The story so far

Engagement and consultation on the future of Hampshire's water resources began during the development of our Water Resources Management Plan published in 2019 (WRMP 2019). WRMP 2019 identified the need for a major new strategic water resource solution to tackle the significant water supply shortfall in Hampshire and outlined an initial proposal for a desalination plant on the solent alongside an alternative water recycling solution.

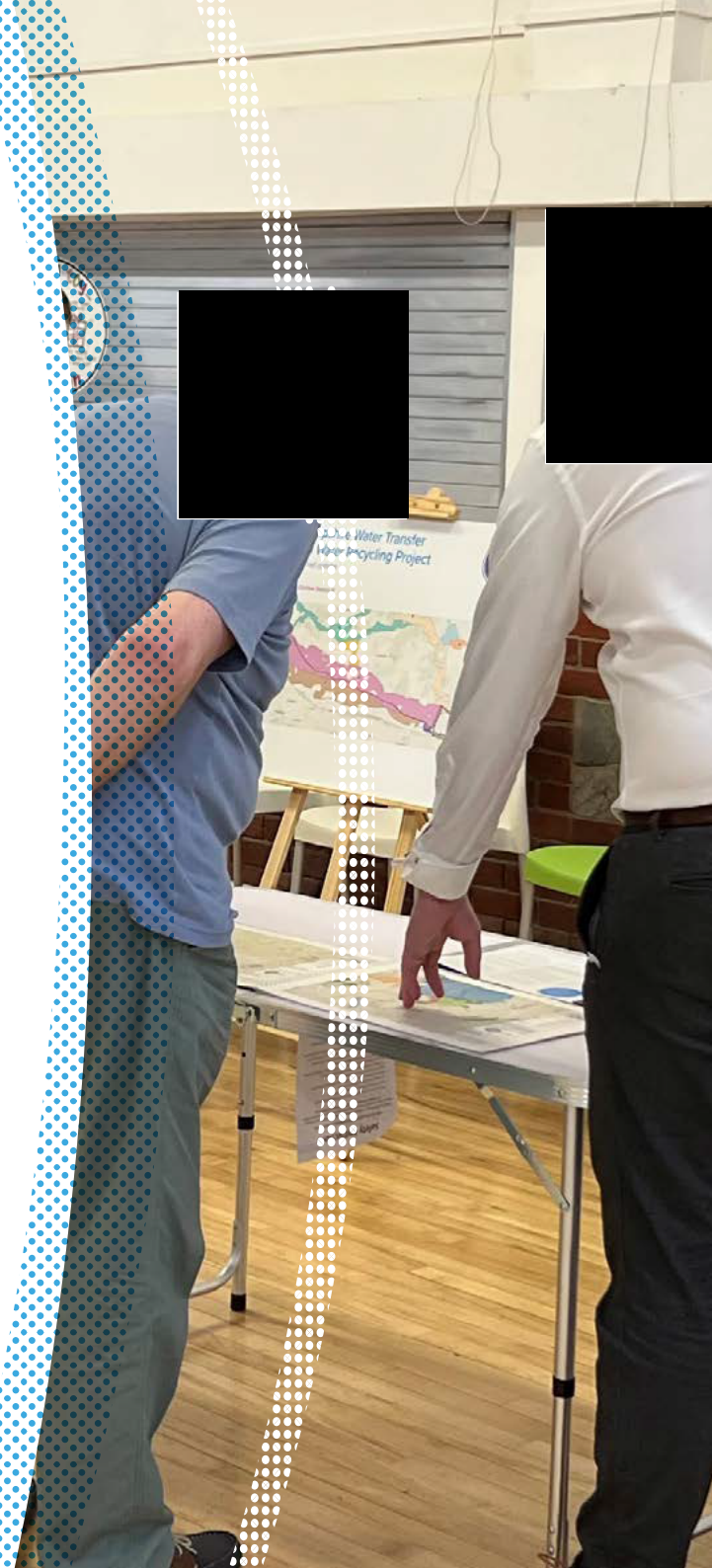
As part of the RAPID regulatory process to develop the desalination proposal further, we also investigated a number of alternative options, including both water recycling and water transfer proposals. We carried out a public consultation in early 2021 to seek views on these different proposals. We then undertook an extensive options appraisal of the desalination proposal and these alternative solutions against a range of planning, environmental and best-value criteria.

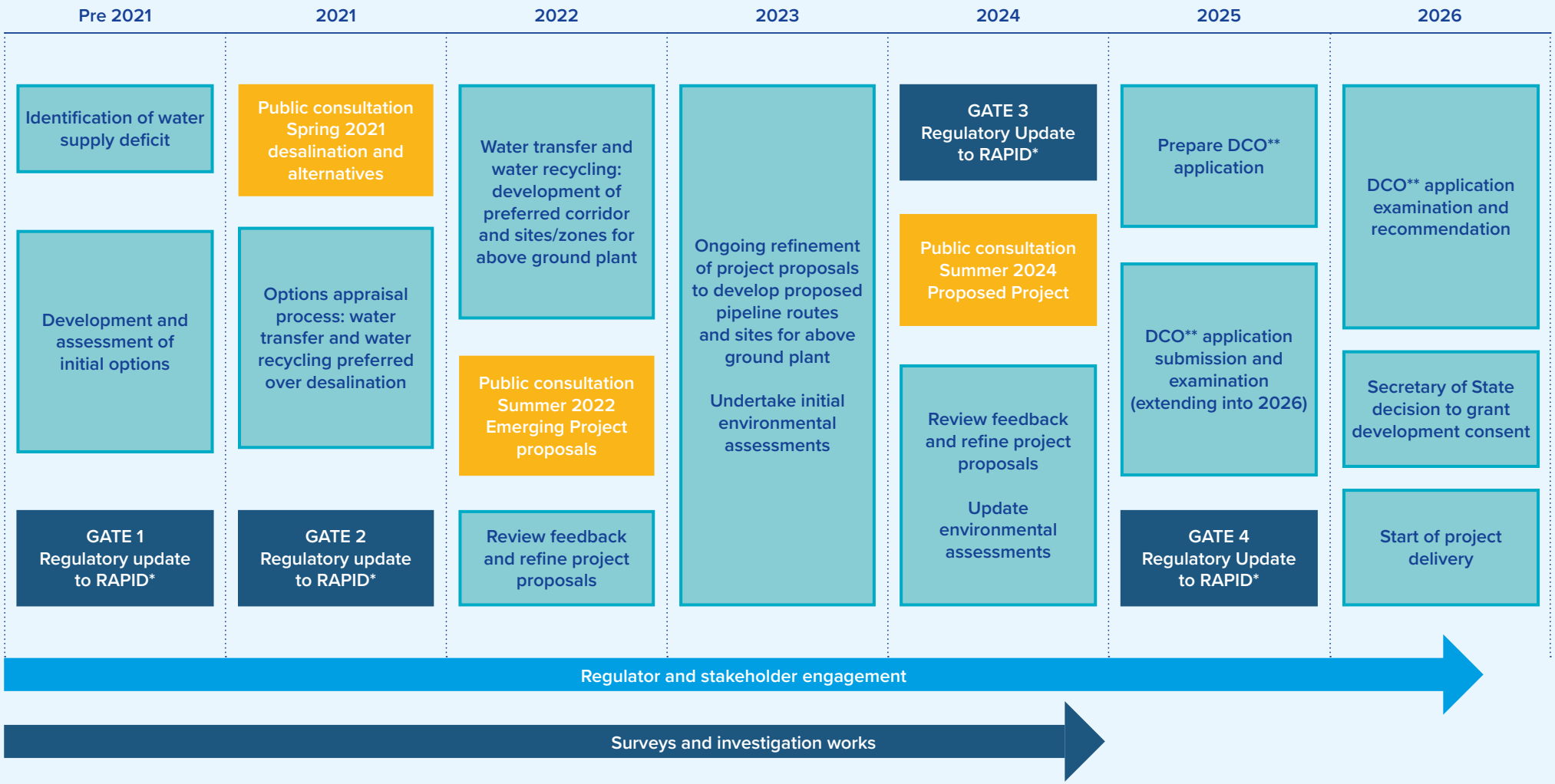
In late 2021, our options appraisal identified desalination as the least preferred option because of its potential impacts on the marine environment and the New Forest National Park. A combined water recycling and water transfer solution (this Project) emerged from the options appraisal as the most preferred solution to help address the water supply challenge in Hampshire. This was supported by the regulators in RAPID. Work subsequently ceased on the desalination scheme as we developed the proposals for the Hampshire Water Transfer and Water Recycling Project.

The Project centres around making the best use of the Havant Thicket Reservoir which is being delivered by Portsmouth Water. The new 8.7 billion litre reservoir was initially designed to be filled with spring water during the winter months to provide up to 21 million litres of water per day to supplement Southern Water's supplies in Hampshire. The addition of water recycling from the Project means the reservoir will be able to provide considerably more water, approximately an additional 90 million litres a day – greatly reducing the amount of water that needs to be taken from Hampshire's chalk streams while helping to address the significant water supply shortfall.

Water recycling is used around the world as a safe and sustainable source of drinking water supplies. The Project is one of ten water recycling schemes currently being developed in the UK.

In the Summer of 2022, we consulted on our emerging proposals for the Project to get feedback on topics such as the location of the proposed water recycling plant, the preferred pipeline corridors and the concept of water recycling. Using the valuable feedback gained from this, alongside our own further studies, we have been able to develop and advance our proposals in readiness for this consultation. Feedback from this consultation will play an important role in helping us refine our proposals in preparation for submitting our application for a Development Consent Order in 2025.





***RAPID** stands for Regulators' Alliance for Progressing Infrastructure Development. See explanation on page 13.

****DCO** stands for Development Consent Order.

3. The proposed Project

from Southern Water

Project overview

The Project is a key part of our strategy to address the water supply challenge we face in Hampshire. By using advanced treatment techniques to turn treated wastewater into purified recycled water, we could supplement the spring water from Bedhampton Springs, which will be stored in the new Havant Thicket Reservoir.

This enhanced use of the reservoir would ensure that more water is available when needed, particularly in times of drought. Water from the reservoir would then be transferred to our existing water supply works in Otterbourne, where it would undergo further treatment to meet drinking water standards before being supplied to customers. Creating a new sustainable source of water in this way will ensure we can maintain essential water supplies for customers while taking less water from the environment.

During a drought, the Project could produce up to approximately 60 million litres per day of purified recycled water, which would be transferred to Havant Thicket Reservoir, enabling the transfer of approximately 90 million litres per day of source water (water that is used as a source of drinking water) from Havant Thicket Reservoir to Otterbourne Water Supply Works.

Outside of a drought, the Project would operate at lower average flows of approximately 30 million litres per day to Otterbourne to maintain essential daily supplies and ensure the infrastructure remains in working order.

Question:

What do you think about the Hampshire Water Transfer and Water Recycling Project as a response to the water supply shortfall in Hampshire and reducing abstractions from the Rivers Test and Itchen?

Project description

The Project comprises the construction and operation of the following:

A water recycling plant located northwest of the existing Budds Farm Wastewater Treatment Works in Havant. During drought conditions, the water recycling plant could receive approximately 80 million litres per day of treated wastewater and produce approximately 60 million litres per day of purified recycled water. Three pumping stations, including a high lift pumping station, would also be located alongside the water recycling plant.

Underground pipelines between our existing Budds Farm Wastewater Treatment Works and the water recycling plant. One pipeline would transfer treated wastewater from Budds Farm Wastewater Treatment Works to the water recycling plant, while the other would transfer reject water from the water recycling plant to the Eastney Long Sea Outfall via Budds Farm Wastewater Treatment Works.

Pipelines between the water recycling plant and Bedhampton Springs. These pipelines would connect to pipelines being proposed by Portsmouth Water between Bedhampton Springs and Havant Thicket Reservoir. Together, these pipelines would transfer purified recycled water from the water recycling plant to the Havant Thicket Reservoir and transfer source water from Havant Thicket Reservoir to the high lift pumping station located at the water recycling plant site. As a backup to this, there would be underground pipelines between the water recycling plant and the Havant Thicket Reservoir. One pipeline would transfer purified recycled water from the water recycling plant directly to the Havant Thicket Reservoir and the other would transfer source water from Havant Thicket Reservoir back to the high lift pumping station located at the water recycling plant site. Further information on these options is provided throughout this section.

During a drought, both options for these pipelines could transfer up to approximately 60 million litres per day of purified recycled water from the water recycling plant to Havant Thicket Reservoir. Up to approximately 90 million litres per day of source water would be transferred back from Havant Thicket Reservoir to the high lift pumping station at the water recycling plant.

An underground pipeline to transfer source water from the high lift pumping station, located at the water recycling plant site, to Otterbourne Water Supply Works. During a drought, the pipeline could transfer up to approximately 90 million litres of water per day to Otterbourne Water Supply Works for further treatment.

A maximum of four above ground plant comprising two intermediate pumping stations, one break pressure tank and one combined intermediate pumping station and break pressure tank. The above ground plant would be located along the pipeline between the high lift pumping station and Otterbourne Water Supply Works. The above ground plant are needed to support the flow of water through the pipeline.

The Project would also include:

- Use of the Havant Thicket Reservoir for the storage of purified recycled water from the water recycling plant.
- Use of pipelines being proposed by Portsmouth Water to transfer purified recycled water and source water between Bedhampton Springs and Havant Thicket Reservoir.
- Use of the existing Eastney Long Sea Outfall for the release of reject water into the Solent.
- Other associated development, including construction compounds, access routes and environmental mitigation and enhancement.

The extent of the Project, the location of the pipelines, water recycling plant and the above ground plant can be viewed within the Book of Plans. The Book of Plans also shows draft Order Limits and draft Limits of Deviation, which control the construction and operation of the Project.

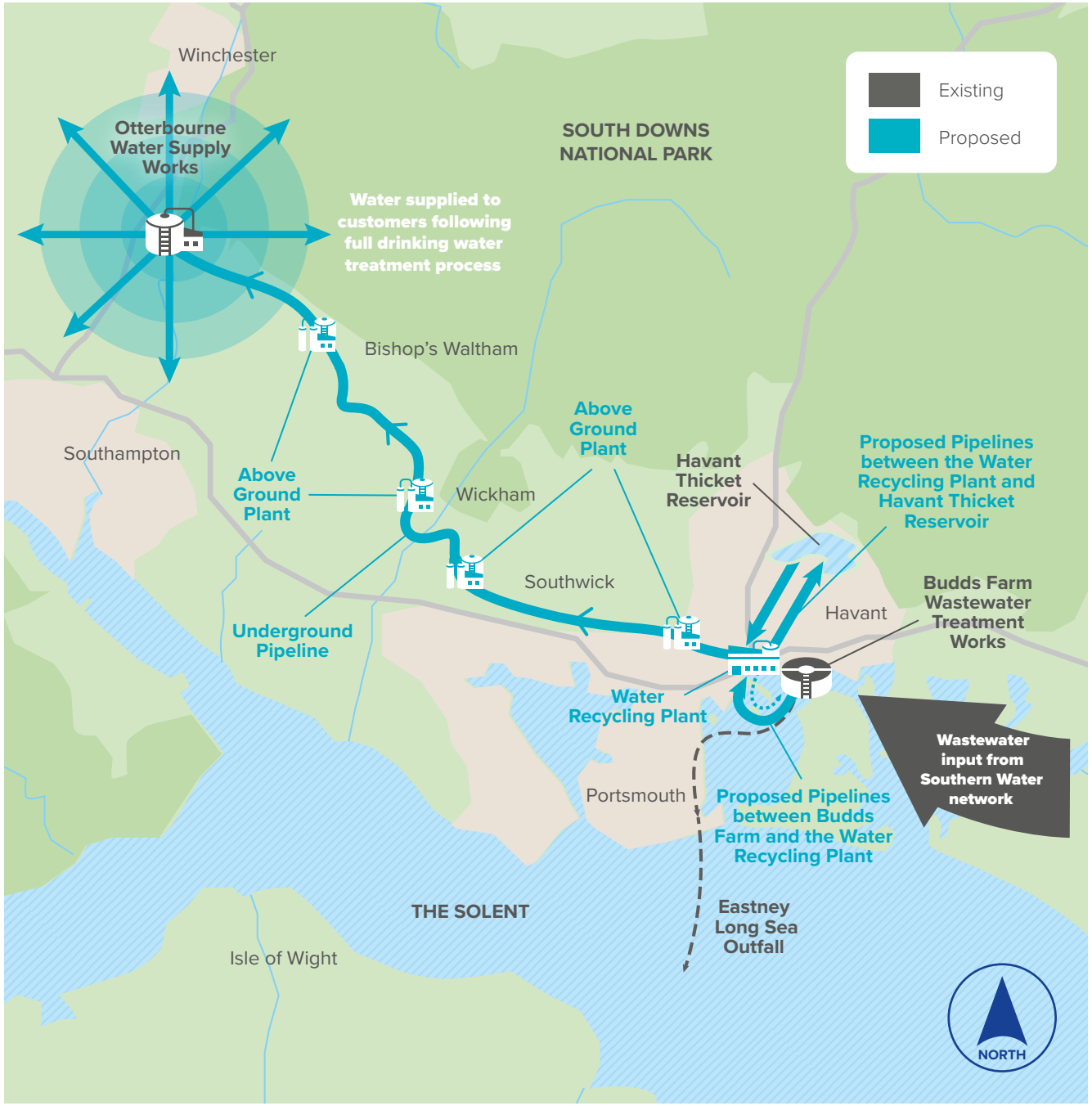


Figure 1 — *Components of the Project*

Not to scale, for indicative purposes only

Draft Order Limits

The maximum extent of land the Project would be delivered within is referred to as the Order Limits. This includes the route of the pipeline and location of above ground plant, access routes and any temporary working areas required to construct the Project. It also includes any areas required to operate the Project.

The Order Limits for the Project are currently draft, as we have not yet finalised the Project design. Following this consultation, further design development of the Project will be undertaken with regard to the feedback received. This could include minor changes to the land required for the Project because of consultation feedback and an increased understanding of the need for environmental mitigation or enhancements. The draft Order Limits currently shown may, therefore, be refined or amended following this consultation and prior to the submission of our Development Consent Order application.

Draft Limits of Deviation

Limits of Deviation show the maximum limits within which the pipelines and the above ground plant would be located. They are currently shown as draft and may also be subject to further refinement. We have also shown development zones for the water recycling plant, which represent the areas within which certain parts of the water recycling plant would be developed.

For the purposes of this consultation, we have also shown an illustrative pipeline location (see the Book of Plans), which indicates the potential location of the pipelines within the draft Limits of Deviation. This represents our current assumptions on the possible location of the pipelines, but if granted development consent, the pipelines could be installed anywhere within the Limits of Deviation.

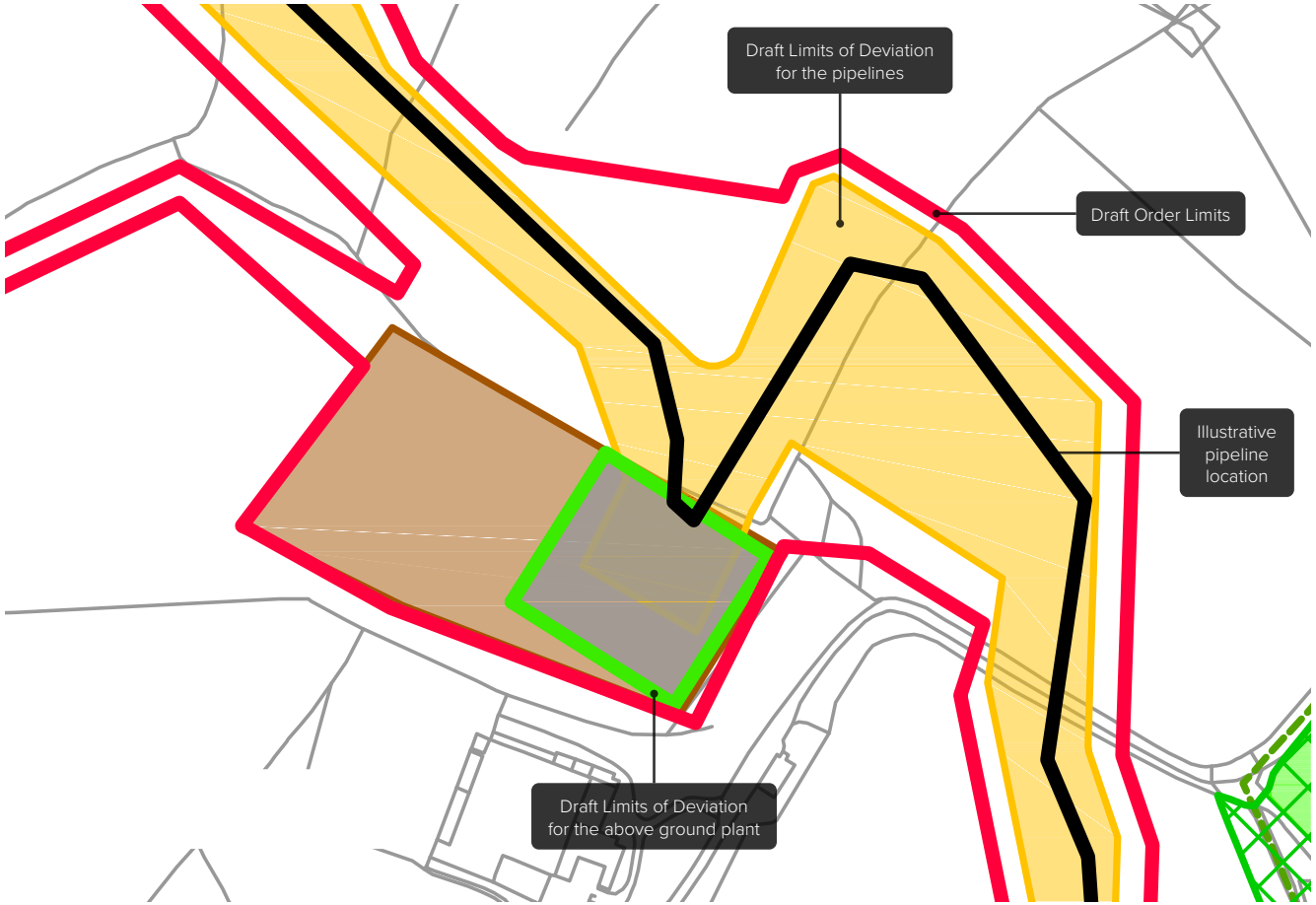


Figure 2 — *Draft order limits and draft limits of deviation*

This flexibility allows for refinements at a very local scale to respond to potential environmental constraints, such as those identified from surveys conducted in advance of construction. This flexibility is also required to respond to unforeseen matters during construction, such as difficult ground conditions or other local features which require minor changes in the precise location of the pipeline.

Design process

Our Development Consent Order application will be based on an initial design. The final detailed design would be developed only after approval of our Development Consent Order application. This is quite normal for large-scale infrastructure projects and it is crucial to maintain a certain degree of flexibility during this stage to accommodate any necessary refinements and innovations as the final detailed design is developed.

The final detailed design would be controlled by a set of documents secured through the Development Consent Order that would define the maximum parameters and limits for the works and secure the environmental and design commitments that the Project would deliver. This will include a Design Principles Document, which would contain both General Design Principles (applicable to the entire Project) and Site Specific Design Principles (which add specific details relevant to the design of particular components) with which the final detailed design would need to comply.

Question:

What do you think about the preliminary design principles we have identified for the sites for the proposed water recycling plant, intermediate pumping stations and break pressure tanks?

The General Design Principles will evolve from a series of preliminary design principles that we developed to embed good design from an early stage and to inform preliminary environmental assessment. The preliminary design principles (which can be found at Appendix 3.3 of the Preliminary Environmental Information Report and are summarised in our draft illustrative Outline Environmental Masterplan) broadly cover:

- Site layout and infrastructure design – through seeking to minimise the amount of land required to deliver the Project, using sustainable resources and materials, avoiding important environmental designations and minimising impact on residents (including how we reinstate land following construction).
- Prioritising the environment - taking care to respect local distinctiveness and striving to minimise the Project's impact on landscapes, ecology, heritage and the water environment.
- Safety, function and accessibility – reflecting the essential primary objective of ensuring safety and security through design.
- Consultation and engagement – recognising the important role of engagement with communities and stakeholders in design development.

The Site Specific Design Principles will evolve through further project development and engagement up to the submission of the Development Consent Order application. At this stage, we have identified what we consider to be the key design considerations and opportunities for the water recycling plant and the above ground plant sites and we are seeking views and input on these as part of this consultation. These can be found throughout this section and the relevant illustrative plans are also provided in a larger format in the draft illustrative Outline Environmental Masterplan.

Development of the Project up to Summer 2022 Consultation

At our Summer 2022 Consultation, we explained the process we went through to select the Project as the best solution to help address the water supply challenge in Hampshire. This process looked at various water supply solutions in different locations across south Hampshire. Water recycling, water transfer and desalination options were identified and assessed against a range of technical, environmental, planning, social and economic criteria. Initial infrastructure sites and pipeline routes were also identified and assessed against these criteria. The outcome was the selection of a combined water transfer and water recycling option, namely the Project. We also identified a preferred site for the water recycling plant at this stage.

Further development of the Project prior to the consultation identified various pipeline corridors and zones for the above ground plant. The preferred pipeline corridor and above ground plant zones were selected with the aim of minimising encroachment into the South Downs National Park and avoiding or minimising impacts on important habitats, densely populated areas and heritage assets. Our emerging proposals for the Project were presented in our Summer 2022 Consultation. This included a document called the 2022 Scheme Development Summary, which provided a detailed description of the process we had undertaken to develop the Project to that stage.

Development of the Project up to the Summer 2024 consultation

Following the Summer 2022 Consultation and having regard to the feedback received, we undertook further technical investigations, environmental surveys and engagement with stakeholders. This allowed us to develop our proposals in greater detail in order to identify a proposed pipeline routes and specific sites for the above ground plant.

Where constraints on the preferred pipeline corridor and the above ground plant zones were identified, we considered and assessed different pipeline routes and sites to avoid these where possible, taking into account planning and environmental policy and regulations. We developed evaluation criteria to compare different pipeline routes and site options. The outcome of this was the selection of proposed pipeline routes and sites for above ground plant.

Our Summer 2022 Consultation explained that the water recycling plant would need to be capable of producing at least 15 million litres of purified recycled water per day but that a larger water recycling plant providing up to 60 million litres per day could be required, depending on the outcomes of our long-term water resources planning. The need for that larger water recycling plant has since been confirmed in order to address increasing environmental restrictions on our river abstractions and provide resilience for more-extreme droughts. We have also confirmed that the water recycling plant would be developed in one single phase.

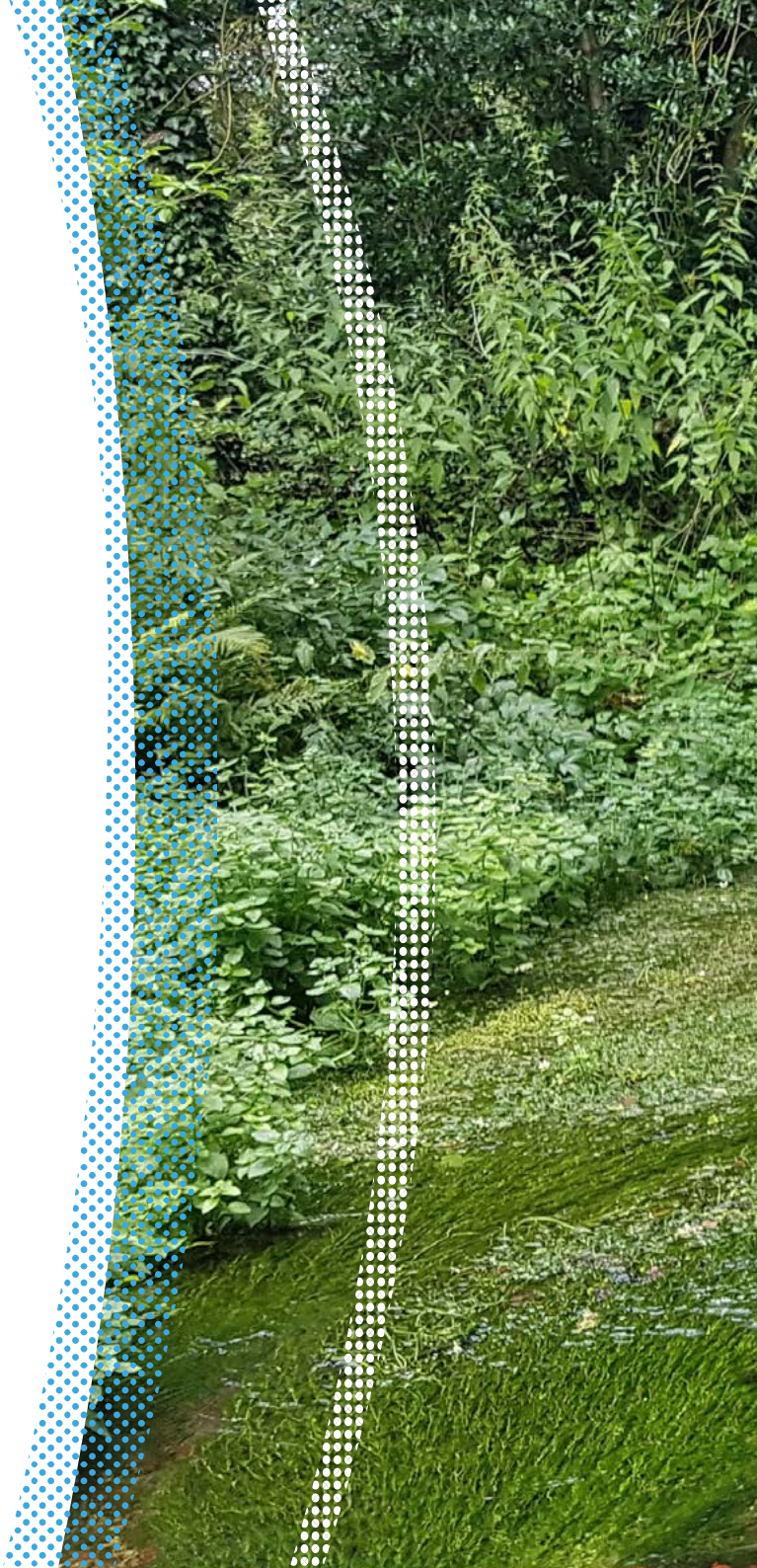
Our Summer 2022 Consultation also explained that the water recycling plant and pipeline to Otterbourne Water Supply Works would need to operate at a 'sweetening flow' of approximately 7.5 million litres a day in order to maintain the efficient operation of the plant and pipelines outside of drought conditions (i.e. when they could be operated at full capacity). Further investigations and development of the Project since then have identified a requirement to pump water to Otterbourne in less than 24 hours in order to maintain water quality in this long pipeline between Havant Thicket Reservoir and Otterbourne Water Supply Works.

To achieve this, we have changed the sweetening flow in this pipeline from 7.5 million litres a day to 20 million litres a day and the diameter of the pipeline from 1200 millimetres to 800 millimetres (1.2 metres to 0.8 metres). A smaller diameter pipeline with a higher flow rate enables the water to be transferred faster.

A further evolution of the Project since our Summer 2022 Consultation is in relation to its interaction with Havant Thicket Reservoir. Portsmouth Water, which is responsible for delivering the reservoir, confirmed at the end of 2023 that it is now proposing two pipelines between its Bedhampton Springs site and the reservoir instead of the single pipeline that it already has planning consent for. Having both an inlet and outlet pipe to and from the reservoir would provide Portsmouth Water with added resilience and provides an opportunity, to futureproof for a potential connection to Southern Water's Project to enable us to use these pipelines instead of constructing our own pipelines through Havant. In this scenario, we would need to provide two pipelines between the water recycling plant and Bedhampton Springs to be able to connect to Portsmouth Water's twin pipeline, and secure consent to use Portsmouth Water's pipelines through our Development Consent Order application.

These proposed pipelines between the water recycling plant and Bedhampton Springs now form part of our Project. In the event that Portsmouth Water is unable to secure the necessary planning approval for its twin tunnelled pipelines, we will continue to include our pipelines between the water recycling plant and Havant Thicket Reservoir.

The 2024 Scheme Development Summary published as part of this consultation provides further detail on the process we have undertaken to develop the Project this far, including the evaluation criteria used to compare different options for components of the Project.



Upper Test © Wessex Rivers Trust

Helpful information about water recycling

A guide to water recycling

Here, we explain how the water recycling technology works and the terminology that is used.

Water is already recycled across the country, with treated wastewater being released into rivers, where it blends with river water before being re-abstracted further downstream.

Currently, the water that comes out of your taps is taken from the environment and treated to a high standard to be safe to drink.

After you've used it, we collect and treat the wastewater and return it to the environment once more. The cycle then repeats. When water is in the environment, these natural processes such as filtration through soil and dilution with other water sources reduce impurities.

Water recycling technology speeds this up and improves the natural process. Water recycling plants use advanced treatment techniques to turn treated wastewater into purified recycled water. Special membranes are used to remove salts and a range of other impurities. In fact, so much is removed from the water that some essential minerals such as calcium and magnesium have to be added back in.

Terminology

Purified recycled water: purified water that has been produced by taking treated wastewater and removing remaining impurities using advanced treatment techniques.

Source water: water that is used as a source for drinking water.

Drinking water: water that has been treated to strict regulatory standards, ready for supply to homes and businesses.

Wastewater: a combination of water from kitchens, bathrooms, sinks and taps (in homes and businesses) and rainwater from roads and roofs, that is transported to and cleaned at, a wastewater treatment works.

Treated wastewater: wastewater that has been treated to strict regulatory standards and is typically released to rivers or the sea.

Reject water: water containing impurities removed during the water recycling process.

Stages of water recycling

Water recycling uses advanced treatment techniques to turn treated wastewater, that is usually pumped away into rivers and the sea, into purified recycled water.

Membrane Process

Treated wastewater, already extensively cleaned at a wastewater treatment works, is pumped through two filtering processes in the Water Recycling Plant. The first, micro-filtration, removes remaining impurities that could block the membranes used at the second stage of treatment – reverse osmosis. Here, dissolved salts and impurities are removed by pushing the water at high pressure through a membrane of tiny holes more than 50,000 times smaller than the width of a human hair. Dissolved impurities such as bacteria and pharmaceuticals are also removed.

Advanced Oxidation Process

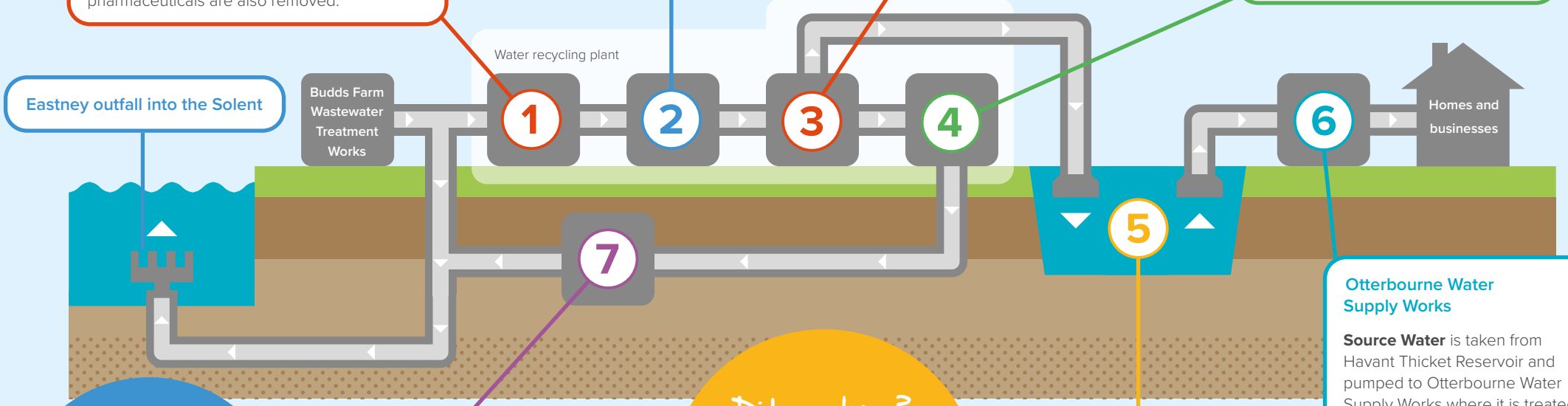
Reverse osmosis is extremely effective at removing impurities. But, as an extra layer of protection, ultraviolet light (just like that found in sunlight) is applied along with a small dose of a chemical called hydrogen peroxide. Both of these treatments are used around the world in water recycling. Ultraviolet light is widely used in other drinking water treatment processes as it helps reduce the amount of chlorine that needs to be added at later stages of treatment.

Treated Water Conditioning

To make the water drinkable, minerals such as calcium and magnesium salts (that have been removed during the earlier stages of treatment) are added back in. As in traditional treatment methods, some chlorine may be added to the water to ensure it meets strict water quality standards. Granular activated carbon is used, primarily to neutralise any hydrogen peroxide remaining from the UV-AOP process, but it also removes some of the remaining trace residual organics in the water.

Waste Handling

Water and particles removed by each of the previous stages of treatment are taken away to be cleaned. The liquid is filtered to produce cleaned wastewater, known as reject water, which can be released back into the sea at Step 7. The process produces a concentrated solid matter which is removed and most commonly returned to the wastewater treatment works.



Did you know?

Water recycling is a tried-and-tested technology used elsewhere in the world – in Southern California they've been using it for 40 years.

Reject Water Release

As about 20% of the source water is filtered out through the various treatment processes, reject water is released 5.7km back into the sea.

Did you know?

Water is already recycled across the country, with treated wastewater being released into rivers, where it blends with river water before being re-abstracted further downstream.

Havant Thicket Reservoir

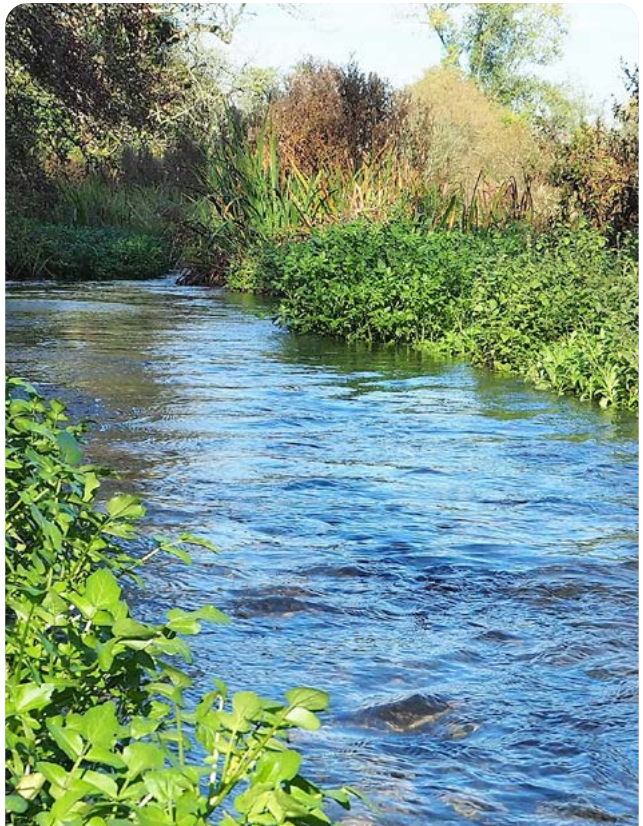
The **recycled water** is pumped to the reservoir where it mixes with existing water from other sources.

Otterbourne Water Supply Works

Source Water is taken from Havant Thicket Reservoir and pumped to Otterbourne Water Supply Works where it is treated to the same rigorous standards as all water taken from the environment to produce **drinking water.** Typically this involves a combination of filtration and the addition of chlorine before it is sent into supply.

The water recycling plant

A key element of the Project is the water recycling plant. The water recycling plant would receive treated wastewater from our Budds Farm Wastewater Treatment Works to produce purified recycled water using the process explained on Page 23. When operating at full capacity during a drought, the water recycling plant would be capable of receiving approximately 80 million litres per day of treated wastewater in order to produce approximately 60 million litres of purified recycled water that would then be transferred to the Havant Thicket Reservoir. The water recycling plant would also produce reject water, containing the impurities that are removed during the water recycling process.



In this scenario, the water recycling plant would produce approximately 20 million litres per day of reject water, which would be returned for release from the existing Eastney Long Sea Outfall via Budds Farm Wastewater Treatment Works. The Eastney Long Sea Outfall is an existing pipeline which releases treated wastewater from Budds Farm Wastewater Treatment Works to the Solent. This treated wastewater is treated to a high standard before it is released into the Solent some 5.7km south of Portsea Island.

Outside of drought (i.e. in normal weather conditions), the water recycling plant could be required to produce approximately 20 million litres of purified recycled water per day in order to balance the minimum 20 million litres per day sweetening flow through the pipeline from the reservoir to Otterbourne. This would help maintain water levels in the reservoir, although the volume of purified recycled water required from the water recycling plant could be reduced if the reservoir is being supplemented by spring water from Bedhampton Springs. Similarly, the output of the water recycling plant could be increased if more water is need at Otterbourne or the reservoir. With an expected average of approximately 30 million litres per day of source water to be transferred from the Havant Thicket Reservoir to Otterbourne, the water recycling plant is likely to operate at a similar volume when the reservoir is not being supplemented by spring water.

The water recycling plant would be located approximately 300 metres northwest of the Budds Farm Wastewater Treatment Works on an area of land that is north of Harts Farm Way, south of the A27 and west of the Hermitage Stream. Access to the water recycling plant would be from Harts Farm Way. This site was previously used as a landfill site and has since been covered. We are undertaking investigations and developing mitigation measures to ensure that the construction of the water recycling plant and associated pipelines would minimise any impacts associated with the landfill. Construction within the landfill would be undertaken in line with relevant guidance and standards and would be controlled by management plans that will form part of our Development Consent Order application. We are also continuing to engage with key stakeholders including the Environment Agency, Natural England and Havant Borough Council on our approach to construction of the water recycling plant.

The high lift pumping station would be located at the site of the water recycling plant. The high lift pumping station would support the transfer of source water from the Havant Thicket Reservoir to Otterbourne. Another pumping station would be required to support the transfer of purified recycled water to the Havant Thicket Reservoir. We also may require a pumping station to transfer reject water to the Eastney Long Sea Outfall via Budds Farm Wastewater Treatments Works. The location of these pumping stations will be dependent on the final detailed design of the water recycling plant.

The water recycling plant has been divided into three zones (for further information please see Book of Plans). These three zones set out where infrastructure would likely be located.

- Zone 1 – Main process buildings, administration building, chemical storage units, holding tanks and further plant and equipment to support the water recycling plant.
- Zone 2 – The high lift pumping station and other associated pumping stations, chemical storage units, holding tanks, parking and further plant and equipment.
- Zone 3 – Further plant and equipment, renewable energy generation, storage and laydown.

Location and site selection

To accommodate the size of the water recycling plant needed, a site of a minimum of 3.2 hectares (32,000 m2) is required. However, to ensure there is sufficient space for temporary construction compounds, pumping stations and tunnel shafts for the connecting pipelines, a site of a minimum of six hectares (60,000 m2) is required.

As the water recycling plant will treat wastewater, it needs to be located as close as practicable to the source of treated wastewater, i.e. Budds Farm Wastewater Treatment Works. This reduces the length of pipelines needed between the water recycling plant and the wastewater treatment works and reduces the cost and carbon footprint associated with pumping the treated wastewater and reject water between the two locations.

Prior to the Summer 2022 Consultation, we undertook a site selection process to identify the best-performing site to locate the water recycling plant. Initially, we considered siting the water recycling plant at the Budds Farm Wastewater Treatment Works as we already own the land and this would minimise the length of connecting pipelines. However, the Budds Farm Wastewater Treatment Works is not large enough to accommodate the water recycling plant. Therefore, we looked at sites within the surrounding area.

We first looked for sites within a radius of 500 metres of the Budds Farm Wastewater Treatment Works. Given that available land within 500 metres of the Budds Farm Wastewater Treatment Works is very limited, the search area was expanded to 1.5 kilometres. We identified sites within this search area that would minimise impacts on residential areas, community facilities and key infrastructure.

These sites were evaluated against a range of planning and environmental criteria, including proximity to ecological sites, residential properties and flood risk zones. We selected Site 72 as the preferred site for the water recycling plant, which is the site located North of Harts Farm Way as described overleaf.

The process undertaken to select the water recycling plant was set out in the 2022 Scheme Development Summary. This site was selected as it has the least environmental constraints and is not currently developed. However, we did identify that the site was located on a former landfill. As set out above, we have undertaken investigations, assessments and engagement to determine the approach to construction and mitigation.

At the Summer 2022 Consultation, we received feedback from the public and stakeholders on our selection of a site for the water recycling plant. This included feedback on the potential risks of locating the water recycling plant and associated tunnel shafts on a former landfill. The feedback also highlighted that other sites within the 1.5 kilometre radius may be suitable for the water recycling plant. Although we were aware that the water recycling plant would be located on a former landfill and were developing measures to mitigate any potential impacts associated with this, we undertook a further comprehensive review that reconsidered a range of sites and assessed these using up to date information to ensure our conclusions remained valid. We also reviewed additional sites in the area with existing employment uses to see if any of these would be preferred to Site 72 when considered against the assessment criteria. Throughout this process, we engaged with Havant Borough Council on the methodology and outcomes.

The review reaffirmed that Site 72 was the most suitable site for the water recycling plant. Site 72 had fewer risks than other undeveloped sites, with greater potential to mitigate effects relating to the landfill compared to potential impacts on important ecological sites at other undeveloped sites. Out of the sites that had existing employment uses, we considered that it would be more acceptable to mitigate effects relating to the landfill at Site 72 than displace and demolish buildings used by local businesses.

In light of the above extensive site selection work that identified Site 72 as the most suitable site for the water recycling plant and taking into account feedback from consultation and our ongoing engagement, we've since purchased Site 72 to support the delivery of the Project.

Figure 3 — *Site selection plan*

Further detail of the process, including the comprehensive review we have undertaken to select a site for the water recycling plant can be found in Section 2.2 and 3.13 of the 2024 Scheme Development Summary.

Design considerations

Key design considerations and opportunities for the water recycling plant include:

- Designing a built form which draws from the local context and is sympathetic to Broadmarsh Coastal Park and views from Langstone Harbour without compromising functional or safety requirements.
- Providing landscaping around the facility that provides benefits for ecology, staff and visitors while remaining flexible and adaptable to respond to future needs.
- Reinforcing existing site boundaries to the west and south through tree and shrub planting to provide further screening.
- Retaining and enhancing a landscape buffer to the Hermitage Stream corridor and exploring opportunities for footpath, habitat and resilience improvements.
- Providing sensitive lighting which meets operational requirements while avoiding uplighting and illuminating hedgerows and habitats where possible.
- Considering potential for on-site habitat enhancement through building design (e.g. green roof) and sustainable drainage.
- Considering potential for wider enhancements within the Broadmarsh Coastal Park in partnership with Havant Borough Council and other third parties.

A visualisation of the water recycling plant and an illustrative environmental masterplan for the site are provided here to show what the plant and landscaping treatment of the site could look like. Detailed designs for the water recycling plant and site landscaping would be submitted following approval of our Development Consent Order application. The illustrative details provided here are to show what the water recycling plant site could look like to get feedback and help refine the design principles that will guide the final detailed designs.

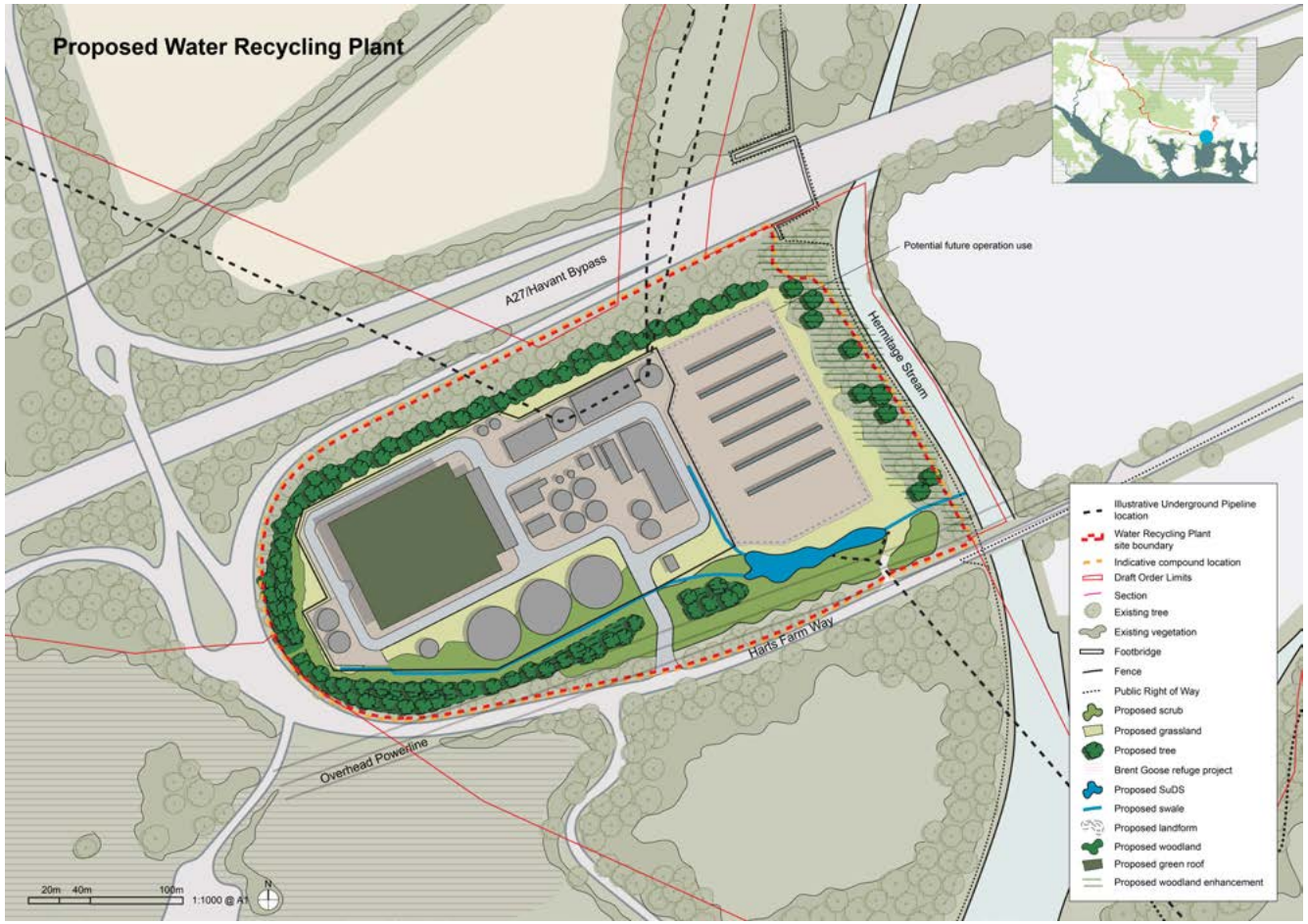


Figure 4 — *Draft illustrative environmental masterplan. Water recycling plant*

Figure 5 — *Draft illustrative environmental masterplan visualisation. Water recycling plant*

Above ground plant

At a number of points along the pipeline between the high lift pumping station (at the water recycling plant site) and the Otterbourne Water Supply Works we would need to develop above ground plant in the form of intermediate pumping stations and break pressure tanks.

These are needed to manage the flow of water in the pipeline as follows:

- **Intermediate pumping stations –** required to maintain pressure along the transfer pipeline route when higher flows are required.
- **Break pressure tanks –** required at high points to manage water pressure and allow the pipeline to operate under gravity at lower flow rates.

At the Summer 2022 Consultation, we identified zones for the above ground plant - wider areas of land where the above ground plant sites could be located. Since the Summer 2022 Consultation, we have undertaken a site selection process to identify preferred locations within the zones - this is detailed within Section 3.12 of the 2024 Scheme Development Summary. This included evaluating sites against evaluation criteria to determine the best-performing sites.

The location of above ground plant is informed by hydraulic modelling of the proposed pipeline route between Havant Thicket Reservoir and Otterbourne Water Supply Works, to determine where additional pumping or pressure management is required. We have undertaken hydraulic modelling throughout the development of the proposed pipeline route to determine whether there were any changes to the above ground plant requirements.

We would require the following intermediate pumping stations and break pressure tanks:

- Break Pressure Tank/Intermediate Pumping Station E: Located to the North of Portsdown Hill Road (B2177) and East of New Down Lane. This site is required as it is the highest point on the proposed pipeline route between Havant Thicket Reservoir and Otterbourne Water Supply Works and water pressure will need to be managed following the transfer up to Portsdown Hill from the high lift pumping station. This site would also pump water west and past the River Wallington valley to Intermediate Pumping Station F. Depending on the final hydraulic modelling, we would either require a combined break pressure tank and intermediate pumping station or just a break pressure tank.
- Intermediate Pumping Station F: Located east of Wickham Road (A32) and west of the River Wallington. This intermediate pumping station is required to repressurise the proposed pipeline after it has passed through the River Wallington valley and would support the flow of water as the topography rises and falls towards Wickham and through the River Meon valley.
- Intermediate Pumping Station G: Located southeast of Titchfield Lane and north of Wickham Park Golf Club. This intermediate pumping station is required to pump water after it has descended and risen through the River Meon valley and then onwards further to the north west.
- Break Pressure Tank K: Located to the east of Scivier's Lane and north of Durley Street. This break pressure tank is required to reduce pressure after it has been pumped from Intermediate Pumping Station G and control the flow of water as it travels towards Otterbourne Water Supply Works.

The above sites are the maximum number of above ground plant requirements for the Project. We may require fewer sites depending on the outcomes of ongoing hydraulic modelling as the pipeline route is refined. This would be undertaken as part of the final detailed design that would be developed following approval of our Development Consent Order application.

The process and outcomes of the design development of above ground plant is set out in Section 3.1.2 and Section 3.12 of the 2024 Scheme Development Summary. The location of the above ground plant and illustrative designs are shown in the Book of Plans.

Question:

What do you think about the locations we've chosen for the proposed above ground plant?

Break Pressure Tank/Intermediate Pumping Station E

Location and site selection

Break Pressure Tank/Intermediate Pumping Station E would be located on agricultural land north of Portsdown Hill (B2177) and east of New Down Lane, which is on the ridge of Portsdown Hill and, therefore, within an elevated landscape. It has been located alongside vegetation that borders the northern side of Portsdown Hill Road (B2177), so it can be screened from the road and the nearby viewpoint. Access to the proposed site would be created from New Down Lane to the west.

The infrastructure associated with Break Pressure Tank/ Intermediate Pumping Station E would cover a maximum area of 76 metres by 59 metres. However, any additional landscaping and vegetation that we propose may extend over a wider area.

Design considerations

Key design considerations and opportunities for Break Pressure Tank/Intermediate Pumping Station E include:

- Delivering operational requirements at a scale, density, layout and appearance that is sensitive to the historical and landscape context.
- Embedding buildings into the hillside with natural screening, including new landform, to integrate into the landscape.
- Cladding prominent façades with natural materials and, according to local colour assessment to blend into treeline.
- Avoiding building heights exceeding the treeline to reduce impact on views from the south.

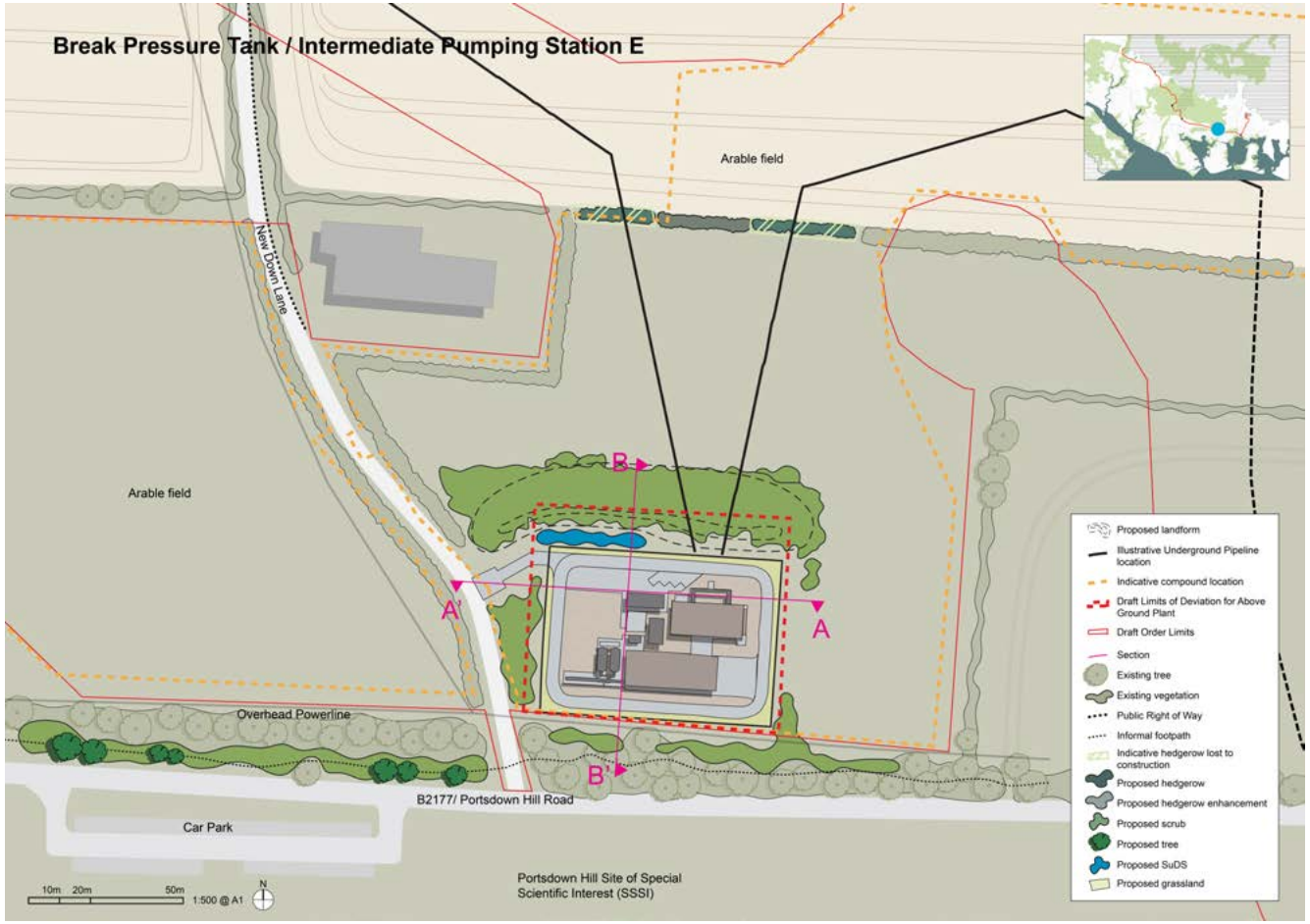


Figure 6 — *Draft illustrative environmental masterplan. Break Pressure Tank / Intermediate Pumping Station E*

- Providing new and enhanced planting (including replacement of any hedgerow loss) to reinforce existing boundaries, where practicable.
- Considering potential for footpath and crossing enhancements, including along Portsdown Hill Road.
- Considering potential for on-site habitat enhancement (for example, through drainage design) and potential to extend chalk grassland habitat to reinforce landscape character and enhance biodiversity.

Intermediate Pumping Station F

Location and site selection

Intermediate Pumping Station F would be located near Crockerhill on agricultural land east of Wickham Road (A32) and west of the River Wallington. It would be adjacent to the site of Welborne Garden Village which is delivering 6,000 homes, schools and other community facilities to the west and east of Wickham Road (A32).

Access to the proposed site would be from Chalk Lane, however this will be dependent on the final design of Welborne Garden Village. We are engaging with the developer of Welborne Garden Village and Hampshire County Council on the temporary and permanent access arrangements.

The infrastructure associated with Intermediate Pumping Station F would cover a maximum area of 76 metres by 44 metres, however, any additional landscaping and vegetation that we propose may extend over a wider area.

Design considerations

Key design consideration and opportunities for Intermediate Pumping Station F include:

- Using the site's topography and embedding the building into the ground to reduce height and visibility without compromising operational requirements.
- Drawing inspiration for materials and colour palette from those found in the local area (for example, farm buildings).
- Working with Welborne Garden Village to explore opportunities for joined approach on environmental enhancement and connectivity.
- Replacing and enhancing hedgerows, where lost, and potentially connecting existing woodland with hedgerows to strengthen habitat connectivity.
- Considering potential for on-site habitat enhancement (for example, through drainage design) and the potential to extend existing woodland.

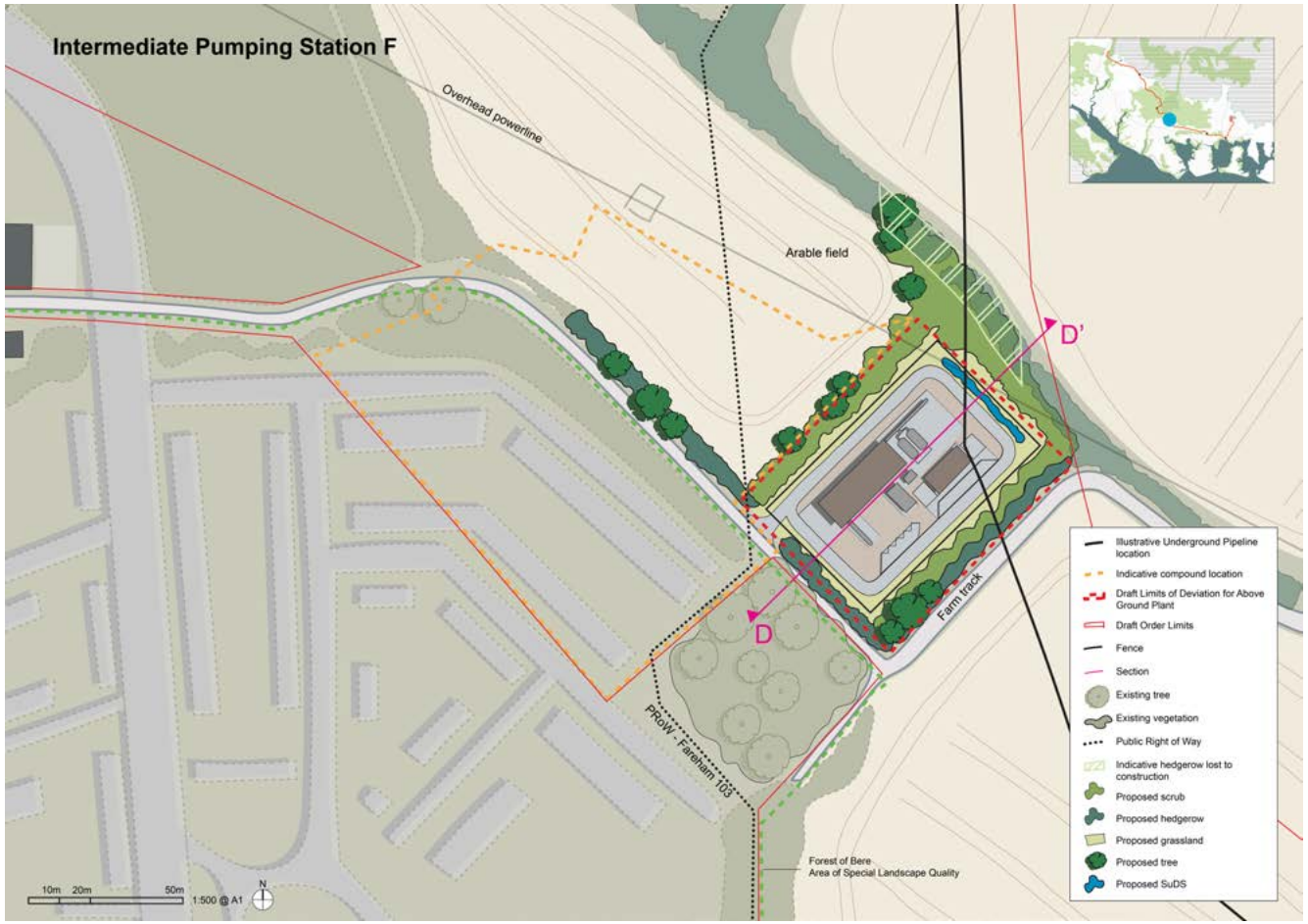


Figure 7 — *Draft illustrative environmental masterplan. Intermediate Pumping Station F*

Intermediate Pumping Station G

Location and site selection

Intermediate Pumping Station G would be located on agricultural land southeast of Titchfield Lane and to the west of Wickham. Access to the site would be from an access road next to Park Place Farm Nursery, which is a garden centre.

The infrastructure associated with Intermediate Pumping Station G would cover a maximum area of 76 metres by 44 metres, however, any landscaping and vegetation that we propose may extend over a wider area.

Design considerations

Key design considerations and opportunities for Intermediate Pumping Station G include:

- Delivering operational requirements at a scale, density, layout and appearance that is sensitive to the local landscape context.
- Using cladding and materials on prominent façades similar to those found in the area (for example farm buildings) and reflecting local colour palette.
- Introducing screen planting to minimise impact on nearby properties and heritage assets while strengthening habitat connectivity.
- Cladding or fencing smaller structures to create a unified appearance.
- Considering potential for on-site habitat enhancement (for example through drainage design) and extending woodland and scrub habitats and planting to reinforce green infrastructure network.

Figure 8 — *Draft illustrative environmental masterplan. Intermediate Pumping Station G*

Break Pressure Tank K

Location and site selection

Break Pressure Tank K would be located north of Durley Street and Wintershill within parkland adjacent to Winters Hill Hall. Access to the proposed site would be along an access road that would be constructed from Scivier's Lane to the west.

The infrastructure associated with Break Pressure Tank K would cover a maximum area of 69 metres by 63 metres, however, any landscaping and vegetation that we propose may extend over a wider area.

Design considerations

Key design consideration and opportunities for Break Pressure Tank K include:

- Embedding the building into the hillside to integrate into the landscape without compromising operational requirements.
- Replacing and extending hedgerows, where lost, to strengthen green infrastructure connectivity.
- Use of cladding and fencing material on prominent façades similar to those in local area and based on local colour assessment opportunities.
- Considering potential for on site habitat enhancement (for example through drainage design) and extending existing parkland and scrub habitat to reinforce landscape character and enhance biodiversity.

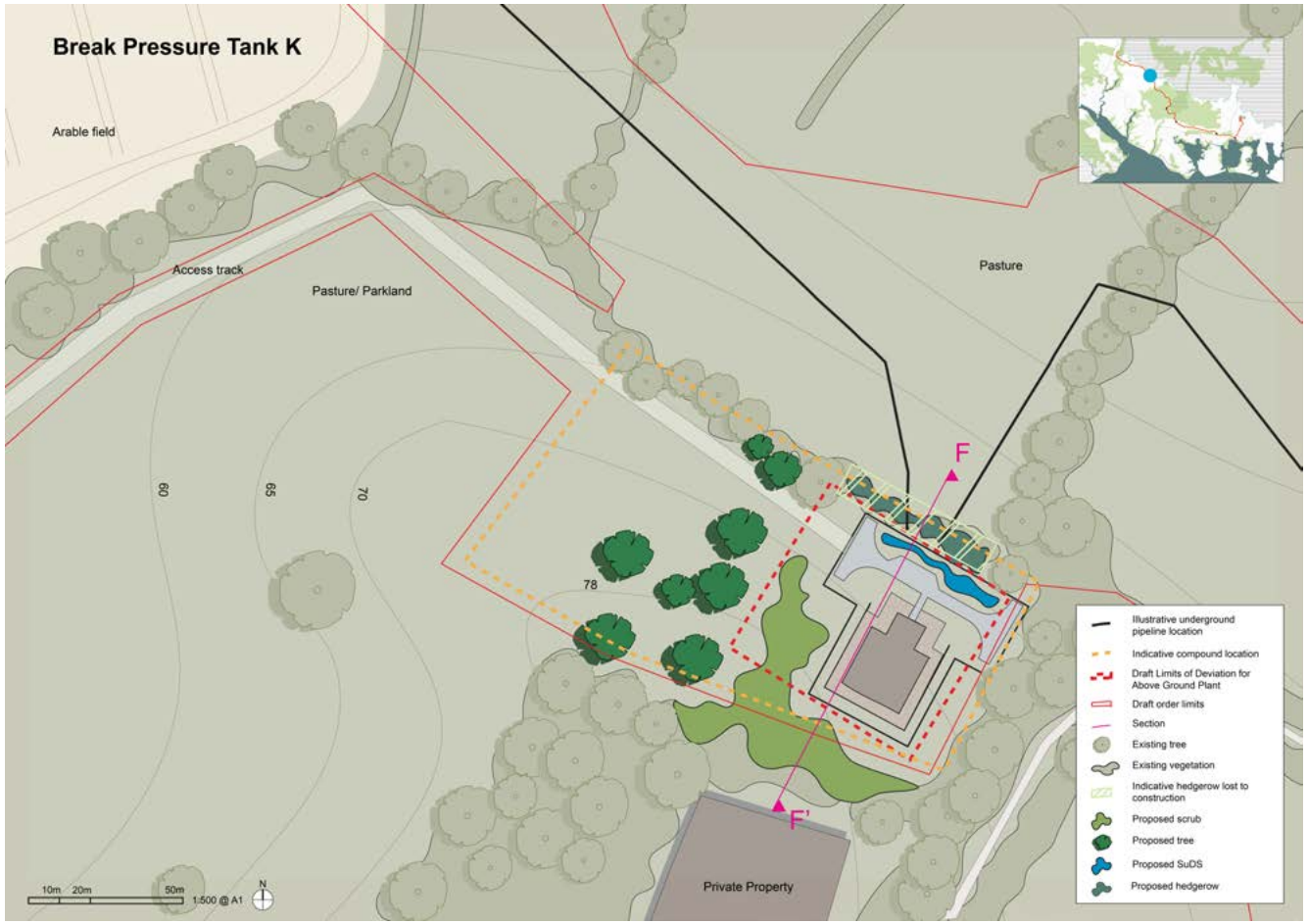


Figure 9 — *Draft illustrative environmental masterplan. Break Pressure Tank K*

Installing an underground pipeline

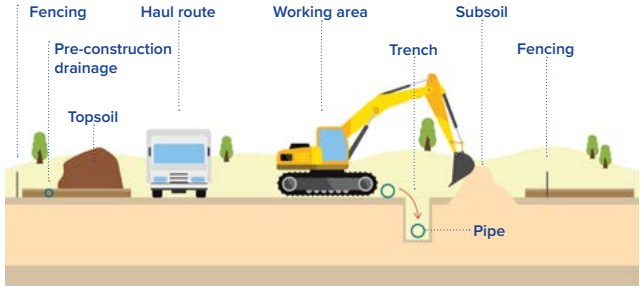
A large part of the Project involves laying pipelines under the ground. Most of the pipelines would be installed by digging a trench, laying the pipe and backfilling the trench. In other locations, such as populated areas or where there are particularly sensitive environmental constraints, we would use trenchless construction techniques. These are set out in Appendix 3.4 of the Preliminary Environmental Information Report.

Installation of the pipelines would be controlled by various management plans, including a Construction Environmental Management Plan. We are sharing preliminary versions of some of these management plans at this consultation — these will be developed into the management plans that will form part of our Development Consent Order application. Upon approval of our Development Consent Order application, we would develop detailed management plans where required.

The Book of Plans shows an illustrative pipeline location, indicating the potential installation methods that could be used along the length of the proposed pipeline routes.

Here are some examples of different installation methods we could use.

All images are not to scale, for indicative purposes only.

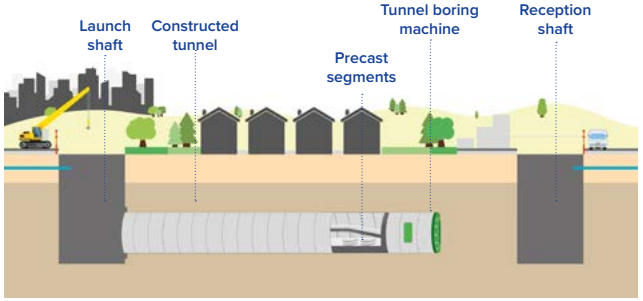


Trenched method - open cut

We would likely use the conventional method of open cut excavation to install most of the pipelines. This involves digging a trench, laying the pipe in the trench and then backfilling the trench with soil.

A typical working area would be approximately 40 metres wide, which allows sufficient space for digging the trench, storing the pipe alongside the trench before installation and storing soil from the excavated trench during installation. However, in some situations, the working width could be reduced to approximately 20 metres wide when intersecting with important or valuable areas of vegetation to limit vegetation removal.

Open cut construction would be used to install the pipeline below some roads that the proposed pipeline routes cross. Temporary road or lane closures would be required to facilitate installation of the pipeline. Road closures could last up to two weeks but no more than one month.

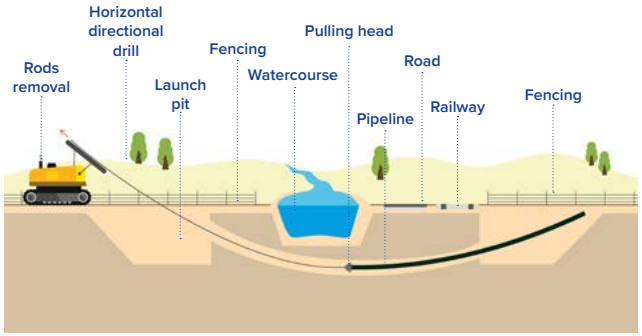


Trenchless method – tunnel boring machine

Tunnelling would be used in areas where the pipeline passes through populated residential areas and crosses sensitive environmental features where the length of the intended crossing is too long for other trenchless installation methods such as horizontal directional drilling or microtunnelling.

Where tunnels are required, typically a tunnel boring machine would be used, with shafts dug at each end of the tunnel. The launch shaft would have an approximate diameter of 15 metres and the reception shaft would have an approximate diameter of 12 metres. Once the machine is launched, the tunnel construction cycle would begin one tunnel lining ring at a time. Material that is excavated during construction of the tunnel would be removed from the launch shaft. On completion of the tunnel, the tunnel boring machine would be moved into the reception shaft, dismantled, and removed, leaving the fully constructed tunnel ready for the pipelines to be installed and connected. Intermediate shafts may be required during construction, as the tunnel boring machine may need to be modified depending on the tunnel length or changes in geology.

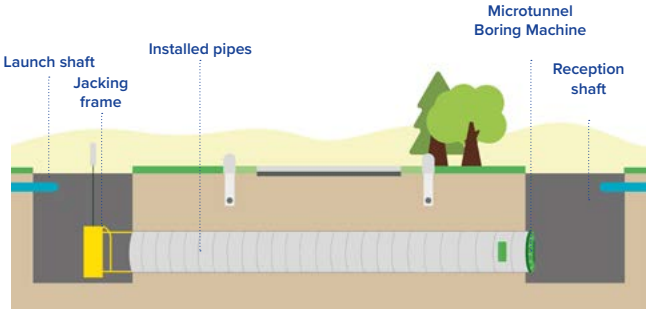
Following completion of the tunnel, the launch and reception shafts would be covered and a hatch or manhole would be installed to provide access for maintenance. Any intermediate tunnel shaft would be filled, covered and returned to its pre-construction condition.



Trenchless method – horizontal directional drilling

Horizontal directional drilling is a multi-phase operation that uses a specially designed drilling rig that initially bores a pilot hole through the ground along a pre-determined route. It involves using a directional drilling machine and associated attachments to drill along the chosen bore path accurately and lay the path for the pipe.

Working area compounds, along with a pit or shaft, are established at each end of the pipeline route. The directional drilling machine is guided by the operator to follow the desired route and is advanced through the ground until the machine reaches the reception shaft at the far end of the route. A pipe is then pulled through the hole without disturbing the surface.



Trenchless method – microtunnelling (pipe jacking)

Microtunnelling uses microtunnel boring machines, which are usually remote-controlled from the surface, to install underground pipes. It's typically carried out for installing shorter tunnelled sections of pipeline and commences from a pit or shaft with a jacking frame to allow insertion of the pipes. It can be carried out in various ground conditions, from soft soils to hard rock. The microtunnel boring machine is advanced through the ground using specially manufactured jacking pipes that are pushed into the ground using hydraulic pistons. The pistons push the pipe and microtunnel boring machine forward at a controlled rate to ensure effective and safe progress as it cuts the soil.

Construction compounds

Temporary construction compounds would be required to support the construction of the pipelines and the above ground plant. The following types of temporary construction compounds would be required:

- Sectional site compounds would be located at intervals along the length of the pipeline routes. Site offices, welfare facilities, parking and storage areas would be provided within the compound.
- Trenchless and tunnelling construction compounds would be required where trenchless or tunnelling construction is proposed on either end of the stretch of trenchless construction. The compound would contain space for the trenchless or tunnelling shaft, equipment and storage.
- Water storage lagoons would be temporarily required to store water in connection with testing the flow of water within the pipeline once it is constructed.

The proposed locations of the construction compounds that would be required are shown in the Book of Plans. We have developed the location of construction compounds alongside the development of the proposed pipeline routes and the above ground plant sites to ensure that environmental impacts are minimised. Construction compounds were first identified in line with technical requirements and then evaluated using the evaluation criteria to refine their locations considering potential environmental effects.

We have not yet developed detailed layouts for all construction compounds, as this will be dependent on the final methods, materials and equipment used to construct the Project. The detailed layouts for the construction compounds would be developed further upon approval of our Development Consent Order application. Generic, illustrative layouts of construction compounds are shown in Chapter 3 of the Preliminary Environmental Information Report.

Developing the proposed pipeline routes

At the Summer 2022 Consultation, we presented our preferred pipeline corridor. This was selected through an evaluation which considered a range of environmental and technical criteria. The pipeline corridor sections we presented at the Summer 2022 Consultation were named Section M to Z. This helped distinguish and describe different pipeline corridor sections.

At the Summer 2022 Consultation, we also identified an indicative pipeline route (referred to as the 'best engineering solution pipeline route') within the preferred pipeline corridor. This indicative pipeline route was determined by considering the most optimal route for hydraulics and transferring water. It was, therefore, used as a starting point for the development of the proposed pipeline routes following the Summer 2022 Consultation. We have developed, refined and amended the indicative pipeline route using environmental survey outcomes, technical investigations, feedback from the Summer 2022 Consultation and ongoing stakeholder engagement. The outcome was the selection of the proposed pipeline routes.

Question:

What do you think about our proposed pipeline routes?

Question:

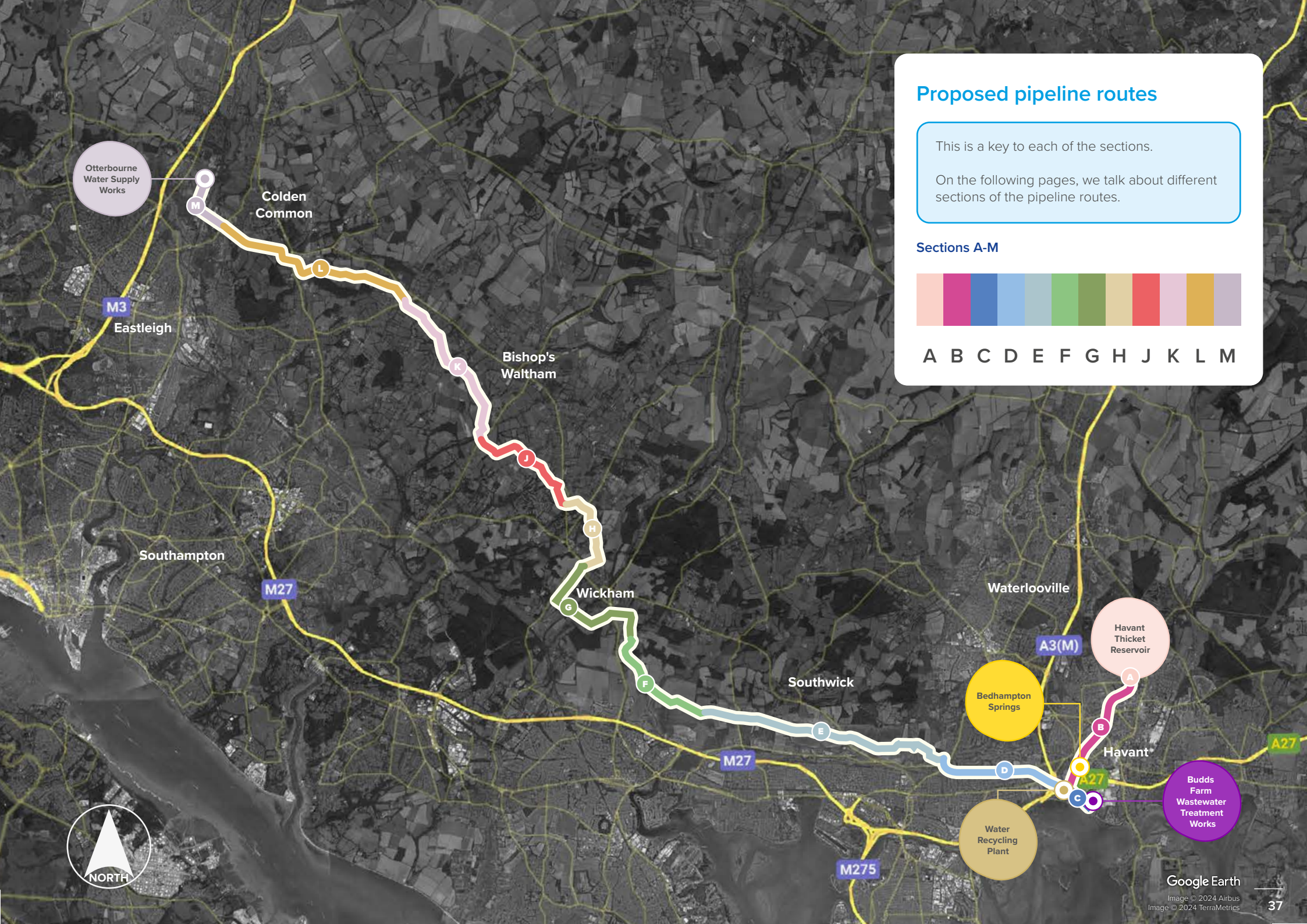
What do you think about the process undertaken to identify our proposed pipeline routes?

As part of this consultation, we have renamed the various parts of the proposed pipeline routes Sections A to M to assist with the identification and description of how each section has been developed. The sections can be identified broadly as follows:

- The proposed pipelines between the water recycling plant and the Havant Thicket Reservoir comprise Sections A and B.
- The proposed pipelines between the Budds Farm Wastewater Treatment Works and the water recycling plant comprise Section C.
- The pipelines between the high lift pumping station located at the site of the water recycling plant and Otterbourne Water Supply Works comprise Sections D to M.

The 2024 Scheme Development Summary published as part of this consultation provides further detail on the process undertaken to develop these proposed pipeline routes, including the methodology and assessment criteria we have used for assessing alternative pipeline route options.

Please note that there is also no Section I of the proposed pipeline routes.



Proposed pipeline routes

This is a key to each of the sections.

On the following pages, we talk about different sections of the pipeline routes.

Sections A-M

A B C D E F G H J K L M

Section A and Section B:

Between the water recycling plant and the Havant Thicket Reservoir

Section description

Section A and Section B of the proposed pipeline route comprises the pipelines that would transfer purified recycled water and source water between the water recycling plant and the Havant Thicket Reservoir. Section A covers the area around Staunton Country Park and Section B covers the area south of Staunton Country Park to the water recycling plant. Sections A and B are described together because they are closely linked and located within a similar area.

Two pipelines would be required. One pipeline would transfer purified recycled water from the water recycling plant to Havant Thicket Reservoir and the other pipeline would transfer source water from Havant Thicket Reservoir back to the high lift pumping station which is located at the site of the water recycling plant.

There are two options for these pipelines:

- Preferred option: The two pipelines would be installed between the water recycling plant and Bedhampton Springs. At Bedhampton Springs, our pipelines would connect into pipelines that are being proposed by Portsmouth Water between Bedhampton Springs and Havant Thicket Reservoir. Portsmouth Water's two pipelines between Bedhampton Springs and the Havant Thicket Reservoir would be located in two separate microtunnels. Portsmouth Water is currently in the process of applying for planning permission for these pipelines. If consented and delivered, we could, subject to securing consent through our Development Consent Order application, use these pipelines to transfer purified recycled water the remaining distance to the Havant Thicket Reservoir and bring source water from the reservoir back to the high lifting pumping station, via Bedhampton Springs. Between the water recycling plant site and Mill Lane, our pipelines would be constructed using trenchless construction. The pipelines would also be constructed under Mill Lane using trenchless construction. East of Mill Lane, our pipelines would be located above ground for a short distance to connect into Portsmouth Water's infrastructure at Bedhampton Springs.
- Backup option: In the event that Portsmouth Water's pipelines between Bedhampton Springs and the Havant Thicket Reservoir are not granted permission, we are currently progressing with a backup option, which we consulted on at our Summer 2022 Consultation. For this option, two continuous pipelines between the water recycling plant and Havant Thicket Reservoir would be developed. Between the water recycling plant and Staunton Country Park, these pipelines would be located within a tunnel that would be constructed at a depth of over 20 metres below ground level through Havant. Tunnel shafts would be located at the site of the water recycling plant (the launch shaft) and within Staunton Country Park just north of Middle Park Way (the reception shaft). If required, we could also locate a temporary intermediate tunnel shaft during the construction phase on open space north of Havant Rugby Football Club and west of Hooks Lane. Between the Staunton Country Park reception shaft and Havant Thicket Reservoir, the pipelines would be constructed using open cut trench construction.

The first option above, involving the use of pipelines being proposed by Portsmouth Water, is our clear preference as it would negate the need for us to construct our own tunnel under Havant to transfer water to and from the Havant Thicket Reservoir. Constructing one set of pipelines would reduce overall disruption on local communities and the environment as well as reducing resource use and costs, demonstrating effective partnership working between neighbouring water companies. We are not therefore consulting on a choice between the two options above, as it is our clear intent to use Portsmouth Water's pipelines should these secure the necessary planning approvals and be delivered by Portsmouth Water. Our proposal for tunnelled pipelines between the water recycling plant and the reservoir is presented as a backup but will be developed further as part of our Development Consent Order application should we need to rely on it. If the consenting and delivery of Portsmouth Water's pipelines is confirmed in due course, then our backup option could be removed from our application depending on the stage we are at in the consenting process.

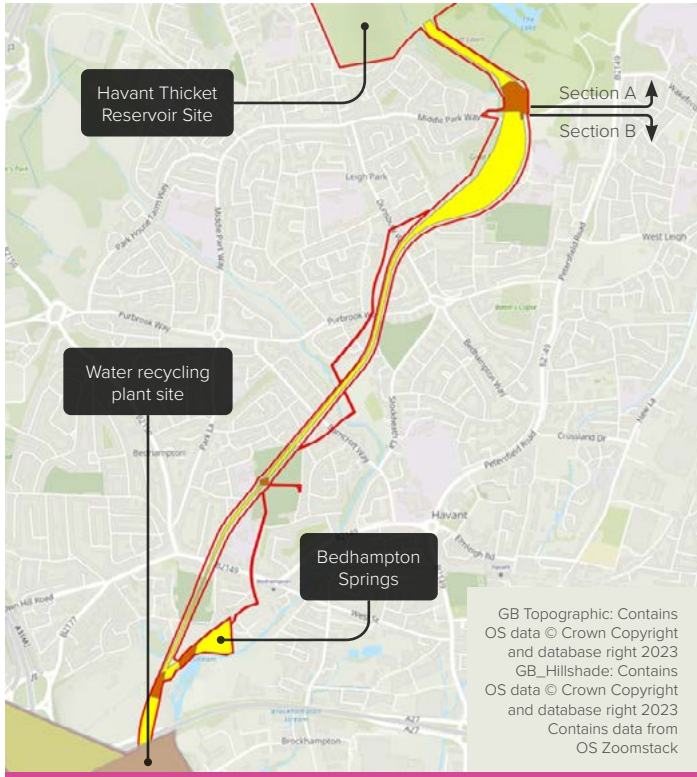


Figure 10 — *Section A & B*

Key features

- Connects the water recycling plant to Havant Thicket Reservoir to transfer purified recycled water.
- Connects Havant Thicket Reservoir and the high lift pumping station located at the water recycling plant site to transfer source water.
- Two options for the pipelines are proposed. The pipelines would either connect or be contained within a single tunnel under Havant and connect to Portsmouth Water pipelines close to Havant Thicket Reservoir.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, a tunnelled option between the water recycling plant and south of the Havant Thicket Reservoir was consulted on, which is the second option described above. This option was chosen because it would minimise construction works at surface level in Havant, which is a densely populated area. We didn't consult on the first option described above as it had not been identified by Portsmouth Water at that time.

The following refinements and developments in Section A and B, which cover the pipelines between the water recycling plant and the Havant Thicket Reservoir, have been undertaken:

- Considering opportunities to collaborate with Portsmouth Water and connect the Project to the infrastructure being proposed for the Havant Thicket Reservoir Project. To avoid the need for Southern Water and Portsmouth Water to both construct separate, tunnelled pipelines through Havant, it was identified that infrastructure could be shared between the Project and the Havant Thicket Reservoir project. To do this, we would need to develop pipelines to connect the water recycling plant to Bedhampton Springs. Therefore, a pipeline route between the water recycling plant and Bedhampton Springs was developed as an option to transfer water to the reservoir and back as described above.
- For the tunnel between the water recycling plant and the Havant Thicket Reservoir (our backup option), four options for the tunnel reception shaft near the reservoir were identified and assessed. Two options were discounted due to their proximity to residential properties, location within a high-risk flood zone or potential for increased impacts on the landscape and historic environment setting of Staunton Country Park and the Leigh Park Grade II* registered park and garden. The other two options, which were in close proximity of each other, have lower potential impacts on the landscape, historic environment and residential properties. Therefore, the construction compound and draft Limits of Deviation for the pipeline in this location have been developed to provide flexibility to locate the tunnel shaft in this area.
- Two options for an intermediate tunnel shaft which may be required during construction of the tunnel between the water recycling plant and the Havant Thicket Reservoir were identified and considered. The option proposed has a lower risk of impacting groundwater abstractions at Bedhampton Springs and minimises community, landscape and visual effects.

For further information on refinement of Sections A and B since the Summer 2022 Consultation, see Section 3.2 of the 2024 Scheme Development Summary.

Not to scale, for indicative purposes only

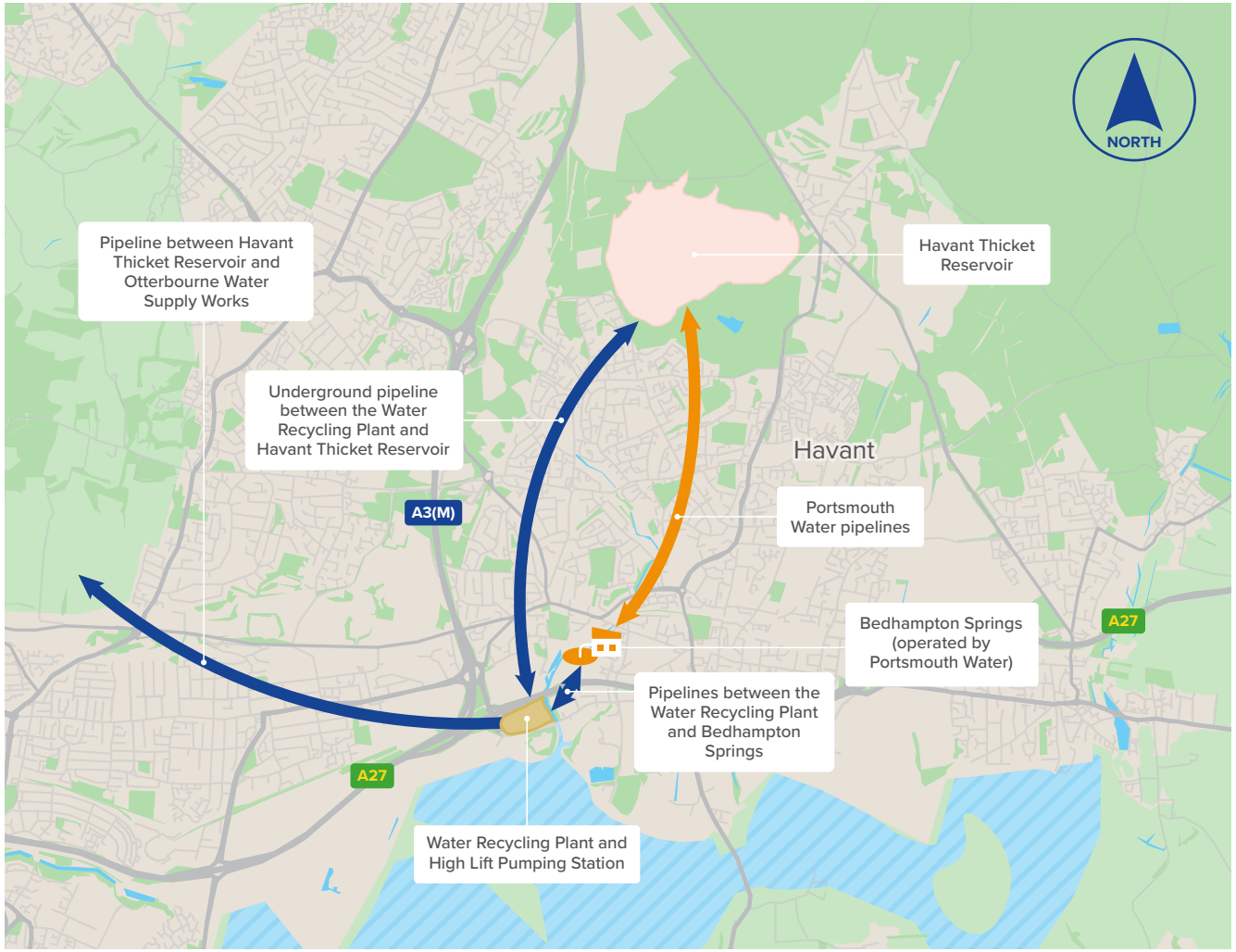


Figure 11 — *Proposed Pipeline between the water recycling plant and Havant Thicket Reservoir*

Section C:

Between Budds Farm Wastewater Treatment Works and the Water Recycling Plant

Section description

Within Section C, two proposed pipelines between Budds Farm and the water recycling plant would be developed and located along the same alignment. The first pipeline would transfer treated wastewater from the Budds Farm Wastewater Treatment Works to the water recycling plant, while a second pipeline would transfer reject water from the water recycling plant back to Budds Farm Wastewater Treatment Works for release via the existing Eastney Long Sea Outfall.

Aside from a small open cut section at Budds Farm, the pipelines would be constructed using trenchless construction methods. The trenchless section would be approximately 500m in length. Crossing of the Hermitage Stream and Harts Farm Way are included in the trenchless section to minimise potential impacts on the local highway network and the watercourse. Shafts would be located on either side of the trenchless section to launch and receive the construction equipment. One shaft would be located at Budds Farm Wastewater Treatment Works and the other shaft would be located at the site of the water recycling plant.

Key features

- One pipeline would transfer treated wastewater from Budds Farm for recycling at the water recycling plant.
- A second pipeline would transfer reject water from the water recycling plant back to Budds Farm for release via the Eastney Long Sea Outfall.
- Both pipelines would be located on the same alignment and pass under the Hermitage Stream and Harts Farm Way.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, we explained that two underground pipelines would be required to connect Budds Farm Wastewater Treatment Works with the water recycling plant.

We initially considered an open cut pipeline to connect the water recycling plant and the Budds Farm Wastewater Treatment Works. However, a trenchless pipeline option under the Hermitage Stream and Harts Farm Way was selected as it would avoid works to the local highway network and any working in close proximity to the Hermitage Stream.

No major refinements to Section C have been undertaken following the Summer 2022 Consultation. However, the pipeline route has been slightly amended alongside the evolving design of the water recycling plant. This is because the plant's design affects where the treated wastewater from the Budds Farm Wastewater Treatment Works would need to be received by the water recycling plant and where the reject water would be collected.

For further information on refinement of Section C since the Summer 2022 Consultation, see Section 3.3 of the 2024 Scheme Development Summary.

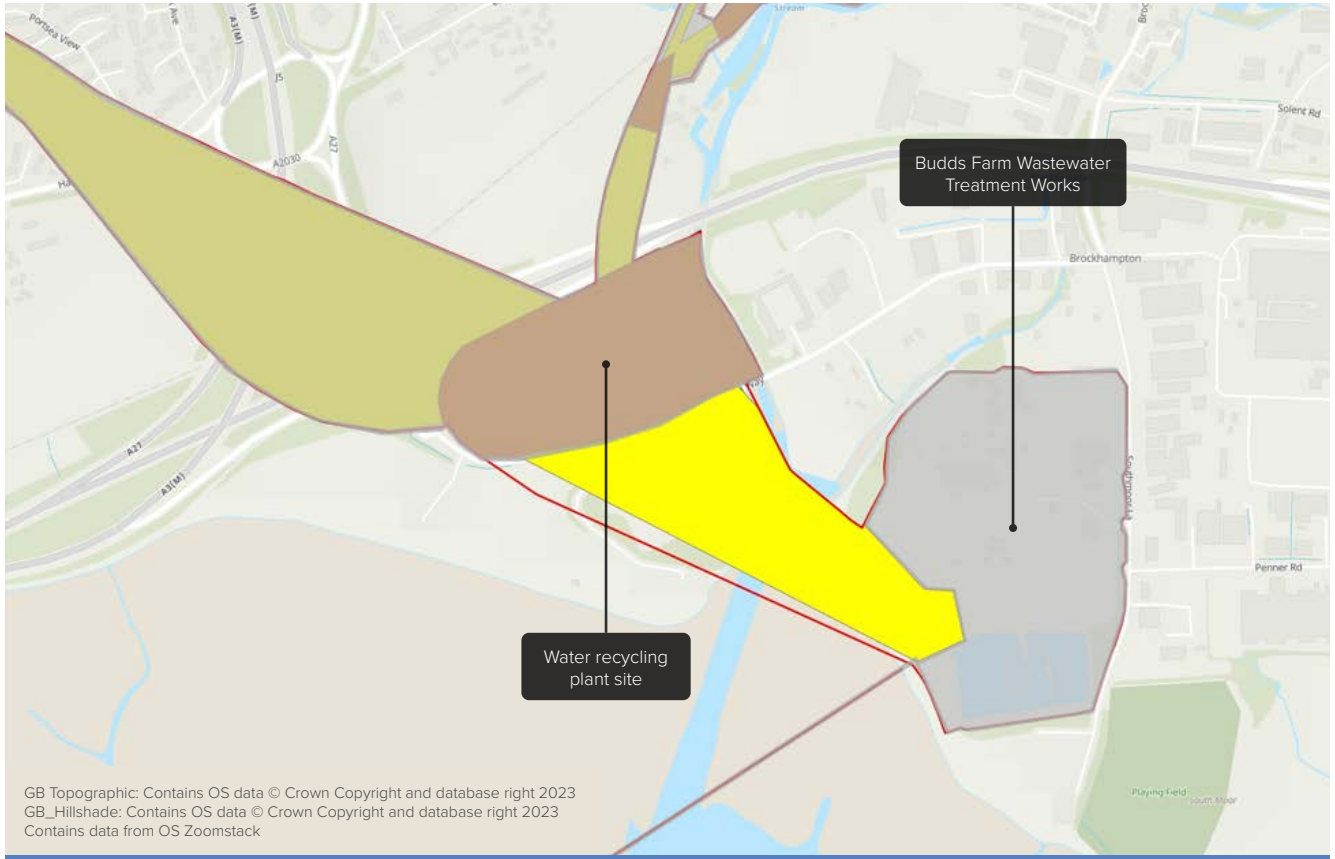


Figure 12 — *Section C*

Section D:

The water recycling plant to Portsdown Hill

Section description

Section D of the proposed pipeline route comprises the section between the high lift pumping station (located at the site of the water recycling plant) and the ridge of Portsdown Hill, southwest of Widley. Section D would be entirely constructed as a tunnel and would pass to the north of Farlington and Drayton, following part of the alignment of Portsdown Hill Road (B2177). Using a tunnel within this section avoids construction works within the road network in a densely populated area and minimises the impact on residents and community facilities.

The tunnel launch shaft at the water recycling plant site is anticipated to be at a maximum depth of approximately 40m and the tunnel reception shaft at the ridge of Portsdown Hill would be at a maximum depth of approximately 80m. An intermediate tunnel shaft may be temporarily required during construction and would be located south of Portsdown Hill Road (B2177) and west of Gillman Road. It is anticipated that the intermediate tunnel shaft would be at a maximum depth of approximately 80m below ground level.

Key features

- Links the high lift pumping station at the site of the water recycling plant to the ridge of Portsdown Hill.
- The pipeline will be constructed as a tunnel underneath Farlington, Drayton and Widley.

Design development since the Summer 2022 Consultation

Two tunnel routes, comprising a northern option and a southern option (called option P1 and P2), were presented at the Summer 2022 Consultation to connect the pipeline to Portsdown Hill. Following the Summer 2022 Consultation, further development and refinement of the northern and southern tunnel options was undertaken, including identifying locations for reception and intermediate tunnel shafts. Within this process, a third tunnel option was identified, which is an extension of the original southern tunnel option, known as the southern long tunnel option.

The three tunnel routes and the associated reception and intermediate shafts were reviewed against our evaluation criteria for considering pipeline route options. The northern tunnel option was discounted as it was considered to have greater potential for impacts on groundwater and open space.

The southern short tunnel option and the southern long tunnel option shared similar constraints; however, the reception shaft for the southern long tunnel option has a greater risk of impacting groundwater. Therefore, the short southern tunnel route is being progressed. The short southern tunnel route is also located in a more optimal location for connecting the pipeline to Break Pressure Tank/ Intermediate Pumping Station E which is proposed to be located at the ridge of Portsdown Hill near the reception tunnel shaft for the short southern tunnel route.

For further information on refinement of Section D since the Summer 2022 Consultation, see Section 3.4 of the 2024 Scheme Development Summary.

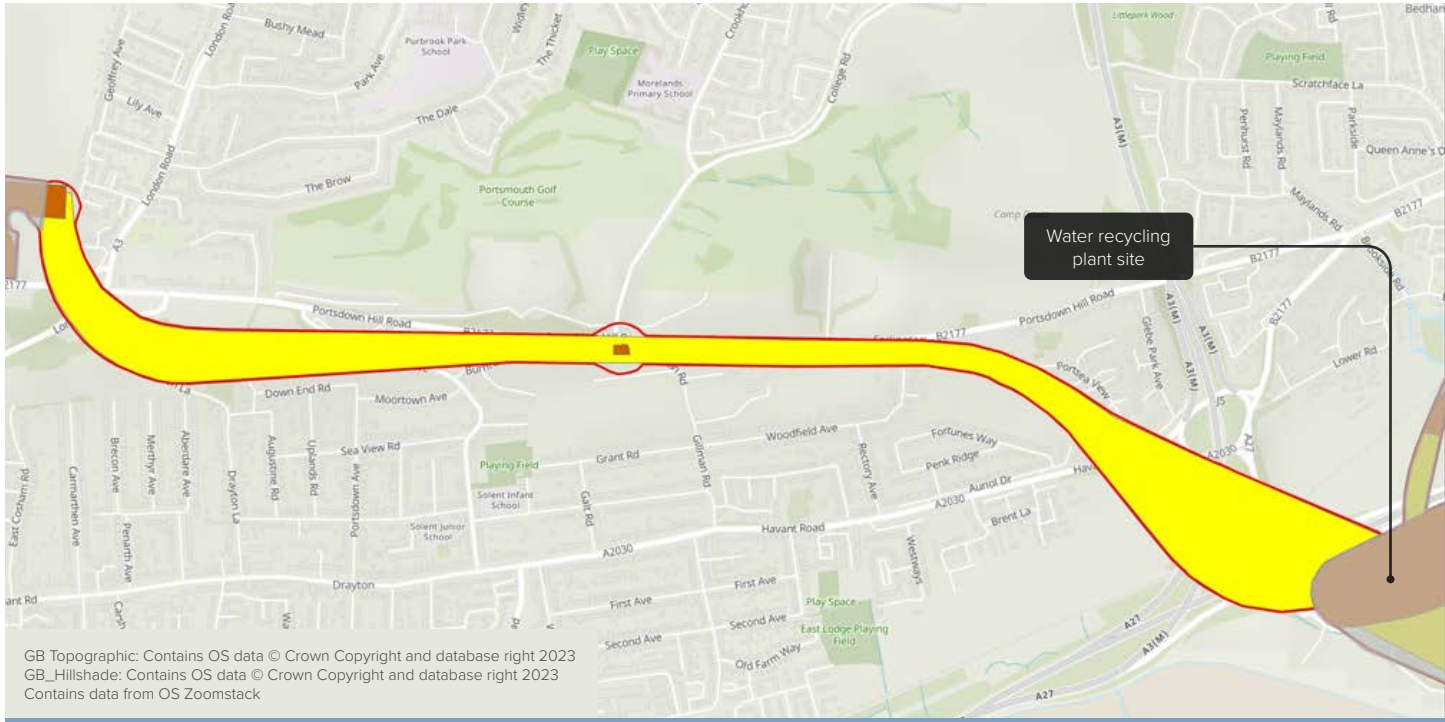


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Figure 13 — *Section D*

Section E:

Portsdown Hill to Boarhunt

Section description

Section E of the proposed pipeline route comprises the section that travels west from the ridge of Portsdown Hill, southwest of Widley to the west of Boarhunt. The site of Break Pressure Tank/Intermediate Pumping Station E would be located at the eastern end of Section E of the proposed Underground Pipeline. Further details of the Break Pressure Tank/Intermediate Pumping Station E is provided on page 30.

Section E is proposed to be installed using open cut construction. A number of construction compounds are identified along Section E. The section is primarily located within agricultural land and crosses a number of roads. To install the pipeline under New Down Lane, Widley Walk, Mill Lane, Pigeon House Lane, Crooked Walk Lane, Portchester Lane, Monument Lane and Boarhunt Road, temporary road closures would be required. For the crossing of Southwick Road (B2177), we would use lane closures to construct the pipeline, which would maintain access along this route during construction works.

Key features

- Consists of the section between the ridge of Portsdown Hill and Boarhunt.
- Break Pressure Tank/Intermediate Pumping Station E is within this section.
- Comprises open cut construction.
- The pipeline route would be installed under New Down Lane, Widley Walk, Mill Lane, Pigeon House Lane, Southwick Road (B2177), Crooked Walk Lane, Portchester Lane, Monument Lane and Boarhunt Road using open cut construction.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, we identified that the north of the pipeline section was at a lower topographic point and therefore, locating the pipeline route here may reduce landscape and historic environment impacts, but the pipeline route may be located closer to locally designated ecological sites. Following the Summer 2022 Consultation, a northern route option and a southern route option were identified and assessed.

The northern route option is proposed as it is at a lower elevation and a greater distance from the Fort Widley Scheduled Monument and a Grade II* listed building, which have a high degree of protection under national planning policy. Therefore, it has a lower impact on the landscape and historic environment. It is also considered that ecological impacts associated with the construction of the northern route would be temporary and that any impacts could be mitigated. These mitigation measures would be developed through the ongoing environmental impact assessment process.

For further information on refinement of Section E since the Summer 2022 Consultation, see Section 3.5 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section E. For a more detailed overview of Section E, including its construction compounds, please refer to the Book of Plans, pages 12 to 16.

Ref.	Location	Purpose	Access point
E-1	North of Portsdown Hill Road (B2177) and east of New Down Lane	Tunnelling construction compound for Section D tunnel reception shaft	New Down Lane
E-2	North of Portsdown Hill (B2177) and west of New Down Lane	Sectional site compound	New Down Lane
E-3	West of Pigeon House Farm	Water storage lagoon	Haul Road via Southwick Road (B2177)
E-4a	East of Southwick Road (B2177)	Sectional site compound	Southwick Road (B2177)
E-4b	West of Southwick Road (B2177)	Sectional site compound	Southwick Road (B2177)
E-5	West of Portchester Lane	Sectional site compound Water storage lagoon	Portchester Lane
E-6a	East of Boarhunt Road	Sectional site compound	Boarhunt Road
E-6b	West of Boarhunt Road	Sectional site compound	Boarhunt Road

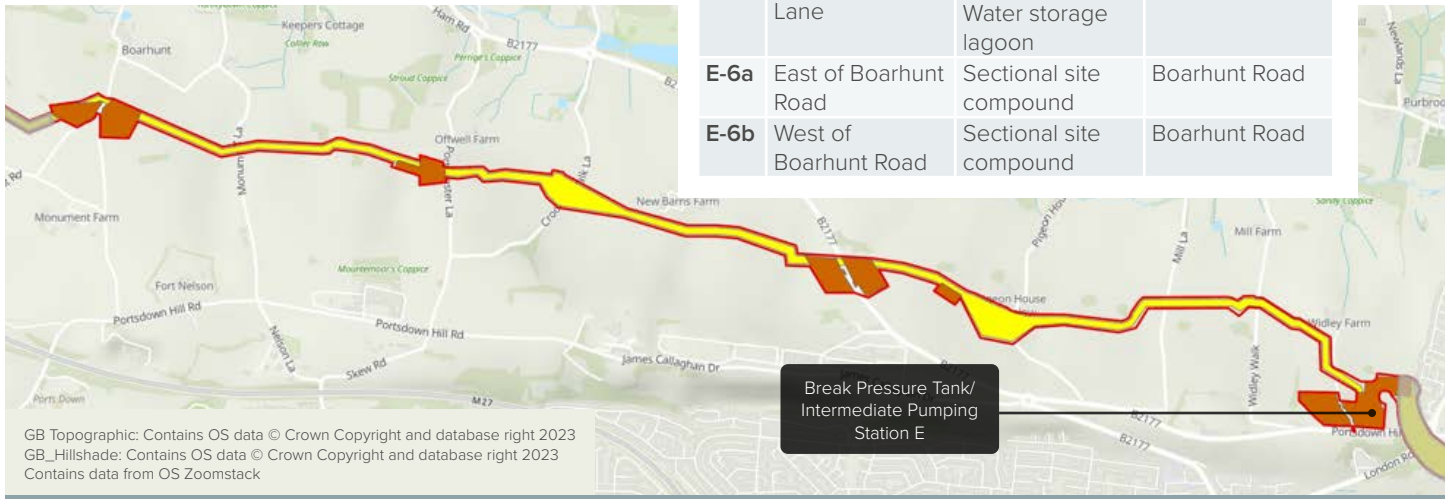

Figure 14 — *Section E*

Section F:

Boarhunt to Crockerhill

Section description

Section F of the proposed pipeline route would be located to the west of Boarhunt and travels northwest to the north of Crockerhill, across Forest Lane. The site of Intermediate Pumping Station F would be located within the middle to western part of Section F, within the vicinity of Albany Farm. Further details on Intermediate Pumping Station F are provided on page 31. Part of Section F would be located close to the site of Welborne Garden Village which is delivering 6,000 homes, schools and other community facilities to the west and east of Wickham Road (A32).

Section F is predominantly located within agricultural land. Within this section, the pipeline would largely be installed via open cut construction. Construction of the pipeline under Whitedell Lane and Forest Lane would be undertaken using open cut construction which would require temporary road closures. The pipeline would be installed under the River Wallington using trenchless construction to minimise impacts on the watercourse and nearby habitats. Construction compounds would be located on either side of this trenchless crossing.

Key features

- Between the west of Boarhunt and the north of Crockerhill.
- Proposed Intermediate Pumping Station F is within this section.
- Intersects Whitedell Lane and Forest Lane.
- Trenchless construction will be used to develop the pipeline underneath the River Wallington.

Design development since the Summer 2022 Consultation

Engagement with the developers of Welborne Garden Village was undertaken before the Summer 2022 Consultation to determine whether the pipeline route could be accommodated within the Welborne Garden Village development. This resulted in the identification of a potential pipeline route that was located within the pipeline corridor.

Following the Summer 2022 Consultation, further engagement was undertaken with the developers of Welborne Garden Village to consider potential risks of the potential pipeline route that had been previously identified. This included coinciding construction programmes and locating the Project near to proposed residential properties, some of which could be built and occupied by the time the pipeline is constructed.

As a result, several alternative pipeline routes were considered to avoid intersecting with Welborne Garden Village. The alternative route proposed avoids intersecting Welborne Garden Village and another planned residential development north of Knowle and is not considered to result in any greater level of environmental impact compared to the route presented at the Summer 2022 Consultation.

Figure 15 — *Section F*

For further information on refinement of Section F since the Summer 2022 Consultation, see Section 3.6 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section F. For a more detailed overview of Section F, including its construction compounds, please refer to the Book of Plans, pages 16 to 19.

Ref.	Location	Purpose	Access point
F-1	East of the River Wallington and west of White Dell Lane	Trenchless construction compound	Haul Road via White Dell Lane
		Water storage lagoon	
F-2	West of the River Wallington	Trenchless construction compound	Haul Road via Chalk Lane
F-3	East of Albany Farm	Sectional site compound	Chalk Lane
		Water storage lagoon	

Section G:

Crockerhill to Wickham

Section description

Section G of the proposed pipeline route would be located north of Crockerhill and Forest Lane and travels to the northwest of Wickham, east of Winchester Road (A334) and south of Blind Lane. Intermediate Pumping Station G would be located towards the north of Section G. Further details on Intermediate Pumping Station G are provided on page 32.

The southeastern part of this section would be located in agricultural land while the northwestern part of this section intersects Wickham Park Golf Club before entering agricultural land again. Both open cut construction and trenchless construction would be used in this section. Hoad's Hill (A32), Mayles Lane, the River Meon and Winchester Road (A334) would be crossed via trenchless construction to minimise impacts. Construction compounds would be located on either side of the trenchless crossings and at other locations within Section G. The installation of the pipeline under Castle Farm Lane, Forest Lane and Tanfield Lane would be undertaken using open cut construction which would require temporary road closures.

Key features

- Consists of the section between the north of Crockerhill and the northwest of Wickham.
- Intermediate Pumping Station G is within this section.
- Open cut and trenchless construction is proposed.
- The pipeline would be installed under Castle Farm Lane, Forest Lane and Tanfield Lane using open cut construction.
- Trenchless construction would be used to install the pipeline under Hoad's Hill (A32), Mayles Lane, the River Meon and Winchester Road (A334).

The draft Order Limits and draft Limits of Deviation for the pipeline within Wickham Park Golf Club have been drawn widely enough to allow for further engagement with the golf club on the location of the pipeline route so we can limit effects as much as practicable.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, the preferred pipeline corridor included land to the east and west of Titchfield Lane. Titchfield Lane provides connectivity between Wickham to the northeast and Fareham to the south. If Titchfield Lane needed to be temporarily closed to allow the pipeline to be constructed, this could cause disruption to the local highway network. The feedback received from the Summer 2022 Consultation, engagement with Hampshire County Council and Winchester City Council and our environmental assessments highlighted the potential constraints of locating the pipeline within the vicinity of Titchfield Lane. Therefore, we identified several pipeline routes to the east and west of Titchfield Lane and assessed these options.

The route proposed does not require construction work within Titchfield Lane. This route also reduces the potential for disruption to existing businesses and reduces impacts on ecology and the historic environment.

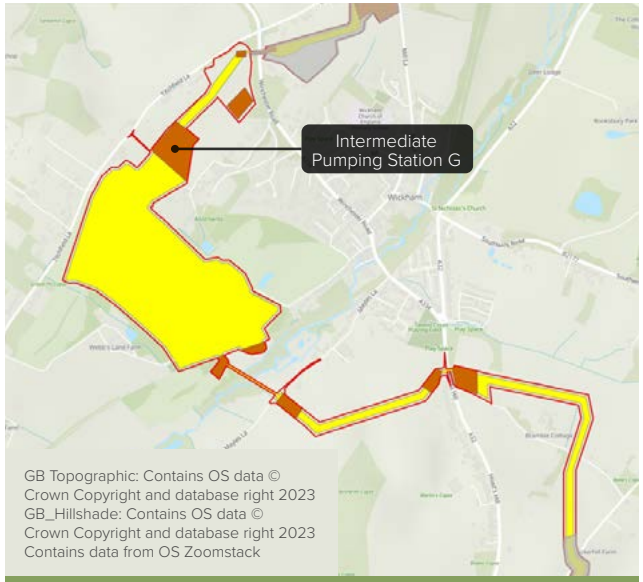

Figure 16 — *Section G*

For further information on refinement of Section G since the Summer 2022 Consultation, see Section 3.6 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section G. For a more detailed overview of Section G, including its construction compounds, please refer to the Book of Plans, pages 19 to 21.

Ref.	Location	Purpose	Access point
G-1	East of Hoad's Hill (A32)	Trenchless construction compound	Hoad's Hill (A32)
G-2	West of Hoad's Hill	Trenchless construction compound	Hoad's Hill (A32)
G-3	East of Mayles Lane	Trenchless construction compound	Mayles Lane
G-4	West of Wickham WTW	Trenchless construction compound	Tanfield Lane
G-5	Wickham WTW	Sectional site compound	Tanfield Lane
G-6	East of Titchfield Lane	Sectional site compound	Titchfield Lane
		Proposed IPS-G construction compound	
G-7	West of Winchester Road (A334) and south of Titchfield Lane	Sectional site compound	Titchfield Lane
		Water storage lagoon	
G-8	West of Winchester Road (A334) and south of Titchfield Lane	Trenchless construction compound	Titchfield Lane

Section H:

Wickham to Shedfield

Section description

Section H comprises the section from the northwest of Wickham, east of Winchester Road (A334) to the north of Shedfield where it crosses Winchester Road (B2177).

Section H passes through agricultural land and would be adjacent to vegetation, farms, gardens and residential properties. The beginning of Section H would be marked by the eastern construction compound associated with the trenchless crossing of Winchester Road (A334).

Much of Section H would be constructed via open cut methods. The pipeline installation underneath Blind Lane and Pricketts Hill would be constructed using open cut construction which would require temporary road closures.

Open cut construction would also be used to construct the pipeline under a tributary of the River Hamble, access roads within Shirrell Farm and several other access roads/tracks. Trenchless construction is proposed to construct the pipeline underneath a narrow access road located east of High Street in Shirrell Heath, next to Nightingale Crescent. Trenchless construction is being proposed here as the access road east of High Street would be too narrow for open cut construction. This trenchless crossing would also extend across High Street. Trenchless construction would also be used to install the pipeline under Winchester Road (B2177) to reduce disruption to this route. This section of trenchless construction would extend across areas of woodland on either side of this road.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, the pipeline corridor extended further north, crossing Black Horse Lane before crossing Winchester Road (B2177). Following the Summer 2022 Consultation, we received feedback that the operation of an existing business within this area could be temporarily disrupted during the construction phase. As a result, we identified an alternative route outside the preferred pipeline corridor to reduce the potential for impacts to the business.

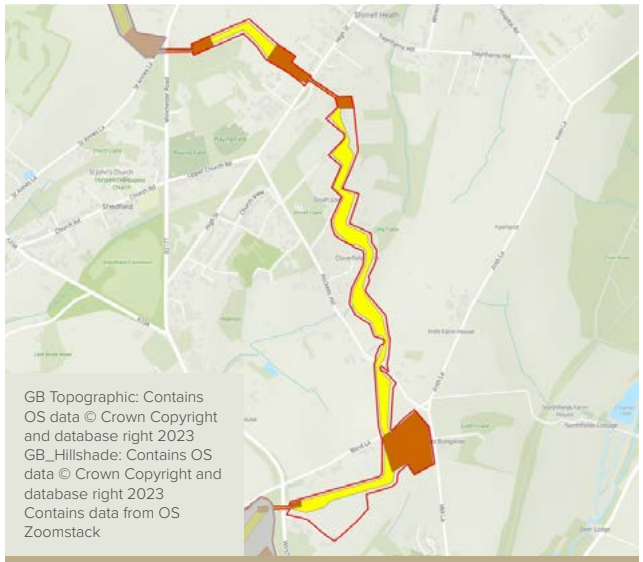

Figure 17 — *Section H*

Key features

- Links the northwest of Wickham to the north of Shedfield.
- Open cut and trenchless construction is proposed.
- The pipeline would be installed under Blind Lane and Pricketts Hill using open cut construction.
- Trenchless construction would be used to install the pipeline under Winchester Road (B2177) and High Street in Shirrell Heath.

The alternative route does not intersect Black Horse Lane.

The original route presented at the Summer 2022 Consultation and the alternative route were assessed against the criteria. It is considered that the alternative route reduces impacts on the business and it is also considered to have a reduced environmental impact, primarily from biodiversity, nature conservation and transport perspectives. As such, the alternative route is proposed.

For further information on refinement of Section H since the Summer 2022 Consultation, see Section 3.7 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section H. For a more detailed overview of Section H, including its construction compounds, please refer to the Book of Plans, pages 21 to 22.

Ref.	Location	Purpose	Access point
H-1	East of Winchester Road (A334) and south of Blind Lane	Trenchless construction compound	Haul Road via Blind Lane
H-2	South of Blind Lane and east of Mill Lane	Sectional site compound	Blind Lane
H-3	East of High Street Shirrell Heath	Trenchless construction compound	High Street
H-4	West of High Street Shirrell Heath	Trenchless construction compound	High Street
		Sectional site compound	
H-5	East of Winchester Road (B2177)	Trenchless construction compound	Haul Road via Titchfield Lane

Section J:

Shedfield to the River Hamble

Section description

Section J of the pipeline comprises the section from the west of Wickham Road (B2177) north of Shedfield, to Botley Road (B3035) southwest of Treefield Farm and south of the River Hamble.

Section J would be predominantly located within agricultural land. At the beginning of Section J, the trenchless crossing of Wickham Road (B2177) described in Section H continues beneath a wooded area and St Anne's Lane. The remainder of Section J would largely use open cut construction to install the pipeline. Section J would intersect Little Bull Lane, Sandy Lane and Curdridge Lane and open cut construction would be used to install the pipeline under these roads which would require temporary road closures. The section would be located east of the Meon Valley Hotel, Golf and Country Club. Towards the end of the section trenchless construction would be used for the crossing of Botley Road (B3035) and the River Hamble which are located on the boundary with Section K.

Key features

- Links from the north of Shedfield to the south of the River Hamble.
- Predominantly constructed via open cut construction.
- The pipeline would be installed under Little Bull Lane, Sandy Lane and Curdridge Lane using open cut construction.
- Trenchless construction would be used to install the pipeline under Botley Road (B3035) and the River Hamble.

Design development since the Summer 2022 Consultation

Design development has focused on two locations:

Sandy Lane crossing

Throughout the site selection process for the Project, our aim was to avoid locating infrastructure near residential properties wherever practicable. The potential pipeline route within the preferred pipeline corridor shown at the Summer 2022 Consultation crossed Sandy Lane within 15m of a residential property west of Sandy Lane. It was identified that construction of the pipeline may restrict access to the property and encroach on associated land. As such, an alternative route was identified and evaluated against the route presented at the Summer 2022 Consultation.

The alternative route would be 45m away from the closest residential property on Sandy Lane (as opposed to 15m), which reduces the potential for environmental impacts such as visual disturbances and construction noise and vibration. However further mitigation to reduce effects will be developed through the environmental impact assessment process. Mitigation measures would be required to minimise the potential for ecological impacts during the construction of the alternative route; however, similar measures would also be required for the route presented at the Summer 2022 Consultation. The alternative route is proposed due to the reduction in impacts to residential properties.

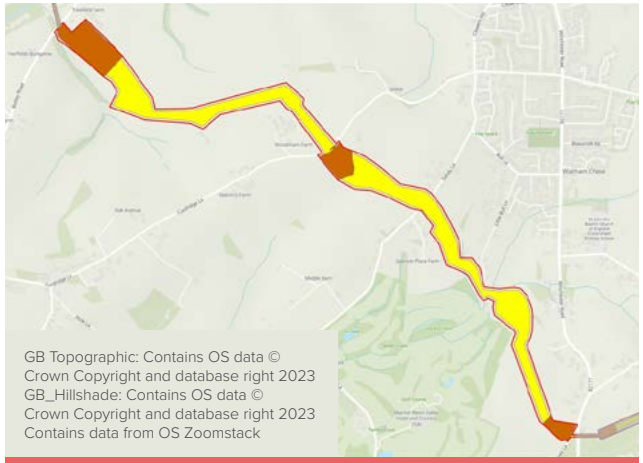

Figure 18 — *Section J*

Woodmans Farm

At the Summer 2022 Consultation, the route presented passed to the west of Woodmans Farm, located north of Curdridge Lane. Environmental surveys following the Summer 2022 Consultation identified several protected species in this area. To reduce the potential for impacts on protected species, an alternative route passing to the east of Woodmans Farm was identified and assessed against the route presented at the Summer 2022 Consultation.

The alternative route is proposed as no protected species have been identified to date in this area.

For further information on refinement of Section J since the Summer 2022 Consultation, see Section 3.8 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section J. For a more detailed overview of Section J, including its construction compounds, please refer to the Book of Plans, pages 22 to 24.

Ref.	Location	Purpose	Access point
J-1	West of St Anne's Lane	Trenchless construction compound	St Anne's Lane
		Sectional site compound	
J-2	South of Curdridge Lane	Sectional site compound	Curdridge Lane
J-3	South of Botley Road (B3035)	Trenchless construction compound	Botley Road

Section K:

The River Hamble to Lower Upham

Section description

Section K of the pipeline route is between the River Hamble and Mortimer's Lane (B3037), west of Lower Upham. Most of Section K would be located within agricultural land. Section K first crosses the River Hamble, which would be crossed using trenchless construction so that no works are required within the watercourse or its banks. The construction compounds for the trenchless crossing are proposed in locations that are outside of the floodplain and do not intersect vegetation close to the watercourse. The trenchless crossing of the River Hamble would also cross Botley Road (B3035).

Beyond the River Hamble, the pipeline heads north towards Bishop's Waltham and passes near Brooklands Farm and Tangier Farm. The pipeline route then reaches Winters Hill near Durley Street. At Winters Hill Road, the pipeline would be installed using trenchless construction. North of Winters Hill, the pipeline passes through a parkland landscape associated with Wintershill Hall. Break Pressure Tank K would be located just north of Wintershill Hall. Further details on Break Pressure Tank K can be found on page 33.

The pipeline route continues northwest and crosses Scivier's Lane and Alma Lane, where the pipeline would be installed using open cut construction which would require temporary road closures.

Key features

- Links from the south of the River Hamble to the west of Lower Upham.
- Break Pressure Tank K is within this section.
- Open cut and trenchless construction is proposed.
- The pipeline would be installed under Scivier's Lane and Alma Lane using open cut construction.
- Trenchless construction would be used to install the pipeline under Winters Hill.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, our preferred pipeline corridor had two options at Winters Hill near Durley Street, a western option and an eastern option. This was because the eastern option intersected the route of an aviation fuel pipeline that was being constructed by Esso between London and Southampton.

Following the Summer 2022 Consultation, we investigated the intersection of the eastern option with Esso's pipeline further to ensure that suitable buffers are retained between our pipeline and the Esso pipeline. These investigations identified that the eastern option would cross Esso's pipeline at a location where the Esso pipeline was underneath a road and therefore our pipeline would need to be much deeper than normal to implement the required buffers.

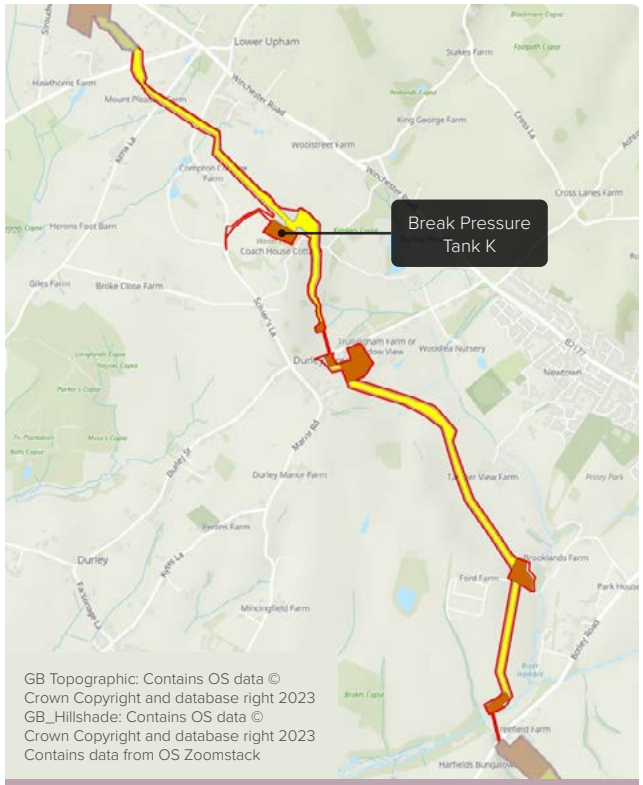

Figure 19 — *Section K*

Based on this information, we considered the suitability of the western option. Further mitigation for any ecological or landscape effects relating to the parkland at Winters Hill would be developed through the environmental impact assessment process.

For further information on refinement of Section K since the Summer 2022 Consultation, see Section 3.9 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section K. For a more detailed overview of Section K, including its construction compounds, please refer to the Book of Plans, pages 24 to 27.

Ref.	Location	Purpose	Access point
K-1	North of the River Hamble	Trenchless construction compound	Haul road via Winters Hill
		Water storage lagoon	
K-2	West of Brooklands Farm	Sectional site compound	Haul road via Winters Hill
K-3	South of Winters Hill	Sectional site compound	Winters Hill
K-5	North of Winters Hill	Trenchless construction compound	Haul Road via Scivier's Lane
K-6	North of Wintershill Hall	Proposed BPT-K compound	Scivier's Lane

Section L:

Lower Upham to Brambridge

Section description

Section L of the proposed pipeline route comprises the section from Mortimers Lane (B3037) near Lower Upham to the northwest of Brambridge, Highbridge Road (B3335). Most of Section L would be located within agricultural land and therefore constructed using open cut construction, however, it also intersects some roads. The pipeline route first crosses Mortimers Lane (B3037) and Stroudwood Lane, where the pipeline would be installed using open cut construction. For construction within Mortimers Lane (B3037), lane closures would be used to maintain access along this route and road closures would be used on Stroudwood Lane. The pipeline then heads west towards Low Hill Farm and Crowdhill. The pipeline route passes between Crowdhill and Fisher's Pond and near to the Park Pale at Marwell Scheduled Monument.

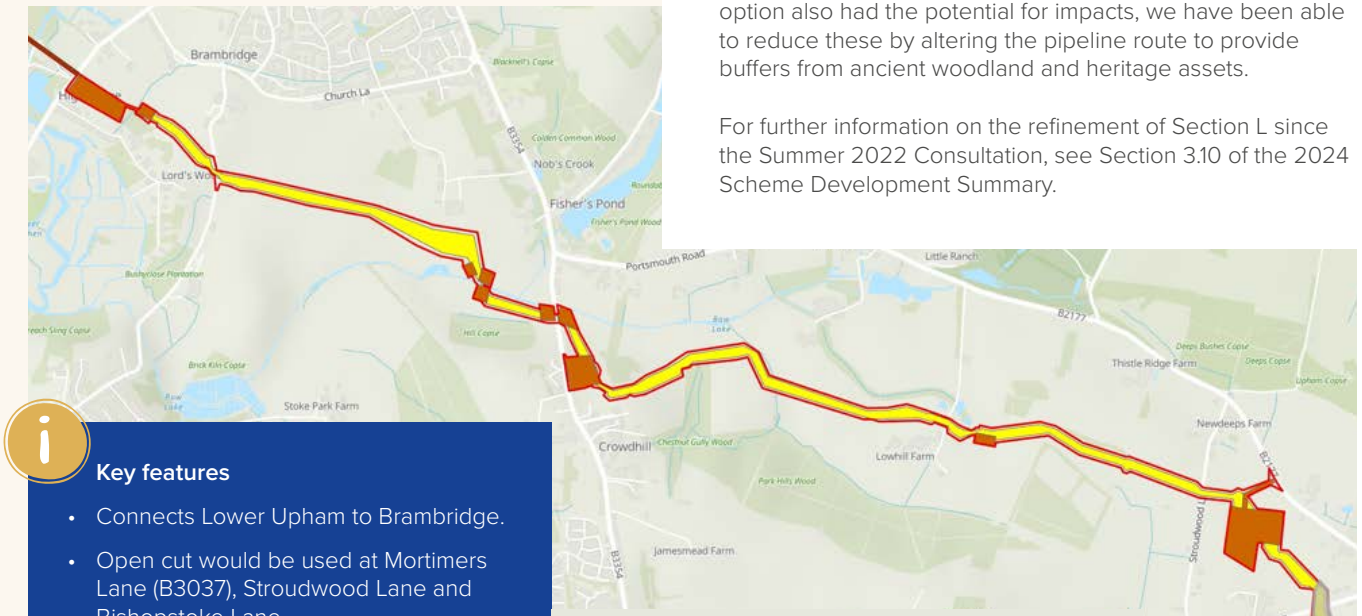

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Figure 20 — *Section L*

Key features

- Connects Lower Upham to Brambridge.
- Open cut would be used at Mortimers Lane (B3037), Stroudwood Lane and Bishopstoke Lane.
- Trenchless construction would be used at Winchester Road (B3354) and the Bow Lake watercourse.

Trenchless construction would be undertaken to cross Winchester Road (B3354), the Bow Lake watercourse and a tributary of the River Itchen (north of Wardle Road) to minimise impacts on the local highway network and these watercourses. South of Colden Common, the pipeline crosses Bishopstoke Lane, which may need to be temporarily closed to facilitate open cut construction. The pipeline route then passes Brambridge before reaching Highbridge Road (B3335).

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, we presented two options for the pipeline route between Fisher's Pond and Crowdhill. The northern option (called option Z1) initially crossed the Bow Lake watercourse before routing along Portsmouth Road (B2177) and crossing Winchester Road (B3354) at the junction between the two roads. The southern option (called option Z2) was located closer to Crowdhill and passed near to ancient woodland and the Park Pale Scheduled Monument at Marwell before crossing Winchester Road (B3354) and the Bow Lake watercourse.

The southern option is proposed as the northern option would have resulted in major transport impacts through the complete closure of Portsmouth Road (B2177) for several months to construct the pipeline. Although the southern option also had the potential for impacts, we have been able to reduce these by altering the pipeline route to provide buffers from ancient woodland and heritage assets.

For further information on the refinement of Section L since the Summer 2022 Consultation, see Section 3.10 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section L. For a more detailed overview of Section L, including its construction compounds, please refer to the Book of Plans, pages 27 to 31.

Ref.	Location	Purpose	Access point
L-1	Southwest of Portsmouth Road (B2177)	Sectional site compound	Portsmouth Road (B2177)
L-2	East of Lowhill Farm	Water storage lagoon	Haul Road via Stroudwood Lane
L-3	East of Winchester Road (B3354)	Sectional site compound	Winchester Road (B3354)
L-4	East of Winchester Road (B3354)	Sectional site compound Trenchless construction compound	Winchester Road (B3354)
L-5	West of Winchester Road (B3354)	Trenchless construction compound	Winchester Road (B3354)
L-6	South of Bow Lake	Trenchless construction compound	Haul Road via Winchester Road (B3354)
L-7	North of Bow Lake	Trenchless construction compound	Haul Road via Bishopstoke Lane
L-8	North of Bow Lake	Water storage lagoon	Haul Road via Bishopstoke Lane
L-9	East of an upstream tributary of the River Itchen	Trenchless construction compound	Haul Road via Bishopstoke Lane
L-10	East of Highbridge Road (B3335)	Trenchless construction compound Sectional site compound	Highbridge Road (B3335)

Section M:

Brambridge to Otterbourne Water Supply Works

Section description

Section M of the proposed pipeline route links the northwest of Brambridge to Highbridge Road (B3335) to the existing Otterbourne Water Supply Works. This section would be required to cross the River Itchen, which is a Special Area of Conservation and a Site of Special Scientific Interest designated habitats and ecological sites. To ensure we are not impacting the River Itchen and its environmental designations, we are proposing to use trenchless construction to cross it. The pipeline would be constructed at an approximate depth of 20m below ground level when crossing the River Itchen to ensure impacts are minimised. The trenchless construction under the River Itchen would also pass under Highbridge Road (B3335) and the section of the Southwest Main Line railway between Winchester and Southampton.

West of the River Itchen, the pipeline route passes alongside Otterbourne Park Wood before heading north. The pipeline route has been designed to ensure a suitable horizontal buffer has been implemented from Otterbourne Park Wood, as it is designated as ancient woodland.

The pipeline route crosses Kiln Lane, which would be temporarily closed to facilitate open cut construction of the pipeline. North of Kiln Lane, the pipeline crosses an upstream tributary of the River Itchen.

Key features

- Links the northwest of Brambridge to Otterbourne Water Supply Works.
- Trenchless construction would be used to cross the River Itchen and one of its tributaries. Trenchless construction would be used to install the pipeline under the River Itchen, Highbridge Road (B3335) and the nearby railway line.
- The pipeline would be installed under Kiln Lane using open cut construction.

This tributary would be crossed using trenchless construction to minimise any impacts that may be posed to the River Itchen. North of this tributary, the pipeline would connect into the Otterbourne Water Supply Works. From here, the source water would be treated to drinking water standards before being sent into supply.

Design development since the Summer 2022 Consultation

At the Summer 2022 Consultation, we presented two options for crossing the River Itchen before the pipeline reached the Otterbourne Water Supply Works. We presented a northern option (called option Z3), which was located closer to Colden Common and passed through Brambridge Park and a southern option (called option Z4), which passed east of Highbridge.

We undertook a number of environmental assessments and engineering investigations to determine which option was the most suitable. This resulted in the selection of the southern option. The northern option was partly located within the South Downs National Park, whereas the southern option did not intersect the National Park. Therefore, the northern option would have greater landscape impacts. The northern option would also have passed through chalk geology and groundwater when passing under the River Itchen, whereas the southern option was not within the chalk geology and posed less of a risk of impact to the groundwater that supports the River Itchen.

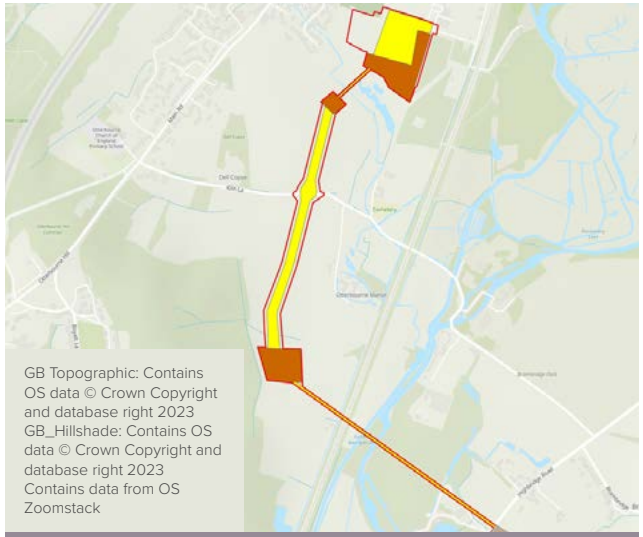


Figure 21 — *Section M*

We also considered options when designing the crossing of the upstream tributary of the River Itchen, which is located north of Kiln Lane. This was to ensure that construction works did not impact the ecology and water quality of a watercourse that was upstream of the River Itchen. Our initial option involved a short section of trenchless crossing, with construction compounds located close to the banks of the watercourse. This initial option had the potential for adverse impacts, as the construction compounds would have been located in the floodplain of the watercourse. As a result, we extended the length of the trenchless construction to ensure that construction works would not be required close to the banks of the watercourse and would be away from the floodplain.

For further information on refinement of Section M since the Summer 2022 Consultation, see Section 3.11 of the 2024 Scheme Development Summary.

Construction compounds

This table sets out the construction compounds that are anticipated to be required within Section M. For a more detailed overview of Section M, including its construction compounds, please refer to the Book of Plans, pages 31 to 32.

Ref.	Location	Purpose	Access point
M-1	East of Otterbourne Park Wood	Trenchless construction compound for trenchless reception shaft	Haul Road via Kiln Lane
M-2	South of an upstream tributary of the River Itchen	Trenchless construction compound	Haul Road via Kiln Lane
M-3	South of Otterbourne WSW	Sectional site compound	Otterbourne WSW
		Trenchless construction compound	

Other works and operations

Use of the Eastney Long Sea Outfall

The existing Eastney Long Sea Outfall takes treated wastewater from our Budds Farm Wastewater Treatment Works and releases this into the Solent, 5.7km south of Portsea Island. The treated wastewater is pumped to the Eastney Long Sea Outfall via the Eastney Transfer Tunnel using the Eastney Pumping Station.

Should our Development Consent Order application be approved, we would divert some of the treated wastewater, which would normally be released into the Solent, to the water recycling plant to be turned into purified recycled water. The reject water produced from the water recycling process would contain the same impurities as those found in the treated wastewater, which is its source. This reject water would be returned to Budds Farm and released to the Solent using the existing Eastney Long Sea Outfall.

When the water recycling plant is operating at full capacity during a drought, approximately 20 million litres per day of reject water could be released to the Solent replacing the 80 million litres of treated wastewater that would usually be released.

Outside of drought conditions, the amount of reject water released to the Solent could be much lower depending on the operation of the water recycling plant, itself dependent on how water is needed at Otterbourne and the amount of spring water available to supplement the reservoir.

Isolation, air and washout valves

Along the proposed pipeline routes, a number of isolation, air and washout valves and associated chambers would be required.

- Isolation valves would be required on either side of major infrastructure or water body crossings where it may be difficult to gain access for repair and maintenance of the proposed pipeline.
- Washout valves would be located at topographic low points along the proposed pipeline routes to allow for emptying of a section of pipeline for repair and maintenance. Usage frequencies would be minimal, for example, in the event of an emergency. The washout valves would release water to open land, watercourses and existing storm drainage or tankers.
- Air valves would be required to release any trapped air within the proposed pipeline routes as water is transferred.

The isolation, air and washout valves would be contained within below-ground chambers and covered. No permanent access would be required to the isolation, air and washout valves. Specific activities relating to the operation and maintenance of washouts would be discussed with relevant landowners. The location of isolation, air and washout valves would be determined as part of the final detailed design that is to be developed following the approval of our Development Consent Order application. Further investigations would be undertaken to determine any operating controls that should be implemented relating to the release of water from washout valves to watercourses or land.

Upper Test © Wessex Rivers Trust

4. Environmental Impact Assessment process

from Southern Water

Explanation of the Environmental Impact Assessment process

The Environmental Impact Assessment (EIA) process is an important framework around which the consent process for major infrastructure is built, informing scheme development, consenting and future plans for delivery.

The purpose of the EIA is to assess the impacts, both positive and negative, that a project may have on the environment and to identify ways in which negative impacts can be avoided, minimised or mitigated. The EIA process assesses the combined impact of the project with other projects in the area, this is known as cumulative impact assessment. For the Development Consent Order process, the EIA will set out the likely significant effects of the Project and inform the Secretary of State's decision on whether to give consent for the Project.

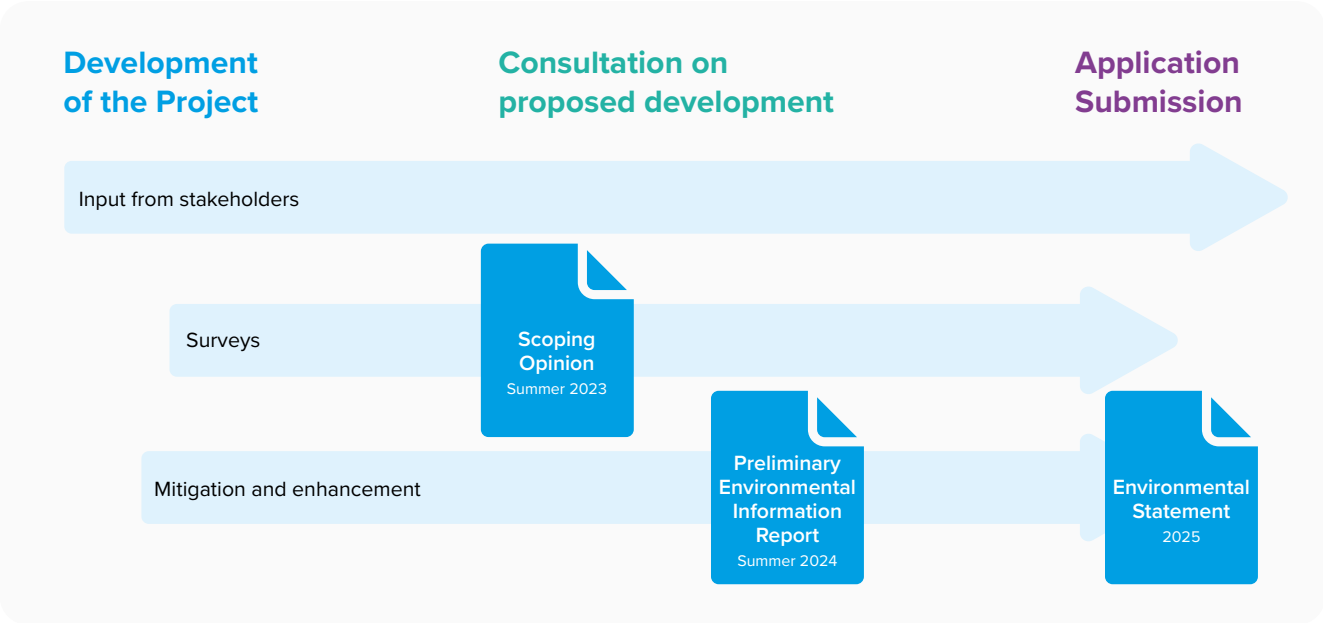


Figure 22 — *The process of environmental assessment*

Scoping

The scoping process is used to determine which environmental topics should be assessed and the level of detail required for the EIA. A Scoping Report was submitted to the Planning Inspectorate in Summer 2023 setting out our proposed approach to the EIA. The Planning Inspectorate subsequently issued a Scoping Opinion with its views on our proposed approach, which we are taking into account as we undertake the EIA. You can view our Scoping Report and the Planning Inspectorate's Scoping Opinion on their website: www.gov.uk/government/organisations/planning-inspectorate

Preliminary Environmental Information Report

As part of the EIA process, we have carried out preliminary environmental assessments. These assessments represent a point in the EIA process when the design of the Project is still in development and the likely significant effects are continuing to be understood. We present these early assessment outcomes in a Preliminary Environmental Information Report.

The Preliminary Environmental Information Report is presented in the format of a draft Environmental Statement. It provides consultees (the public, local planning authorities, environmental bodies, etc) with preliminary information that enables them to understand the likely significant effects of the Project based on the environmental assessments carried out to date and to provide feedback on this information through the consultation process. A Non-Technical Summary has also been produced that summarises the Preliminary Environmental Information Report. These documents will help you better understand our proposals, their preliminary effects and any initial measures proposed to reduce negative impacts. More detailed environmental assessments will be shared in our Environmental Statement (see below).

Environmental Statement

Surveys will continue to be undertaken to develop our understanding of the current environmental conditions within the Project boundary and surrounding area. This information is used to determine how the Project may affect the existing environment (both negatively and positively) and to design mitigation to reduce any potential negative environmental effects. An Environmental Statement will be submitted as part of our Development Consent Order application. It will report on the completed EIA, providing the findings of the more detailed environmental assessments undertaken and our proposed mitigation measures.

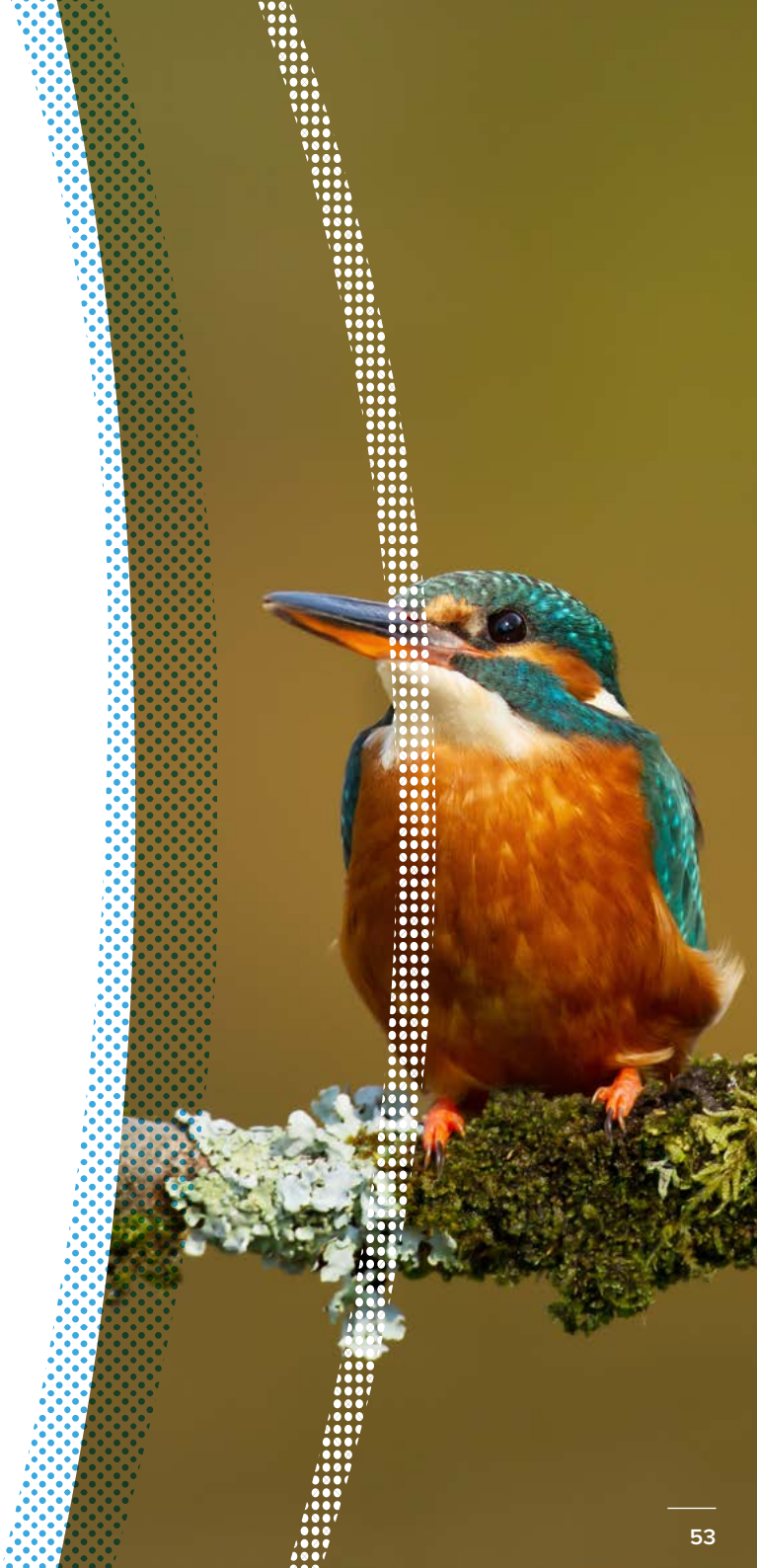
Mitigation

To ensure that effects on the environment are avoided or reduced, various mitigation measures have been embedded when designing the Project. Other measures are proposed as part of a suite of mitigation to address identified negative effects. The principles below are applied to the Project to avoid, prevent and/or minimise the potential environmental impacts. This is known as the mitigation hierarchy:

- **Primary mitigation** – measures embedded into the Project and its design to avoid or minimise impacts. For example, avoiding, where practicable, designated conservation sites and residential areas, measures to minimise vegetation loss and adopting trenchless construction techniques at sensitive locations such as rivers and main roads.
- **Secondary mitigation** – additional measures to reduce environmental effects. For example, planting trees to screen views where development is visually intrusive, restoration of impacted vegetation and offsetting/ compensating for certain effects.
- **Tertiary mitigation** – measures that meet legislative requirements or standard best practices. For example, measures to control construction dust, noise and vibration.

In addition, environmental enhancements may be incorporated where practicable, such as landscape and ecological enhancements and management.

Sections 5 and 6 of this brochure summarise the mitigation measures we have designed for the Project, as well as other measures we are considering, to address the effects on people and the environment. These measures will continue to be considered and informed by feedback from consultation and engagement, including identifying opportunities to enhance the environment through environmental design.



5. How the Project could affect you

from Southern Water

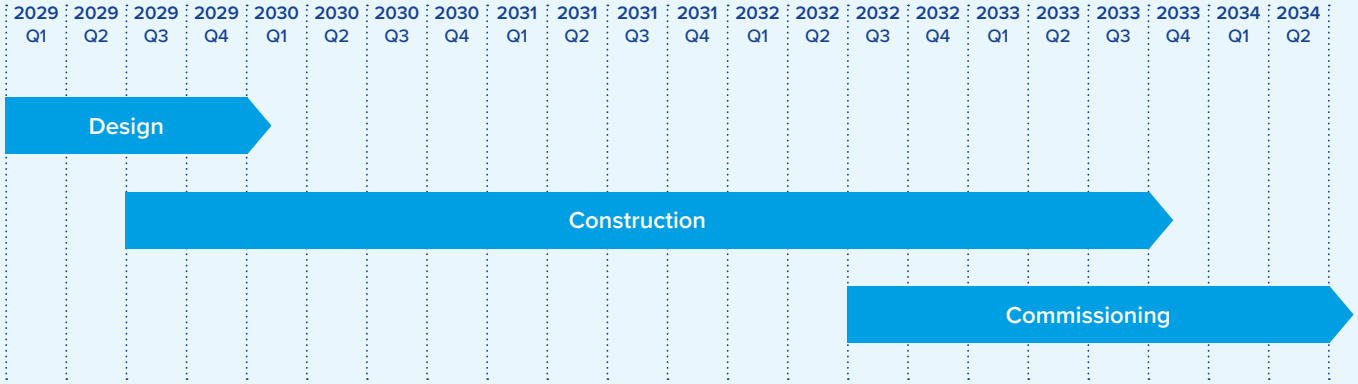
Construction

Section 3 explains the type of construction techniques we may need to use for the Project, including for the installation of new underground pipelines. It also explains the type of temporary construction compounds that would be required to support construction of the pipelines and above ground plant.

Each component of the Project would involve different construction activities, some of which could take place at the same time. In this section, we outline the ways in which construction could affect you and how we will seek to avoid, reduce or mitigate any likely effects.

The construction programme – indicative timeline

Construction is anticipated to start in 2029 and last approximately four years. The indicative timelines for the key stages of the construction programme are shown below.



The typical working hours for construction of the Project will be as follows:

- **Monday to Friday:** 07:00 to 19:00 in summer and 07:00 to 17:30 in winter.
- **Saturday:** 07:00 to 17:00.

Works outside these typical working hours or overnight (including Sundays and bank holidays) may be required for the construction of some aspects of the Project, including, but not restricted to, trenchless crossings and tunnelling, construction works within or near highways and railways and abnormal load deliveries. This may be as a result of ground conditions that require continuous working, or works within highways to minimise traffic disruption.

Operation and maintenance

If the Project is approved, the proposed water recycling plant would run 24 hours a day with operatives always in attendance. Routine activities would include deliveries to the site, which would vary in number depending on whether the water recycling plant is operating at peak capacity (where several lorries per day could enter the site). Routine maintenance would also take place at the site.

For the pumping stations located at the proposed water recycling plant site, including the high lift pumping station, pumps and equipment would be equipped with remote monitoring and control and attendance by an operative would be required approximately once a month for planned routine maintenance and monitoring.

Similarly, for the operation of the intermediate pumping stations and break pressure tanks located along the proposed pipeline route to Otterbourne, attendance by an operative would be required approximately once per month for planned routine maintenance and approximately once per week for monitoring. Washout valves along the pipeline are only likely to be used in an emergency when a section of pipeline needs draining to facilitate repairs. A maintenance cycle for washout valves, isolation valves and air valves would occur yearly.

How we will manage impacts

We recognise that our proposals have the potential to impact local communities and the surrounding environment in a number of ways. Both positive and negative effects may occur during construction and operation of the Project and will be assessed fully through the Environmental Impact Assessment process. This Section outlines the potential effects on people and communities during construction and operation of the Project and the measures we are considering to avoid or reduce these effects. Potential effects on the environment are outlined in Section 6.

There are several topics where we have undertaken preliminary environmental assessments to understand any likely effects from construction and operation of the project. These are outlined below, however more detail on our assessments can be found in our Preliminary Environmental Information Report and its associated Non-Technical Summary.

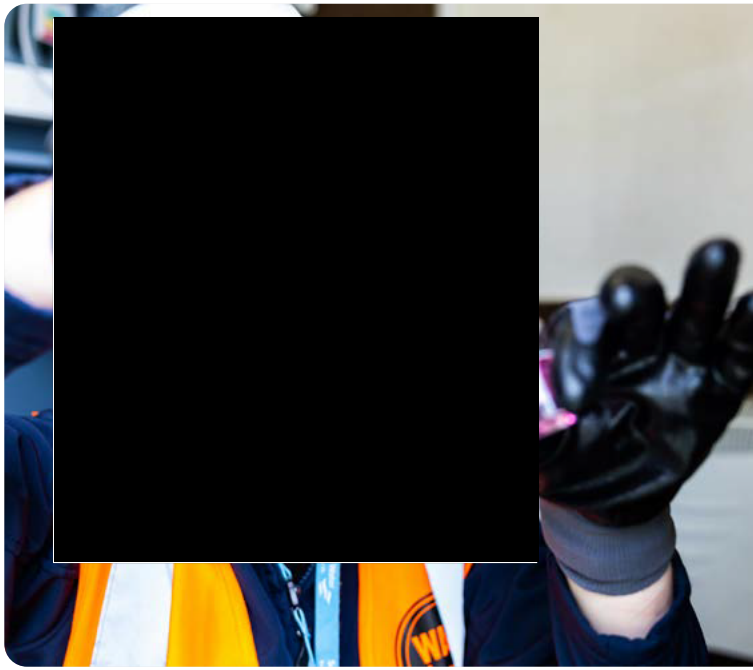
Construction Environmental Management Plan

During construction, we will look to reduce negative effects on the community using industry best practice and established construction techniques. A key document that we are developing is an Outline Construction Environmental Management Plan to summarise how we will avoid, reduce or mitigate the effects of construction on people and the environment.

A preliminary version of the Outline Construction Environmental Management Plan has been provided as part of this consultation, setting out our initial approach to environmental management for the construction phase of the Project. This will be developed further for our Development Consent Order application as the environmental assessments and design are progressed. A more detailed Construction Environmental Management Plan would also be developed after the Project is consented and prior to construction.

Examples of the measures to be included in the Construction Environmental Management Plan may include, where practicable:

- Good housekeeping at construction sites and locating machinery and equipment to minimise effects on people and the environment.
- Measures to reduce emissions from vehicle, plant and equipment use, including no idling vehicles on construction sites and avoiding the use of diesel or petrol-powered generators.
- Use of best practice noise reduction techniques, including scheduling works to minimise noise at highly sensitive times.
- Preparing a Rights of Way Management Plan to minimise any disruption caused by footpath closures or diversions.
- Keeping communities informed of the timing of construction activities and possible disruption during the construction period.



Creating a new source for water supplies

A key benefit of the Project for our water supply customers in Hampshire would be the additional resilience provided to their drinking water. Creating a new source of water would mean we're better prepared for drought and would reduce the risk of restrictions on domestic water use being imposed if a drought did occur. This is because we propose to use recycled water to supplement the spring water in the Havant Thicket Reservoir, ensuring there's more water to be treated at our Otterbourne Water Supply Works before being sent into supply.

While there may be a potential change in taste to the water supplied to customers, as it would include the blend of sources in the reservoir, all water sent into supply would continue to meet strict regulatory standards.

Traffic, access and Public Rights of Way

We would use trenchless installation methods (as described in Section 3 of this brochure) to install the pipeline under major roads to avoid or minimise traffic effects as far as possible. We may need to use temporary traffic and footpath diversions, for example, where we are installing the pipeline using trenched methods and, in some cases, close sections of road or footpaths. A Framework Traffic Management Strategy, detailing potential road closures and associated traffic management that may be required during construction, will be submitted with our Development Consent Order application.

Where we need to close a road or footpath, this would be done for as short a time as possible to reduce impacts on local communities, however there may be some temporary effects on journeys. Works affecting footpaths will be in accordance with a Rights of Way Management Plan to be submitted as part of the Development Consent Order application to ensure we limit effects on public access as much as possible.

During the construction period, we would need to use some existing accesses to our working areas and create some temporary accesses from the road network. We would use existing accesses where possible to limit disruption and any new temporary access points would be returned back to their original state. Our proposed access locations, as currently identified at this stage of the Project, are shown in the Book of Plans published as part of this consultation.

After the Project is consented and before construction starts, a Construction Traffic Management Plan would be produced to outline how disruption to existing users of the road network and to surrounding communities during construction would be minimised. Measures set out in the Construction Traffic Management Plan could include:

- Limiting the number of vehicle movements associated with the movement of materials and people.
- Minimising the impacts of construction traffic on local communities.
- Identifying safe and appropriate construction traffic access routes.

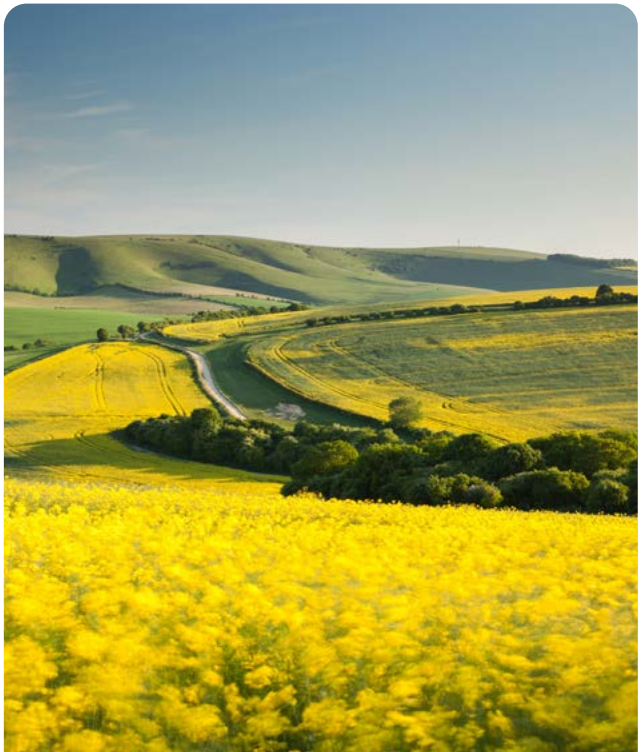
The draft Framework Construction Traffic Management Plan, published as part of this consultation, sets out our general approach to traffic management based on what we know at this stage of the Project. Before construction of the Project begins, the detailed Construction Traffic Management Plan will be prepared for the duration of construction of the Project.

A Construction Worker Travel Plan would also be prepared for the construction phase of the Project to include a package of measures aimed at encouraging more sustainable travel among construction workers, such as car-sharing and using public transport where possible.

Air quality and odour

During construction of the Project, activities such as earthworks and vehicle movements could result in emissions which may affect air quality. Our preliminary Outline Construction Environmental Management Plan discusses how we would minimise and mitigate the impact of construction effects, including measures such as developing a Dust Management Plan, conducting regular site inspections and using dust suppression techniques.

During operation, Budds Farm Wastewater Treatment Works will continue to operate as it does currently with its existing odour management systems that are in place.



Noise and vibration

Construction activities have the potential to result in some temporary construction noise and vibration effects on people living or working in close proximity to the Project, for example through the use of construction machinery and construction traffic travelling along existing roads.

Our preliminary Outline Construction Environmental Management Plan details measures that we could potentially use to minimise the effects of noise and vibration on people, including:

- Providing acoustic screening and enclosures
- Selecting of plant and working methods to minimise noise and vibration emissions
- Placing equipment carefully to minimise noise disturbance
- Using plant movement alarms which vary the loudness levels according to ambient noise levels

Whilst there is the potential for noise and vibration to be emitted from the proposed water recycling plant, high lift pumping station and intermediate pumping stations, the design, operation and maintenance of these elements will be undertaken in accordance with best practice guidance. This will ensure that any operational noise and vibration associated with the Project is minimised.

Community and employment

Construction of the Project could support up to 900 jobs in the South East of England at the peak of construction, of which up to 350 could be in Hampshire. We are developing a Skills and Employment Plan to support the Development Consent Order application which will aim to maximise the delivery of construction jobs and training opportunities in the local area.

Wherever practicable, the design of the Project has sought to avoid settlements, commercial land and property and major housing allocations, to reduce the risk of disruption and possible effects on accesses, businesses, properties and land.

However, some construction activities have the potential for temporary effects on users of community or social facilities, for example public spaces and access to places that may affect work, leisure and recreation activities. We know areas such as Hooks Lane Recreation Ground and Staunton Country Park will have short-term reduced access during construction. Measures to manage the effects of construction on such areas will continue to be developed and will include:

- Reducing the duration and area of construction activity wherever practicable.
- Controlling construction noise and vibration through best practice measures.
- Reducing temporary land take and the potential for disruption to businesses, accesses and amenities.

Throughout construction, there would be regular engagement with businesses and communities to keep them informed of any likely disruption or effects and what is being done to reduce them.

Landscape and visual

The design of the Project has sought to avoid sensitive landscape designations, such as the South Downs National Park and landscape features wherever possible to avoid or minimise the visual effects of the Project on important viewpoints and landscapes.

Across the Project area, there would be some temporary visual effects as a result of construction, mostly for residents living in close proximity to the Project or people using public rights of way and other footpaths.

Good construction practices are set out in the preliminary Outline Construction Environmental Management Plan to manage the visual effects of construction. These include, for example, maintaining well-managed and tidy construction working areas and site compounds, storing topsoil no higher than 2m high and keeping construction lighting to a minimum.

Once the Project is operational, temporary working areas, such as construction compounds and the ground above trenches for the pipeline, would be restored in line with our Reinstatement Strategy.

Apart from the water recycling plant and above ground plant, most of the Project infrastructure would be below ground. Some existing vegetation may have to be removed to facilitate construction, which may take some years to reinstate fully. We would look to minimise the removal of existing vegetation wherever practicable and monitor the growth and maintenance of replacement planting to ensure that it is establishing. Any action taken would follow the processes as detailed in the Reinstatement Strategy.

The Reinstatement Strategy forms part of our Outline Landscape and Ecological Management Plan and will be submitted as part of the Development Consent Order application.

Our landscape and visual impact assessment has informed the design of the Project so far, including the siting and design of permanent above ground plant, as explained in Section 3 of this brochure and our draft illustrative Outline Environmental Masterplan, published alongside this consultation.

The initial design of above ground plant, including the treatment and landscaping of the sites, is being carefully considered and informed by discussions with relevant Local Planning Authorities to minimise landscape and visual effects wherever practicable.

Question:

What do you think about the measures we intend to take to minimise operational effects on people that might be impacted?

Land use

During the design of the Project, we have sought to avoid settlements, commercial land and property, major housing allocations and the best and most versatile agricultural land, where reasonably practicable, to reduce the risk of disruption to existing property and land uses. In some areas, we'll also reduce the construction working area where we can't avoid working in sensitive areas.

However, temporary effects on land use during the construction of the Project will include some temporary loss of agricultural, community and commercial land. We will also require some land permanently to build and operate the Project.

We are engaging with all parties with an interest in land that could be affected by the Project. More information on land and property requirements is explained in the next Section.

Question:

What do you think about the measures we intend to take to minimise construction effects on people that might be impacted?

Land ownership

People with an interest in land in close proximity to the Project may be affected. We will need to access, use and acquire land either on a temporary or permanent basis for a variety of reasons for the Project. This involves securing interests in land including the:

- Acquisition of freehold interests in land
- Acquisition of rights over land
- Temporary possession of land to construct the Project

Land required permanently to operate and maintain the Project includes the land for the water recycling plant and above ground plant, such as pumping stations and break pressure tanks, which, upon completion of the work, will be fenced off for security and operational reasons. We would also need land for environmental mitigation and enhancements. Temporary occupation of land includes working areas for construction activities and compounds for offices, welfare and storage of materials during construction. We would return the land to its former condition or look for opportunities to enhance the landscape upon completion of the works. All works would be undertaken in accordance with the Reinstatement Strategy.

Where pipelines (including tunnels) are installed underground, the land above the pipeline will generally continue to be able to be used as before, though there may be some restrictions where access may be required and on the type of activities being carried out over the pipeline. Where tunnelling would be used underneath residential areas and roads, we will conduct a number of investigations, surveys and monitoring before and throughout the construction period to protect land and property interests. You can learn more about tunnelling in our Frequently Asked Questions and in Section 3.

We will continue to engage with those with a land interest likely to be affected by the Project throughout the planning process and construction of the Project.

If you believe you have such an interest and have not been contacted already, please get in touch. Contact details for our Land Agents are below.

Acquisition of land interests

Where we need to acquire interests and rights in land, both on a temporary or permanent basis, we are committed to reaching agreement with affected parties. Where agreements cannot be reached, Compulsory Acquisition powers could be applied for through the Development Consent Order process to secure any necessary interests, but our preference is to reach voluntary agreements with landowners.

Compensation

Where land interests are affected by the Project, entitlement to compensation will be determined on a case-by-case basis and will depend on the nature of the interest and how that interest is impacted. For further information, please contact our Land Agent, Dalcour Maclaren.

How to find out more

If you are unsure whether or not you may be impacted please refer to our Book of Plans or the interactive map on the consultation website for more detailed plans of our proposals. Further landowner-specific information can be found in Frequently Asked Questions on our website or by contacting our Land Agents, Dalcour Maclaren on:

HWTWRP@dalcourmaclaren.com

03331 885374

6. Protecting the environment

from Southern Water

Managing environmental effects

We are committed to providing our customers with a reliable and safe supply of water in a way that protects and enhances the environment. In Hampshire, this means taking significantly less water from the River Test and River Itchen, two of country's finest chalk stream rivers, and the underground aquifers that feed them. Protecting these precious habitats for future generations of wildlife and people, while maintaining supplies for our customers, is the core driver of this project.

Taking less water from the environment means we need to create a new source of water – as outlined in this document. Using advanced treatment technology will unlock a previously wasted source of water and will help protect the wildlife that live in and around Hampshire's chalk streams. However, an infrastructure project of this scale and nature is not without its own effects on the environment, especially during its construction phase but also during its operation.

The construction phase involves the building of large-scale plant and various buildings as well as the installation of pipelines. The operational phase, when the water recycling plant and other plant and pipelines would come into use, could also have potential effects on the environment.

We are carefully considering these effects at every step of the process. Our Environmental Impact Assessment (EIA) process (described in Section 4) is providing a rigorous and proportionate approach to assessing and managing the effects of the Project and we're ensuring that environmental considerations inform the Project's design. We have already embedded several measures at the early design stages of the Project to avoid or minimise potential environmental effects.

These measures have included:

- Siting our proposed pipeline routes to avoid sensitive environmental areas and respond to local constraints. This has included avoiding statutory designated sites, ancient woodland and flood zones, where practicable.
- Where possible, avoiding non-statutory designated sites, wildlife and habitats, for protected species.
- Proposing trenchless methods to install the pipeline underground in sensitive environmental areas.
- Implementing reduced working widths at areas along the pipeline routes in environmentally sensitive areas or crossing points and using existing gaps in vegetation, such as hedgerows, where practicable.

Our environmental assessments, being carried out as part of the EIA process, will build on these measures by considering mitigation to minimise negative effects – including the use of management plans. As outlined in Section 5, a preliminary version of the Outline Construction Environmental Management Plan has been provided as part of this consultation, setting out how the effects of construction on the environment could be effectively managed. Other management plans will be developed to support our Development Consent Order application to ensure adequate controls are in place to manage environmental effects. These management plans will include, but are not limited to:

- An Outline Soils Resource Management Plan
- An Outline Site Waste Management Plan
- An Outline Landscape and Ecology Management Plan
- An Outline Materials Management Plan

Some of the key effects that the Project may have on the local environment during both the construction and operational phases are outlined here. More detail on our assessments and potential mitigation measures can be found in our Preliminary Environmental Information Report and the Preliminary Environmental Information Report Non-Technical Summary.

Wildlife, biodiversity and landscape

We are committed to achieving a meaningful net gain in biodiversity as part of the Project. We will incorporate environmental enhancements, including habitat creation and management, into the design of the Project where practicable. We have published a draft illustrative Outline Environmental Masterplan as part of this consultation to set out initial ideas and opportunities for integrating environmental and biodiversity net gain opportunities across the Project.

The design of the Project has sought to avoid and include buffers from, wherever practicable, statutory designated sites, ancient woodland, wildlife and habitats. Underground trenchless crossings would be used to install the pipelines under sensitive ecological areas to avoid and minimise direct disturbances to habitats including trees, hedgerows and vegetation. We do, however, recognise that construction activity, such as the presence of people and noise associated with machinery, could disturb wildlife, or temporarily change the setting or character of the landscape. Construction could also result in dust and emissions from earthworks, construction plant and construction traffic, which could affect habitats and wildlife.

To avoid and mitigate these effects, best practice construction measures would be followed, as set out in the preliminary Outline Construction Environment Management Plan. Lighting would be kept to a minimum, a reduced working width would be implemented when working within environmentally sensitive areas and existing gaps in vegetation, such as hedgerows, would be used to route the pipelines where practicable. Any works near or affecting protected species (such as wild birds, badgers, bats and dormice) would be carried out sensitively and under appropriate licences. Works would be timed to avoid key hibernation, nesting or breeding seasons where practicable.

After construction, there may be some temporary effects as new or replacement planting establishes. The permanent presence of above ground plant on the landscape is being carefully considered through sensitive design and siting, which will continue to be reviewed having regard to feedback from this consultation. Earthworks and planting are also being carefully considered to help integrate new plant and buildings into the landscape thereby reducing potential effects on the landscape.

Water environment

The Project will help protect and enhance Hampshire's iconic chalk stream habitats. However, we recognise that construction activities have the potential to impact the water environment, if not carefully managed. The design of the Project has therefore included a range of potential mitigation measures to avoid and minimise effects on the water environment, including:

- Avoidance of surface and groundwater bodies where possible
- Using trenchless techniques to install the pipelines under and across all main rivers
- Avoiding siting shafts associated with the proposed underground pipeline within the chalk aquifer where possible
- Burying pipeline infrastructure sufficiently deep to minimise interference with the natural form of watercourses

In addition to avoiding and minimising the effects of construction on rivers and groundwater, we are also undertaking assessments to understand potential operational effects on both the Solent and the new Havant Thicket Reservoir.

Reject water from the water recycling process would be combined with existing treated wastewater flows at our Budds Farm Wastewater Treatment Works before being released to the Solent. Assessments of the marine environment are under way to understand potential effects from a change in volumes of water and concentrations released from the existing Eastney Long Sea Outfall.

As the water recycling process takes treated wastewater as its source, the reject water flowing back into the Solent contains the same impurities that would have been released as part of the ongoing operation of Budds Farm, albeit at a higher concentration. Initial modelling has indicated very little change in marine water quality but further surveys and modelling are required to determine any potential effects and required mitigation, which will be reported in our Environmental Statement.

Question:

What do you think about the measures we intend to take to minimise construction effects on the environment?

Water entering the new Havant Thicket Reservoir will predominantly come from spring water from Bedhampton Springs and purified recycled water from the water recycling plant. Other lesser sources of water will come from rainwater and streams flowing into the reservoir.

Extensive water quality modelling is being undertaken in collaboration with Portsmouth Water to investigate the effects of the addition of recycled water on reservoir water quality and downstream watercourses, including Riders Lane Stream, Hermitage Stream and Langstone Harbour. The outputs of the modelling and assessment of effects on the reservoir and its associated watercourses, together with any required mitigation, will be fully reported in the Environmental Statement to be submitted with our Development Consent Order application.

Question:

What do you think about the measures we intend to take to minimise operational effects on the environment?

Carbon and climate change

We are committed to working towards net zero and will be updating our company Net Zero Plan this year. Our draft Water Resources Management Plan and the Net Zero Plan have and will continue to be considered as part of our ongoing assessments.

We have included measures to avoid or minimise carbon emissions throughout the Project's lifecycle, including using resources sustainably and, where feasible, incorporating a design that is energy efficient, minimises carbon and is climate change resilient.

Peak energy use associated with the operation of the water recycling plant is only likely to occur during drought conditions, with the energy use associated with the expected normal operation of the plant would be much lower. Carbon emissions associated with the consumption of electricity will be assessed as part of our Environmental Impact Assessment. We will continue to develop the design of the Project to identify measures that could further reduce emissions.

During the construction phase, best practice construction measures would be followed to avoid and minimise emissions that could contribute to climate change, as set out in the preliminary Outline Construction Environmental Management Plan. Such measures will include no idling vehicles and avoiding the use of diesel or petrol powered generators where reasonably practicable.

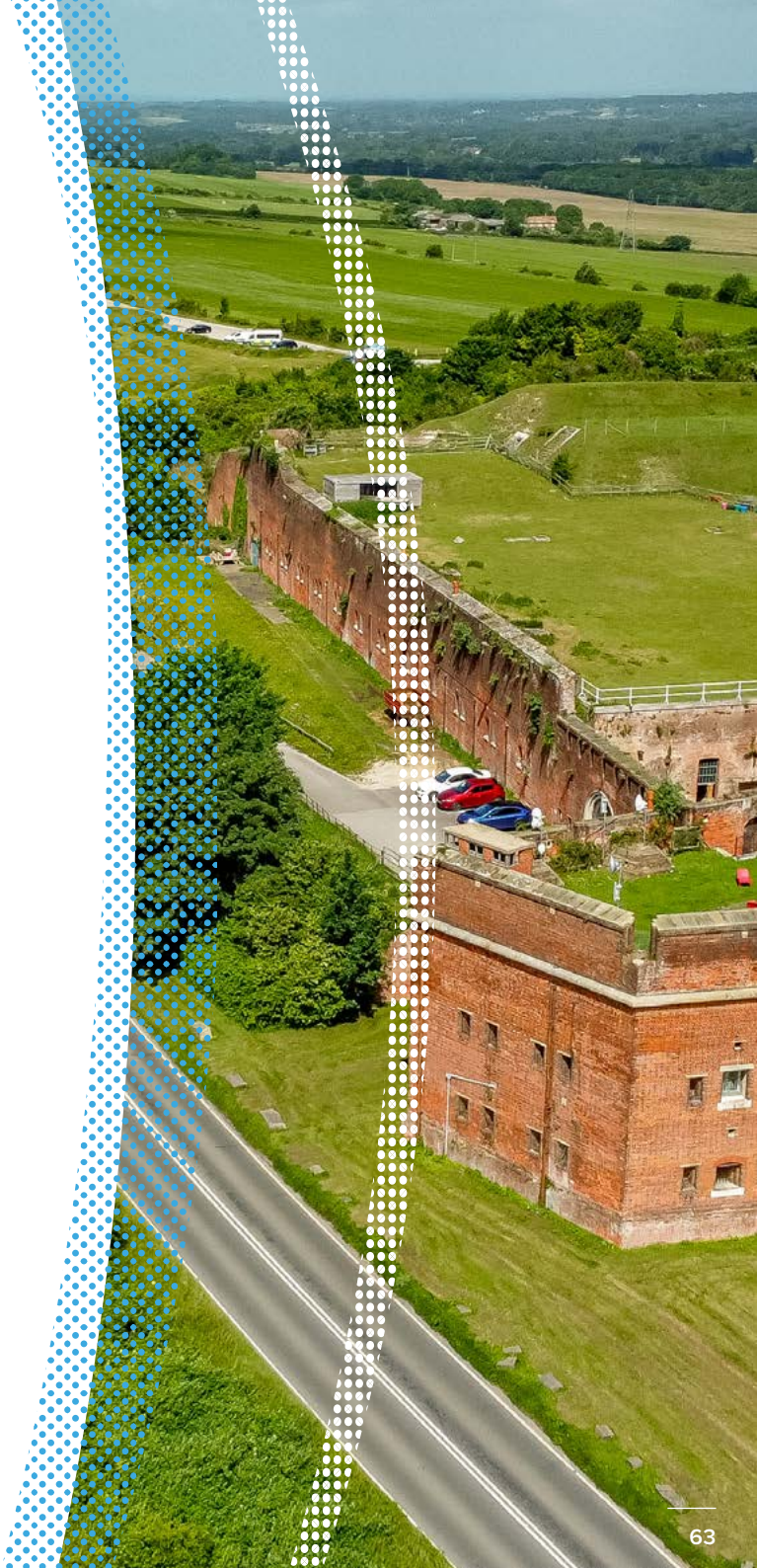
Historic environment

We have given careful consideration to ensuring that the design of the Project avoids or minimises effects on the historic environment as far as practicable. Such features include Scheduled Ancient Monuments, Listed Buildings, Conservation Areas and Registered Parks and Gardens.

Design measures include avoiding heritage features and areas of high archaeological potential, minimising earthworks and using vegetation to screen above ground plant wherever practicable. The Project nonetheless has some potential to affect the historic environment. For example, the character and setting of heritage assets may be temporarily impacted by construction, or permanently affected near some proposed above ground plant sites.

Construction controls would be put in place to minimise the risk of disturbing archaeological remains. Archaeological investigations and any site-specific measures required to mitigate impacts on archaeology will be developed as part of our Development Consent Order application. An outline Landscape and Ecology Management Plan, including details of reinstatement, will also be prepared, to secure any required landscape restoration and screening to avoid effects on cultural heritage assets.

Further preliminary information on the potential environmental effects of the Project and how we plan to mitigate them can be found in the Preliminary Environmental Information Report and its associated Non Technical Summary. These documents can be found online at **www.HampshireWTWRP.co.uk** or at one of our nine deposit locations, full details of which can be found in Section 8 of this brochure.



7. Project benefits and legacy

from Southern Water

The Project would deliver a number of benefits at a national, regional and local level – leaving a lasting legacy for both the environment and local communities.

Maintaining public water supplies

The Project will deliver a new sustainable source of water for Hampshire that keeps our customers' taps flowing in the face of increasing environmental protection, climate change and a growing population. Water companies in the water-stressed South East are working hard to maintain supplies while the amount of water we take from the environment is reduced. Delivering a new resilient water supply will help us better address these challenges and protect against water restrictions in a drought.

Contributing to Government environmental objectives

We are working with the Environment Agency, landowners and key stakeholders through our Water Industry National Environment Programme to meet the objectives of the Water Framework Directive Regulations. This commits England and Wales to ensuring there is sufficient water of suitable quality in all water bodies to prevent the deterioration of the water environment. The Project will play a major role in meeting this national objective in Hampshire.

Protecting our natural resources

Reducing how much water we take from Hampshire's rivers and aquifers for our water supplies is a significant challenge as new sources of water are needed. Protecting Hampshire's iconic chalk streams and reducing the risk of harm to these sensitive habitats is a fundamental objective of this project.

Further reductions on the amount of water we can take from the environment are expected in the future, so finding a new sustainable source of water now is key to enhancing these unique and precious chalk streams while safeguarding water supplies.

Enabling economic growth

The Project will help deliver economic and social benefits in the Hampshire area, including new jobs and skills training as part of the construction phase and increased spending in our local economies.

We are producing an Outline Skills and Employment Plan that will accompany our Development Consent Order application to identify and maximise local benefits in terms of employment, supply chain and training opportunities. The plan will provide further information regarding the skills that will be needed, how they will be sourced and how these could provide opportunities to people in Hampshire.

Facilitating housing growth

Southern Water supplies water to more than 2 million homes and businesses across the South East. With communities expanding and populations growing, we have a duty to ensure every home in our region has access to a clean and wholesome water supply.

The Project will not only help us maintain supplies for existing customers but also build capacity for future housing growth.

Environmental Net Gain and Biodiversity Net Gain

Environmental Net Gain can ensure that new developments make a positive contribution by leaving the natural environment in a measurably better state than prior to the Project being constructed (i.e. a net gain). Biodiversity Net Gain is an essential component of Environmental Net Gain. We are actively looking to deliver environmental opportunities across the Project and within that, are considering how we can achieve a 10% biodiversity net gain. Potential opportunities could include tree planting and landscaping enhancements, improvements to riverside and wildlife habitats and enhancements to woodland and grassland. These could consist of on and off-site measures, as well as working in partnership with others to support existing or planned initiatives. A strategy for delivering Environmental Net Gain and Biodiversity Net Gain will accompany our Development Consent Order application.

River habitat enhancements

Until 2030, we have an agreement with the Environment Agency (called a section 20 Agreement*) to continue to rely on the Rivers Test and Itchen for public water supplies, if needed, during a drought. In case a drought occurs during this period, we have committed to a £10m suite of environmental improvements that are designed to help offset any environmental impact that may occur. While not a direct benefit of the Project, the enhancements are part of a wider commitment to protect the environment.

These improvements include wildlife monitoring, river restoration and enhancement, and a captive breeding programme for white-clawed crayfish. The projects are being developed and delivered by partners at Wessex Rivers Trust, Hampshire & Isle of Wight Wildlife Trust and the Environment Agency.

Question:

What do you think about benefits the Project would deliver?

* Our section 20 Agreement with the Environment Agency covers our ability to abstract water from the Rivers Test and Itchen during a drought (called drought orders and permits) in order to address any shortage in public water supplies. This agreement was signed in 2018 and expires in 2030. Any abstractions after this point to address any shortfalls in water supply during drought conditions will require further formal agreement from the Environment Agency.

8. Have your say on our proposals

from Southern Water

Share your views

Our Summer 2024 Consultation gives you the opportunity to learn more about the Project and have your say on what we're proposing.

Our consultation opens at midnight on 29 May 2024 and closes at 11:59pm on 23 July 2024.

Have your say by:

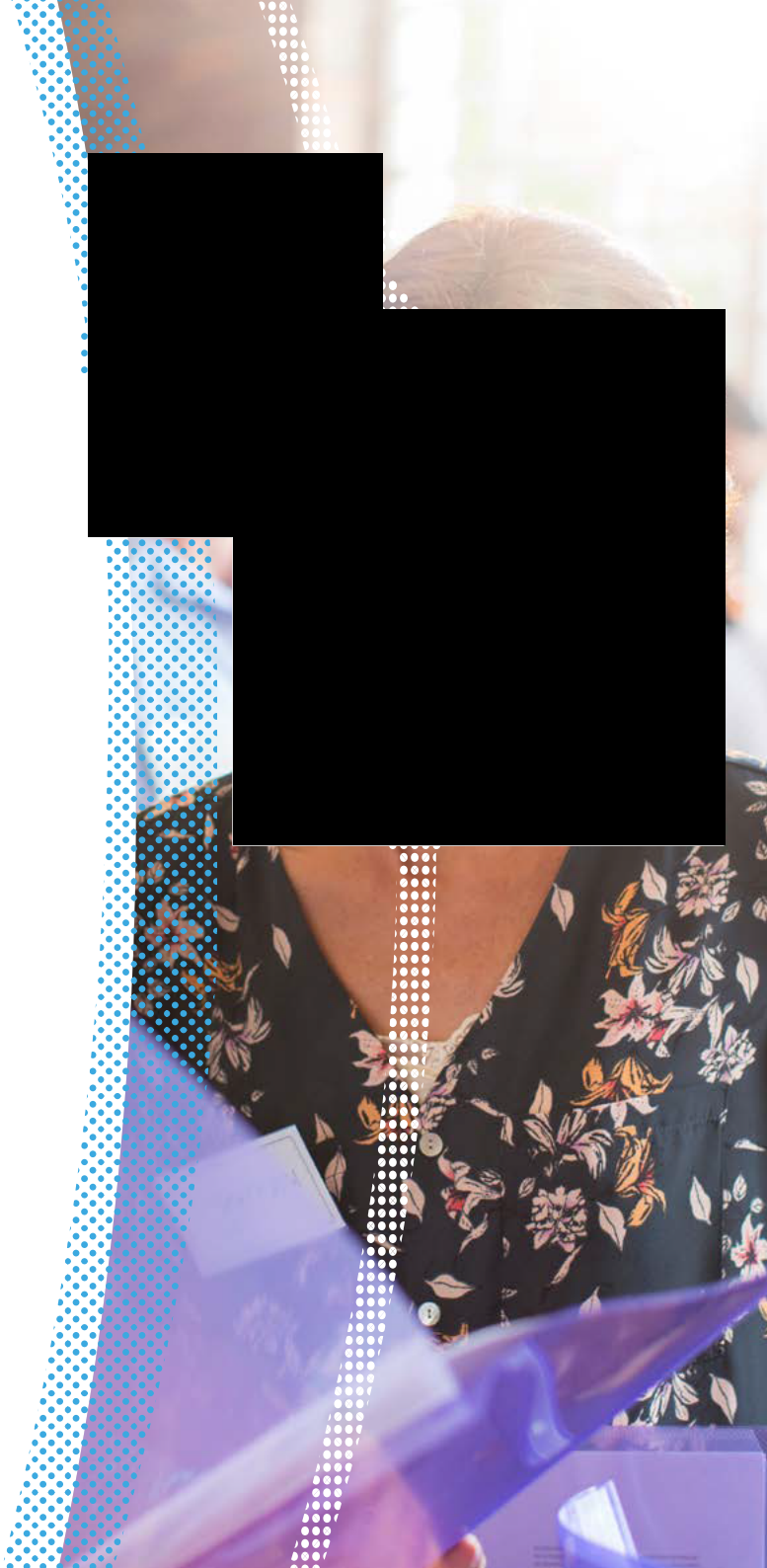
Completing an online feedback form via our website by visiting www.HampshireWTWRP.co.uk

Sending us an email at FeedbackHWTWRP@southernwater.co.uk

Completing a paper feedback form and sending it back to us via **FREEPOST HAMPSHIRE WTWRP CONSULTATION. No stamp needed.**

Please note that feedback received late, after 11:59pm on 23 July 2024, may not be considered.

Scan the QR code to view our website and give your feedback



Public consultation events

We are hosting a series of drop-in sessions in locations close to the Project. Details of the Project described in this brochure will be on display and you can meet members of the Project team to ask us any questions.

You are welcome to visit us in person without prior booking. If you require additional support or have any special requests, please contact us beforehand. We are working closely with the venues to provide extra support if necessary, but please note that we may be unable to accommodate all needs on the day. Nevertheless, we will try our best to meet your requirements.

We're looking forward to seeing you soon at one of our drop-in sessions listed below:

Date	Time	Location	Accessibility
Monday 10 June	2pm-8pm	Havant Rugby Football Club, Hooks Lane Ground, Fraser Road Havant, Hampshire, PO9 3EJ	Four accessible parking bays are available. Step free access is present. An accessible toilet is available on the first floor via a lift, where the event will take place.
Saturday 15 June	10am-4pm	Meridian Shopping Centre, Elm Lane, Havant, PO9 1UN	Accessible parking bays with free bays for Blue Badge Holders available. Customer lifts are accessible and accessible toilets are also provided.
Thursday 20 June	2pm-8pm	Southwick D-Day Memorial Hall, Priory Road, Southwick, PO17 6ED	Two accessible parking bays are available. The venue has ground level entry with step free access.
Saturday 22 June	10am-4pm	Jubilee Hall, Little Shore Lane, Bishop's Waltham, SO32 1ED	Three accessible parking bays are provided. The venue has ground level entry with step free access and automatic opening doors. The Ruby Room has a hearing loop for those who are hard of hearing and an accessible toilet is also provided.
Thursday 27 June	2pm-8pm	Colden Common Community Centre, Saint Vigor Way, Colden Common, SO21 1UU	Two accessible parking bays are provided. The venue has ground level entry with step free access. One accessible toilet is also available.
Friday 28 June	2pm-8pm	Wickham Community Centre, Mill Lane, Wickham, PO17 5AL	Two accessible parking bays are provided. The building has ground level entry with step free access. An accessible toilet is also available.

Deposit locations

You can visit any of our deposit locations, listed in the table below, to view reference copies of the consultation materials, as well as additional supporting material:

- **Consultation brochure:** Provides a summary of information about the Project.
- **Feedback form:** Paper copies will be available to take away so you can provide feedback.
- **Frequently Asked Questions:** A document which may be able to answer any questions you may have.
- **Statement of Community Consultation:** This document describes how we are carrying out the Summer 2024 Consultation.
- **Preliminary Environmental Information Report:** Outlines the likely environmental effects of the Project, as we understand them at this stage.
- **Preliminary Environmental Information Report Non-Technical Summary:** provides a summary description and findings of the preliminary environmental assessments.
- **2024 Scheme Development Summary:** A summary of how our Project has progressed and developed since the Summer 2022 Consultation.
- **Book of Plans:** The Book of Plans shows plans and illustrations of our Project.

Location	Opening times			
Bishop's Waltham Library, Free Street, Bishop's Waltham, Southampton, SO32 1EE	Monday Tuesday Wednesday Thursday	Closed 1pm-5pm 9:30am-1:30pm Closed	Friday Saturday Sunday	1pm-5pm 9:30am-1:30pm Closed
Cosham Library, Spur Road, Cosham, Portsmouth, PO6 3EB	Monday Tuesday Wednesday Thursday	9:30am-6pm 9:30am-6pm 9:30am-5pm 9:30am-6pm	Friday Saturday Sunday	9:30am-5pm 10am-3:30pm Closed
Eastleigh Library, 1 Floor Swan Centre, Eastleigh, SO50 5SF	Monday Tuesday Wednesday Thursday	9:30am-1:30pm 9:30am-5pm Closed 9:30am-5pm	Friday Saturday Sunday	9:30am-5pm 9:30am-5pm Closed
Fair Oak Community Library, Campbell Way, Fair Oak, Eastleigh, SO50 7AX	Monday Tuesday Wednesday Thursday	9:30am-1pm 2pm-5pm 9:30am-5pm 2pm-5pm	Friday Saturday Sunday	9:30am-1pm 9:30am-1pm Closed
Fareham Library, Osborn Road, Fareham, PO16 7EN	Monday Tuesday Wednesday Thursday	9:30am-5pm 9:30am-5pm 9:30am-1:30pm 9:30am-5pm	Friday Saturday Sunday	9:30am-5pm 9:30am-5pm Closed
Havant Library, Havant Meridian, Centre, Havant, PO9 1UN	Monday Tuesday Wednesday Thursday	9:30am-5pm 9:30am-5pm Closed 9:30am-1:30pm	Friday Saturday Sunday	9:30am-5pm 9:30am-5pm Closed
Leigh Park Library, 50 Park Parade, Leigh Park, Havant, PO9 5AB	Monday Tuesday Wednesday Thursday	Closed 9:30am-5pm Closed 9:30am-5pm	Friday Saturday Sunday	9:30am-5pm 9:30am-1:30pm Closed
Paulsgrove Library, Paulsgrove Youth, Community Centre, Marsden Road, Portsmouth, PO6 4JB	Monday Tuesday Wednesday Thursday	9:30am-12:30pm & 1:30-5pm Closed 9:30am-12:30pm & 1:30-5pm 9:30am-12:30pm & 1:30-5pm	Friday Saturday Sunday	9:30am-12:30pm & 1:30-5pm 10am-3:30pm Closed
Waterlooville Library, The Precinct, Waterlooville, PO7 7DT	Monday Tuesday Wednesday Thursday	9:30am-5pm 9:30am-1:30pm 9:30am-5pm 9:30am-5pm	Friday Saturday Sunday	9:30am-5pm 9:30am-5pm Closed

Contact Us

If you'd like a printed copy of our brochure or have any of our documents in an alternative format, please contact us using the contact details below.

Email:

General email:
If you have any general queries related to the Project, please contact **HampshireWTWRP@southernwater.co.uk**

Phone:

Dedicated consultation phone-line:
0800 254 5138

Next steps

Consultation close – what will happen next?

Our consultation will close at **11:59pm on Tuesday, 23 July 2024.** The feedback from the consultation will be considered as we further develop our proposals. We will also be publishing a report where we will respond to your feedback.

We will then prepare an application for a Development Consent Order for the Project that will be submitted to the Planning Inspectorate (on behalf of the Secretary of State).

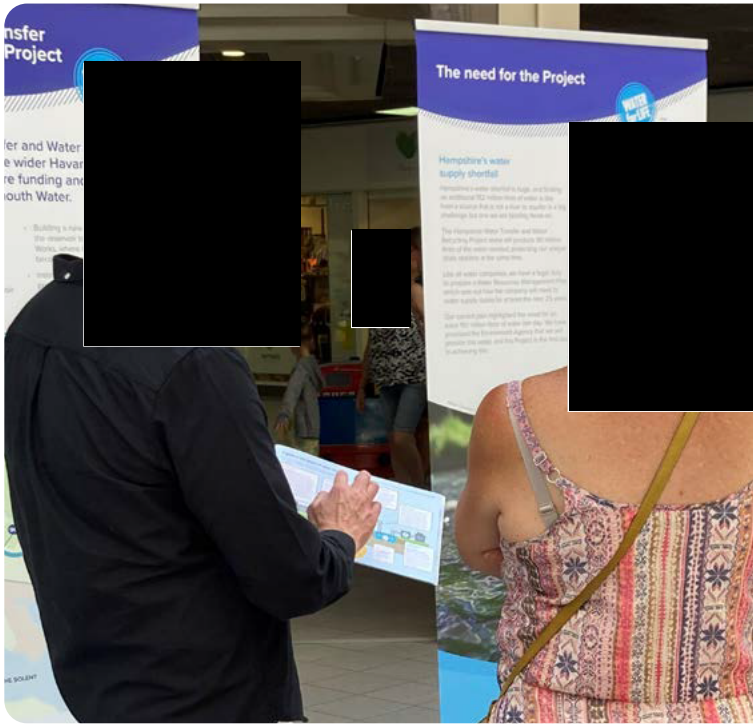
What is a Development Consent Order?

We will be applying for a Development Consent Order for the Project, which is a type of consent given by the Secretary of State for nationally significant infrastructure projects. The Secretary of State for the Department for Environment, Food and Rural Affairs (Defra) has confirmed the Project is of national significance.

The Development Consent Order process is a bespoke consenting route for major infrastructure schemes, like the Project.

The process puts an emphasis on early engagement with communities and stakeholders to allow for the opportunity to influence a project before a Development Consent Order application is submitted.

To find out more about the Development Consent Order process, please visit the National Infrastructure Planning website: **www.infrastructure.planninginspectorate.gov.uk/application-process/the-process**



Development Consent Order process

Indicative process for preparing and determining a Development Consent Order application

We are here

Indicative timeframe from Development Consent Order application to decision = 18 months

Pre-application	Acceptance	Pre-examination	Examination	Recommendation	Decision	Post-decision
Lead Applicant	Planning Inspectorate	Planning Inspectorate/ Applicant	Examining Authority	Examining Authority	Secretary of State	Applicant / Courts
Timescale 1.5 years +	28 days	3-5 months	6 months	3 months	3 months	6 weeks
• Design • Construction Planning • Consultation (min. one round of Statutory Consultation) • Stakeholder engagement • Environmental Impact Assessment • Land referencing • Traffic modelling • Needs case • Statements of Common Ground	• Checking of consultation, incl. adequacy of consultation representations by local authorities • Consistency of documents / information	• Relevant representations • Examination timetable • Continue engagement • Examining Authority appointed • Preliminary Meeting	• Questions • Representations • Comments and responses • Local impact reports • Hearings • Updates to key documents	• Examining Authority prepares recommendation to Secretary of State	• Secretary of State considers Examining Authority's recommendation • Secretary of State makes decision	• 21 days for the Order to come into force • Judicial review challenge period - 6 weeks • Powers to do the works • Acquisition of land and land rights

Pre-application stage

We're currently in the pre-application stage of the Development Consent Order process, where we consult on our proposals as they are being developed. It's a statutory requirement to consult, but your feedback also provides us with invaluable insight to help refine our proposals. We also undertook a public consultation in 2022 (our Summer 2022 Consultation) on our emerging proposals and have been engaging with local authorities, relevant bodies and interested parties for a number of years as the Project has developed.

Before we launched our consultation, we prepared a Statement of Community Consultation (SoCC) where we consulted with each local authority where our Project would be situated. Local authorities can play a key role in the process by helping to ensure that our consultation adequately reaches those local communities that may be potentially affected by the Project and have an opportunity to take part in the consultation to share their views.

When we submit our Development Consent Order application in 2025, we will set out how we have had regard to the feedback received from this consultation. Our application will also include updated environmental assessments as part of the Environmental Statement, as well as updated plans and other documentation needed to explain the Project and its likely effects. Once submitted, the Planning Inspectorate, on behalf of the Secretary of State, will decide if the Project can proceed to the examination stage of the process.

Examination

The Planning Inspectorate will appoint an Examining Authority on behalf of the Secretary of State to consider, examine and report on the application. Interested parties, including members of the public, stakeholders, organisations, and affected landowners, can register to take part in the examination process. Representations to the examination are normally made in writing, although there may be an opportunity to comment verbally at a hearing. The Examining Authority has up to 6 months to complete the examination.

For more information, see the Planning Inspectorate's Frequently Asked Questions at **www.infrastructure.planninginspectorate.gov.uk/application-process/frequently-asked-questions**

Recommendation and decision

Following the close of an examination, the Examining Authority has up to 3 months to make a recommendation to the Secretary of State, who will then have a further 3 months to make a decision on the application.

More information

Please take a look at our Frequently Asked Questions for more information about our Summer 2024 Consultation **www.HampshireWTWRP.co.uk/feedback.html**

For more information about our Water for Life programme, please visit our main Southern Water website at **www.southernwater.co.uk/water-for-life-hampshire**

Also, watch our social media channels, where we'll run a campaign as part of the consultation. Please note that comments made on social media will not be considered as formal feedback as part of Summer 2024 Consultation. Feedback must only be submitted by post, email, or feedback form (online and paper copy).

Take a look at our social media pages for updates and information.

SouthernWater

SouthernWaterMedia

SouthernWater

SouthernWater

WATER for LIFE®

from Southern Water®

F.3 Frequently Asked Questions

Frequently Asked Questions 2024

from Southern Water®

Contents

Water for Life - Hampshire

Q1: What is Southern Water's Water for Life – Hampshire Programme?

Water for Life – Hampshire is Southern Water's holistic response to the water supply challenge we face in the county.

We already need to find at least 166 million litres of water a day in Hampshire that's not from a river or an aquifer. That number is only set to rise, with further environmental restrictions expected in the future.

Taking less water from the rivers means finding a new source for public supplies, as proposed under the *Hampshire Water Transfer and Water Recycling Project*.

But this new source of water won't solve Hampshire's water resources challenge alone – that's why we are developing a range of wider solutions including reducing leakage (up to 50% by 2050) and improving water efficiency to ensure we're all using water wisely.

The Project

Q2: What is the Hampshire Water Transfer and Water Recycling Project?

The Project would use advanced treatment techniques to turn highly treated wastewater, that is usually pumped far out to sea, into purified recycled water at a new water recycling plant in Havant. This purified recycled water would be pumped via an underground pipeline to the Havant Thicket Reservoir where it would mix with spring water. Water from the reservoir would then be pumped along another pipeline to our Otterbourne Water Supply Works where it would be treated to strict drinking water standards before being sent into supply. The Project is designed to optimise the use of the Havant Thicket Reservoir's 8.7 billion litre storage capacity, as well as the spring water within it, and be capable of providing an additional 90 million litres of water a day to Hampshire. The Project includes:

- Proposed water recycling plant and associated pumping stations
- Proposed underground pipelines between Budds Farm Wastewater Treatment Works and the water recycling plant
- Proposed underground pipeline between the water recycling plant and Havant Thicket Reservoir
- Proposed underground pipeline between Havant Thicket Reservoir and Otterbourne Water Supply Works, via a pumping station at the water recycling plant
- Proposed pipelines between the water recycling plant and Bedhampton Springs
- Proposed above ground plant comprising intermediate pumping stations and break pressure tanks located along the underground pipeline between the water recycling plant and Otterbourne
- Use of the Havant Thicket Reservoir for the storage of recycled water
- Use of the existing Eastney Long Sea Outfall for the release of reject water.
- Other associated and ancillary development.

Please refer to the **Consultation Brochure** and **Book of Plans** for more detail on the Project proposals.

Q3: How long will you continue to take water from Hampshire's chalk stream rivers?

We're working hard to deliver the Project as quickly and effectively as possible, so we can move away from reliance on the use of Drought Orders and Drought Permits, which currently enable us to apply to continue abstracting water for public supplies from the Rivers Test and Itchen during certain drought conditions. Our current agreement with the Environment Agency (called a Section 20 Agreement) runs until 2030 however so we're looking carefully at how we manage water supplies in the Hampshire area up to when the Project is delivered.

Q4: How is the Project being funded and how will this affect my water bill?

The Project is being funded by Southern Water. Like all our costs, funding for new infrastructure and improvements on the water supply side of the business is averaged across water supply customers' bills across our region.

As with all our costs and charges to customers, funding for the Project will be subject to approval by our economic regulator, Ofwat. We anticipate that Ofwat would spread the cost of construction and operation over the life of the Project once built, to reduce the impact on bills in any one year.

The Project is continuing to be developed. We currently estimate that the cost of the Project to each of our water supply customers would be approximately £2.50 a month over a 20-year period.

Q5: What approvals will be required for the Project?

The Project has been directed by the Secretary of State for Environment, Food and Rural Affairs as a project of national significance because of its scale, complexity and the contribution it would make to Government environmental objectives and addressing the water supply challenge in Hampshire. This means we need to submit an application for a Development Consent Order (DCO) to the Secretary of State. If given, the DCO would provide the planning and other consents and powers necessary to build and operate the project.

More detail on the DCO process can be found on the Planning Inspectorate's website[1]. The process | National Infrastructure Planning (planninginspectorate.gov.uk)

Q6: How are you considering the potential effects the Project could have on the environment?

We are undertaking a range of environmental assessments, as part of the Environmental Impact Assessment (EIA) process, to understand the potential effects of the Project on the environment. We have prepared a Preliminary Environmental Information Report, which is a key part of the EIA process, and forms part of our Summer 2024 Consultation documentation. You can view this on our consultation website, at one of our six events, and at any of our deposit locations. The Preliminary Environmental Information Report details the preliminary findings of our environmental assessments based on the information available to date.

Following the consultation, our environmental assessments will continue to be updated and will be documented in an Environmental Statement that will be submitted as part of the Development Consent Order application.

[1] https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/

More information on the environmental effects of the Project can be found in Section 3 of the Summer 2024 Consultation Brochure and in the Preliminary Environmental Information Report and its accompanying Non-Technical Summary.

Q7: Will I be able to see the pipelines?

It is anticipated that the majority of our infrastructure would be underground once construction has been completed and the Project is operational. However, our proposals do include some above-ground infrastructure. This includes the new water recycling plant in Havant, and a small number of intermediate pumping stations and break pressure tanks along the pipeline route between the water recycling plant and Otterbourne Water Supply Works.

Q8: How will you install the pipelines?

We would install the majority of the pipelines using an open-cut excavation method where a trench is dug, the pipeline is laid at the bottom and earth is put back into the trench to bury the pipeline. The land will then be reinstated. Where we need to cross major roads, railway lines and rivers, we will look at what are called trenchless methods such as tunnelling or pipe jacking.

We will minimise disruption as much as we can and will engage and communicate with local communities on how we will undertake the works, use local roads and manage our construction activities.

More information on pipeline installation methods is set out in Section 3 of our *Hampshire Water Transfer and Water Recycling Project* Summer 2024 Consultation Brochure.

Q9: How long will construction take?

The Project is planned to take approximately four years to construct, with construction works potentially starting in 2029.

For more information, please see Section 4 of our *Hampshire Water Transfer and Water Recycling Project* Summer 2024 Consultation Brochure.

Q10: How will construction affect me and what are the typical working hours?

While most people across Hampshire will not be directly affected by the construction of the Project, those living or working close to the pipeline may experience short term disruption from noise and traffic restrictions that may be required. The preliminary outline Construction Environment Management Plan (CEMP) (published as part of the Summer 2024 Consultation) provides further information on the ways we will mitigate any necessary disruption related to construction.

Throughout construction, we will continue to engage and communicate with affected people and businesses.

The typical working hours for construction of the Project will be as follows:

Monday to Friday: 07:00 to 19:00 in summer and 07:00 to 17:30 in winter.

Saturday: 07:00 to 17:00.

Sunday and Bank Holidays: 08:00 to 16:00 when required (e.g. abnormal load deliveries).

Work outside these typical working hours, or overnight, may be required for construction of some aspects of the Project including trenchless crossings and tunnelling. In these instances, continuous working or works within the road may be undertaken to minimise traffic disruption. The preliminary outline CEMP provides further information on the typical working hours and the process for working outside of these.

For further information, please see Section 5 of our *Hampshire Water Transfer and Water Recycling Project* Summer 2024 Consultation Brochure.

Water recycling

Q11: What is water recycling?

Water recycling uses advanced treatment techniques to turn highly treated wastewater into purified recycled water. The Project would pump purified recycled water to the Havant Thicket Reservoir. Water from the reservoir would be pumped to our Otterbourne Water Supply Works for further treatment to become drinking water. Special membranes are used to remove salts and a range of other impurities. The process involves several stages of treatment including micro or ultra-filtration and reverse osmosis.

Reverse osmosis is a filtration process that forces water through membranes with perforations more than 50,000 times smaller than the width of a human hair, to remove dissolved salts and impurities. As an extra layer of protection, ultraviolet light is applied along with a small dose of a chemical called hydrogen peroxide in a process called advanced oxidation.

Reverse osmosis is so effective at purifying water that some essential minerals such as calcium and magnesium have to be added back in to make the water drinkable.

Water recycling is already widely used around the world – in Australia, Singapore, the USA and, closer to home, in Belgium. Southern Water is one of several water companies in the UK developing water recycling plants to create new sources supply for the future.

Q12: Is water recycling the same as stormwater releases?

The water recycling proposals are fundamentally different, and separate, to the current system of stormwater releases which are designed to protect homes from flooding.

Stormwater is wastewater that has been heavily diluted by rain and is sometimes released to the environment to reduce the risk of flooding to homes and businesses.

Purified recycled water is water that has gone through a series of advanced treatment techniques before being pumped into a river, lake or reservoir – from where it can be taken and treated to strict drinking water standards before being sent into supply.

It is this purified recycled water that would be pumped into Havant Thicket Reservoir under the Hampshire Water Transfer and Water Recycling Project proposals.

There would be no possibility of stormwater releases entering Havant Thicket Reservoir.

Q13: Is water recycling safe?

Water recycling creates a safe and sustainable supply of purified recycled water that, after being pumped into Havant Thicket Reservoir and taken again for further treatment to strict UK drinking water standards, would be sent into supply.

Water recycling is already widely used around the world – in Australia, Singapore, the USA and, closer to home, in Belgium. Southern Water is one of several water companies in the UK developing water recycling plants to create new sources supply for the future.

A Water Recycling Pilot Plant was set up, in partnership with the University of Brighton's School of Applied Sciences, at Budds Farm Wastewater Treatment Works in Havant to test key elements of the water recycling treatment process. Initial results showed that the water recycling technology effectively removed numerous different nutrients and metals. A more detailed report, written by the University, will be published later in the year, with the results informing additional assessments including the Environmental Impact Assessment for the Project.

For more information about water recycling please visit: www.southernwater.co.uk/water-recycling or refer to Section 3 of our Hampshire Water Transfer and Water Recycling Project Summer 2024 Consultation Brochure.

Q14: Where would the purified recycled water be treated?

The purified recycled water would be produced at a new water recycling plant in Havant. Locating the water recycling plant close to our Budds Farm Wastewater Treatment Works will reduce pumping costs and the overall energy needed to run the Project. We've selected a brownfield site as the optimum location for the Water Recycling Plant.

Q15: How will water recycling be used when we are not in a drought?

The Project is being developed to support both daily water supplies and provide much needed resilience in a drought when river sources are no longer available. A continuous 'sweetening flow' of water would be needed through the water recycling plant and pipelines throughout the year to ensure that the system is always ready to be used at a higher capacity when needed.

Q16: How will recycled water affect water quality in the Havant Thicket Reservoir?

Southern Water and Portsmouth Water are working together to investigate the possible effects on water quality within Havant Thicket Reservoir based on various operational scenarios. This analysis is ongoing with further engagement on the results to come later. Our assessments will also be fully reported on in our Environmental Statement, which will be submitted as part of our application for development consent.

Q17: Does water recycling use a lot of energy and will you use renewable energy sources?

Water recycling uses more energy than water abstraction from rivers or groundwater due to the additional treatment processes and pumping requirements involved. These conventional abstractions have been significantly reduced to protect the environment, meaning that new technologies such as water recycling are needed to create new sources of water that are not from a river or an aquifer.

Due to the volume of energy required there will always need to be a reliance on the national grid and national decarbonisation of electricity. However, we will seek to use local renewable energy resources within the project where we can.

Q18: What alternatives have you explored alongside water recycling?

The Project has progressed through an extensive options appraisal process that considered alternative water resource solutions such as desalination, water transfers and water recycling, as well as different configurations of these solutions. The solutions went through a number of stages of detailed review considering a range of technical, environmental, planning, social and economic criteria, as well as taking into account the outputs of a public consultation on desalination. Following this process, the Project was selected as the optimal solution to make up the largest proportion of the water supply shortfall.

Q19: Why did Southern Water change its plan to deliver a desalination plant in Fawley?

In early 2021 we consulted on plans for a desalination plant on the Solent at Fawley in the New Forest to turn seawater into drinking water and transfer this via a pipeline to our Testwood Water Supply Works. We estimated this plant could have provided up to 75 million litres of water per day.

This was originally our preferred solution to meet the water supply shortfall in Hampshire identified in our Water Resources Management Plan 2019. We also introduced various alternative options in this consultation should the desalination option not prove deliverable.

Desalination was not well supported by those who responded to the consultation. Of those who responded, 27% agreed it was an acceptable solution to the water resources challenge in Hampshire, while 60% considered that water recycling would be an acceptable solution in the event that desalination was not deliverable. Further information can be found in our Consultation Feedback Report September 2021.

Through an extensive options appraisal process, we assessed the desalination proposal and the alternative options against a range of technical, planning, environmental, social and economic criteria. As the HWTWRP was found to be the optimal solution to help address the water supply shortfall, we took the decision that work on the desalination plans should not be progressed any further.

Consultation

Q20: When does the consultation take place?

The eight-week consultation runs from 29 May 2024 to 23 July 2024.

Q21: What are you consulting on?

As part of our Summer 2024 consultation, we want to know what stakeholders think about the following:

- The Project overall
- The proposed pipeline routes
- The proposed water recycling plant and associated pumping stations
- Proposed above ground plant along the pipeline route
- The process undertaken to develop the Project up to this consultation

- The preliminary environmental and other impacts of the Project and initial proposals for mitigation.

Q22: Are you holding in-person events?

Six consultation events will be held where you can meet members of the Project team and view consultation materials.

Date	Time	Location
Monday 10 June	2pm-8pm	Havant Rugby Football Club Hooks Lane Ground Fraser Road Havant Hampshire PO9 3EJ
Saturday 15 June	10am-4pm	Meridian Shopping Centre Elm Lane Havant PO9 1UN
Thursday 20 June	2pm-8pm	Southwick D-Day Memorial Hall Priory Road Southwick PO17 6ED
Saturday 22 June	10am-4pm	Jubilee Hall Little Shore Lane Bishops Waltham SO32 1ED
Thursday 27 June	2pm-8pm	Colden Common Community Centre Saint Vigor Way Colden Common SO21 1UU
Friday 28 June	2pm-8pm	Wickham Community Centre Mill Lane Wickham PO17 5AL

Q23: How can I find out more about the Project?

We have produced a suite of documents with information about the Project, the key one being the Consultation Brochure.

We have also produced the 2024 Scheme Development Summary, which describes how we have developed the Project, particularly the proposed pipeline routes and locations for the above ground plant, since we last consulted at our Summer 2022 Consultation.

If you come along to one of our consultation events, you can also speak to a member of the Project team.

Q24: How can I make comments on the Project?

We want to hear your views on the Project. The easiest way to respond is to complete our online feedback form which can be found at www.HampshireWTWRP.co.uk and paper copies are available at our deposit locations and at our in-person events. You can also email FeedbackHWTWRP@southernwater.co.uk to submit formal feedback.

You can also write or send paper copies of the feedback form to FREEPOST HAMPSHIRE WTWRP CONSULTATION. You don't need a stamp, just ensure you copy the freepost address correctly and remember that the Freepost must be in uppercase and make your handwriting as clear as possible.

Q25: What if I have any general questions?

For general questions, please contact HampshireWTWRP@southernwater.co.uk

If you come along to one of our consultation events, you can also speak to a member of the Project team.

Q26: Where can I read more about the Project?

You can find out more information by visiting our dedicated Project consultation website at www.HampshireWTWRP.co.uk

Here you can view all our consultation documents and use our interactive map so you can see how the Project might affect you and your area.

You can also visit the locations below to read reference copies of the consultation materials and pick up a copy of the feedback form.

Location	Address	Opening times
Bishop's Waltham Library	Free Street Bishop's Waltham Southampton SO32 1EE	Monday Closed Tuesday 1-5pm Wednesday 9:30am-1:30pm Thursday Closed Friday 1-5pm Saturday 9:30am-1:30pm Sunday Closed
Cosham Library	Spur Road Cosham Portsmouth, PO6 3EB	Monday 9:30am-6pm Tuesday 9:30am-6pm Wednesday 9:30am-5pm Thursday 9:30am-6pm Friday 9:30am-5pm Saturday 10am-3:30pm Sunday Closed
Eastleigh Library	1 Floor Swan Centre Eastleigh SO50 5SF	Monday 9:30am-1:30pm Tuesday 9:30am-5pm Wednesday Closed Thursday 9:30am-5pm Friday 9:30am-5pm Saturday 9:30am-5pm Sunday Closed
Fair Oak Community Library	Campbell Way Fair Oak Eastleigh SO50 7AX	Monday 9:30am-1pm Tuesday 2-5pm Wednesday 9:30am-5pm Thursday 2-5pm Friday 9:30am-1pm Saturday 9:30am-1pm Sunday Closed
Fareham Library	Osborn Road Fareham PO16 7EN	Monday 9:30am-5pm Tuesday 9:30am-5pm Wednesday 9:30am-1:30pm Thursday 9:30am-5pm Friday 9:30am-5pm Saturday 9:30am-5pm Sunday Closed
Havant Library	Havant Meridian Centre Havant PO9 1UN	Monday 9:30am-5pm Tuesday 9:30am-5pm Wednesday Closed

Location	Address	Opening times
		Thursday 9:30am-1:30pm Friday 9:30am-5pm Saturday 9:30am-5pm Sunday Closed
Leigh Park Library	50 Park Parade Leigh Park Havant PO9 5AB	Monday Closed Tuesday 9:30am-5pm Wednesday Closed Thursday 9:30am-5pm Friday 9:30am-5pm Saturday 9:30am-1:30pm Sunday Closed
Paulsgrove Library	Paulsgrove Youth Community Centre Marsden Road Portsmouth PO6 4JB	Monday 9:30am-12:30pm & 1:30-5pm Tuesday Closed Wednesday 9:30am-12:30pm & 1:30-5pm Thursday 9:30am-12:30pm & 1:30-5pm Friday 9:30am-12:30pm & 1:30-5pm Saturday 10am-3:30pm Sunday Closed
Waterlooville Library	The Precinct Waterlooville PO7 7DT	Monday 9:30am-5pm Tuesday 9:30am-1:30pm Wednesday 9:30am-5pm Thursday 9:30am-5pm Friday 9:30am-5pm Saturday 9:30am-5pm Sunday Closed

Q27: What happens after the consultation closes on 23 July 2024 and how will you use my feedback?

After the consultation closes, we will gather the feedback and analyse the responses received. We will carefully consider all issues raised when finalising the proposed application. As part of the Development Consent Order application we will publish a Consultation Report, detailing how we have engaged and consulted on the Project.

It may be necessary to make ongoing changes to the proposed Project following the Summer 2024 Consultation process. If we consider a significant change to the Project, or new statutory consultees are affected, we will consider targeted consultations beyond what is specified in the Statement of Community Consultation document, to help inform the final design of the Project. If more consultation is carried out, we will provide appropriate notification to relevant stakeholders who may be affected by the change(s) in question.

In addition to the Consultation Report, we will prepare a 'Summary of Consultation Feedback' report after the close of the consultation which will be published on our Project page. This document will focus on the feedback we received during the Summer 2024 consultation. A separate 'Response to Consultation Feedback' report will follow which will summarise our response to feedback provided through the Summer 2024 Consultation and demonstrate, at a high level, how we have considered issues raised in the refinement of the Project. This will be published at the same time we submit our Development Consent Order application.

For more information, please see Section 8 of the *Hampshire Water Transfer and Water Recycling Project* Summer 2024 Consultation Brochure.

Q28: Where can I get further information on the topics covered in this document?

More information on the Project can be found in the Consultation Brochure and the Preliminary Environmental Information Report and its accompanying non-technical summary, as well as the interactive map on the

consultation website. Links to the material can be found on the consultation website when it launches on 29 May 2024. Hard copies of these documents will also be available to read at our deposit locations.

www.HampshireWTWRP.co.uk


WATER
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from
Southern
Water®

F.4 Feedback form

Hampshire Water Transfer and Water Recycling Project

Feedback Form Summer 2024 Consultation

from Southern Water

We are seeking your views on our proposals for the Hampshire Water Transfer and Water Recycling Project. Knowing what matters to you matters to us. Your feedback is important to us and will help shape our proposals as they are developed further.

1. THE PROJECT

Question 1a: Overall, what do you think about the Hampshire Water Transfer and Water Recycling Project as a response to the water supply shortfall in Hampshire and reducing abstractions from the Rivers Test and Itchen?

- ☐ Strongly support
- ☐ Support
- ☐ Neutral
- ☐ Do not support
- ☐ Strongly do not support

Question 1b: Please tell us your reasoning for your answer:

2. DESIGN

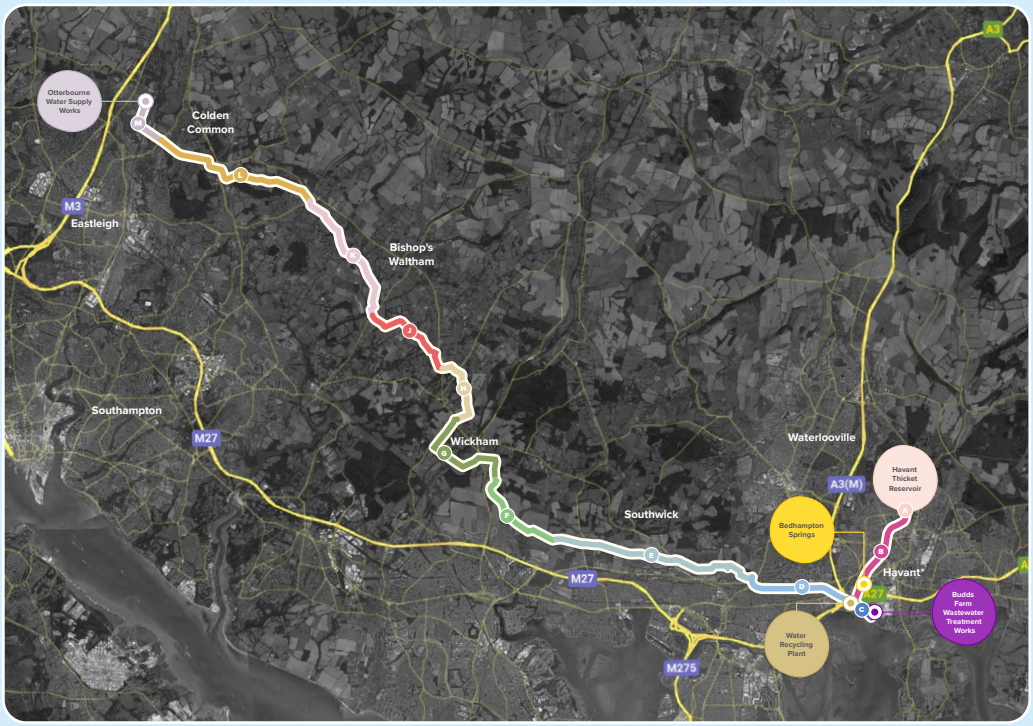
Since the Summer 2022 Consultation, and in consideration of the feedback received, we undertook further technical investigations, environmental surveys, and engagement with stakeholders to identify the proposed pipeline routes.

Section 3 of our Summer 2024 Consultation Brochure shows our proposed pipeline routes. Our proposed pipeline routes are made up of Sections A to M.

Question 2a: Which section of the proposed pipeline routes is of interest to you?

This could be because you live nearby, work in the area, or visit often. You may tick more than one.

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G
- ☐ H
- ☐ J
- ☐ K
- ☐ L
- ☐ M



Question 2b: What do you think of our proposed pipeline routes?

The 2024 Scheme Development Summary outlines the further design work we've undertaken to develop Sections A-M of the proposed pipeline routes and how we have assessed alternative options.

Question 2c: What do you think about the process we have undertaken to identify our proposed pipeline routes?

Our proposed above ground plant would consist of intermediate pumping stations and break pressure tanks located along the pipeline route between the high lift pumping station (at the water recycling plant) and Otterbourne Water Supply Works.

We have selected four sites for the proposed above ground plant. See Section 3 of the Brochure, Section 3.12 of the 2024 Scheme Development Summary, and the Book of Plans for more information.

Question 2d: What do you think about the locations we've chosen for the proposed above ground plant?

- [ ] Strongly agree
- [ ] Agree
- [ ] Not sure
- [ ] Disagree
- [ ] Strongly disagree

Question 2e: Please tell us the reasoning behind your answer.

Question 2f: Are there any further comments you would like to make about the Project and how we've developed it since our last consultation in Summer 2022?

Question 2g: What do you think about the preliminary design principles we have identified for the sites for the proposed water recycling plant (including associated pumping stations), intermediate pumping stations and break pressure tanks?

- [ ] Strongly support
- [ ] Support
- [ ] Not sure
- [ ] Oppose
- [ ] Strongly oppose

Question 2h: Please tell us the reasoning behind your answer. Also, is there anything else we should consider as part of finalising the design principles.

3. CONSTRUCTION AND OPERATIONAL EFFECTS

In Section 5 of our Consultation Brochure and in our Book of Plans, we have outlined how the construction and operation of the Project could affect you.

Question 3a: What do you think about the measures we intend to take to minimise construction effects on people that might be impacted?

☐ Strongly support ☐ Support ☐ Not sure ☐ Oppose ☐ Strongly oppose

Question 3b: What do you think about the measures we intend to take to minimise operational effects on people that might be impacted?

☐ Strongly support ☐ Support ☐ Not sure ☐ Oppose ☐ Strongly oppose

Question 3c: Do you have any comments about how the construction and operation of the Project might affect you and our initial proposals for mitigation?

In Section 3 of the brochure and in the book of plans, we identify the proposed temporary construction compound locations along the proposed pipeline routes.

Question 3d: Do you have any comments about a specific temporary construction compound location? Please make reference to the specific compound or compounds in your response.

4. PROTECTING THE ENVIRONMENT

Our Preliminary Environmental Information Report describes in detail our assessment of environmental effects so far and how we are looking to minimise and mitigate the impacts of our proposals on the environment. For a summary which outlines how we would protect the environment, please see Section 6 of our Summer 2024 Consultation Brochure and the Preliminary Environmental Information Report Non-Technical Summary.

Question 4a: What do you think about the measures we intend to take to minimise construction effects on the environment?

☐ Strongly support ☐ Support ☐ Not sure ☐ Oppose ☐ Strongly oppose

Question 4b: What do you think about the measures we intend to take to minimise operational effects on the environment?

☐ Strongly support ☐ Support ☐ Not sure ☐ Oppose ☐ Strongly oppose

Question 4c: Do you have any comments on how we're proposing to protect the environment during the construction and operation of the Project?

5. BENEFITS AND LEGACY

The Project would deliver a number of benefits at a national, regional and local level – leaving a lasting legacy for both the environment and local communities. You can read more about this in Section 7 of our 2024 Summer Consultation.

Question 5a: **Overall, what do you think about the benefits the Project would deliver?**

- [ ] Strongly support
- [ ] Support
- [ ] Not sure
- [ ] Oppose
- [ ] Strongly oppose

Question 5b: **Please explain the reasoning behind your answer:**

6. ANYTHING ELSE

Question 6a: **Is there anything further you'd like to share with us in relation to the Hampshire Water Transfer and Water Recycling Project?**

7. OUR CONSULTATION

Question 7a: Please let us know your views on the quality of our consultation materials, the accessibility of our online information and public information events.

Area of consultation	Very effective	Effective	Average	Poor	Very poor	Not applicable
i) Was the information presented clearly?						
ii) Was the website easy to navigate?						
iii) Were the public information events of good quality?						
iv) Were the public information events suitably located?						
v) Was the consultation promoted well and to the right people?						

Question 7b: How did you hear about our consultation? Select all that apply.

- ☐ I received a letter
- ☐ I received a leaflet
- ☐ I saw an advert in the newspaper
- ☐ I attended an event

  If so, where?
- ☐ Word of mouth
- ☐ I saw information on social media, not just on Southern Water channels (Facebook, Instagram etc)
- ☐ Information provided by my local authority
- ☐ Visited the dedicated consultation website www.HampshireWTWRP.co.uk

8. ABOUT YOU

We will only use these details in accordance with our Data Privacy Statement, as set out later in this form, which may include contacting you in the future about the Project.

Tell us a little bit about you...

First Name

Last Name:

Address:

*Postcode:

Email Address:

Phone number:

*Sharing your postcode with us will help us to understand where in the community concerns and issues are being raised. We will only use your postcode data anonymously for the purpose of further understanding your feedback.

Are you happy to be contacted in future? ☐ Yes ☐ No

Who are you responding as? (You may tick more than one box)

- ☐ Local resident
- ☐ Local representative (e.g. parish councillor)
- ☐ Potentially affected landowner or occupier – please insert your Party ID number if known
- ☐ Local business owner or supplier/contractor
- ☐ Regular visitor
- ☐ Local interest group member (please specify in the text box below)
- ☐ Statutory organisation (please specify in the text box below)
- ☐ Other (please specify in the text box below)

Which gender do you identify as?

☐ Female ☐ Male ☐ Prefer not to say

☐ Other: Please state if you wish

What is your age?

☐ 16 to 24 years old ☐ 25 to 34 years old ☐ 35 to 44 years old ☐ 45 to 54 years old

☐ 55 to 64 years old ☐ 65 to 74 years old ☐ 75 years old or over ☐ Prefer not to say

DATA PRIVACY STATEMENT

Southern Water is collecting your personal data to help shape and inform the Project. Your data will be used to contact you in the future in relation to developments about this project, this may include land, survey and consultations of this or a similar nature. However, you may be contacted by Southern Water as an existing customer where you have already given Southern Water permission to do so.

The answers to the questions on this feedback form are voluntary, as is any information you provide about yourself. By responding to this consultation, you consent to Southern Water using the information you've provided for the above purposes. You have the right to withdraw your consent at any time. To do this, please contact **HampshireWTWRP@southernwater.co.uk** or call 0800 254 5138.

For more information about how Southern Water uses personal data generally, who it shares it with, and what your rights in relation to personal data are, please see Southern Water's Privacy Notice on its website at **https://www.southernwater.co.uk/our-customers/privacy**.

Your comments will be analysed by Southern Water Services Limited and any of its appointed agents. Copies may be made available in due course to the Secretary of State, the Planning Inspectorate (PINS) and other relevant statutory authorities so that your responses can be considered as part of the development of the Hampshire Water Transfer and Water Recycling Project. Your personal details will not be placed on public record and will be held securely by Southern Water Services Limited and its appointed agents in accordance with the data protection law and will be used solely in connection with the consenting and regulatory processes, and statistical and analytical purposes on an aggregated basis, or in accordance with any legal requirements or process, will not be passed to third parties. The PINS privacy statement, which advises how data will be used and held by PINS, is available to view here: **https://www.gov.uk/government/publications/planning-inspectorate-privacy-notices/customer-privacy-notice**.

Scan the QR code
to view our website

from Southern Water®

F.5 Book of Plans

Hampshire Water Transfer and Water Recycling Project

Book of Plans

Summer 2024 Consultation

Contents

WATER for LIFE®

from Southern Water®

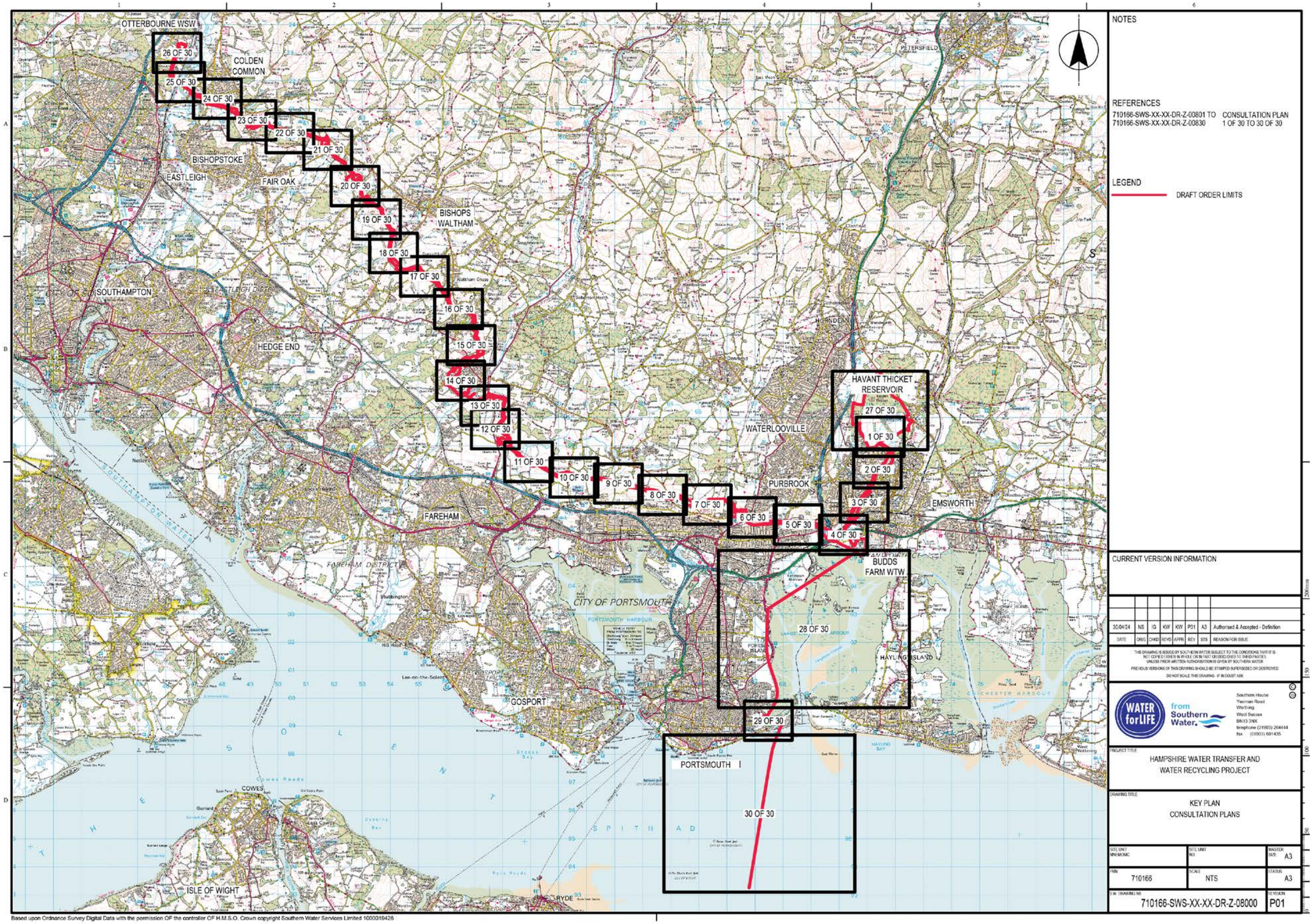
Scan the QR code to view our interactive map

Project and proposed pipeline route plans

WATER for LIFE®

from Southern Water®

Key Plan



NOTES

REFERENCES

710166-SWS-XX-XX-DR-Z-00801 TO 710166-SWS-XX-XX-DR-Z-00830	CONSULTATION PLAN 1 OF 30 TO 30 OF 30

LEGEND

DRAFT ORDER LIMITS

CURRENT VERSION INFORMATION

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
30/04/24	NS	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

WATER for LIFE from Southern Water

Southern House
Yeoman Road
Worthing
West Sussex
BN13 3NX
telephone (01903) 264444
fax (01903) 691435

PROJECT TITLE

HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE

KEY PLAN
CONSULTATION PLANS

SITE UNIT MW-MOMC	SITE UNIT NO	MASTER SIZE: A3
PRN 710166	SCALE NTS	STATUS A3
S/W DRAWING NO 710166-SWS-XX-XX-DR-Z-08000		REVISION P01

Sections A and B

A
B
C
D
E
F
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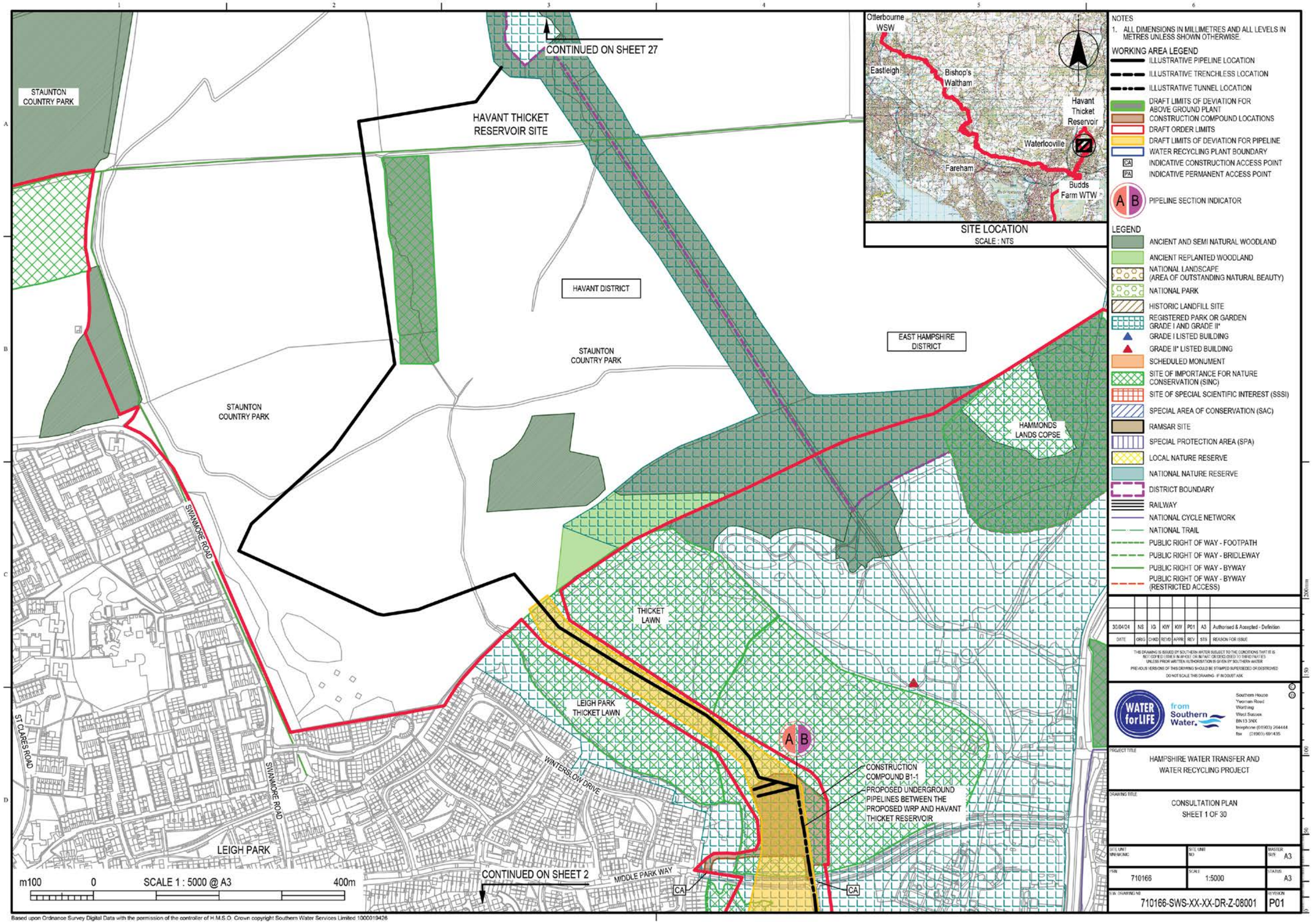
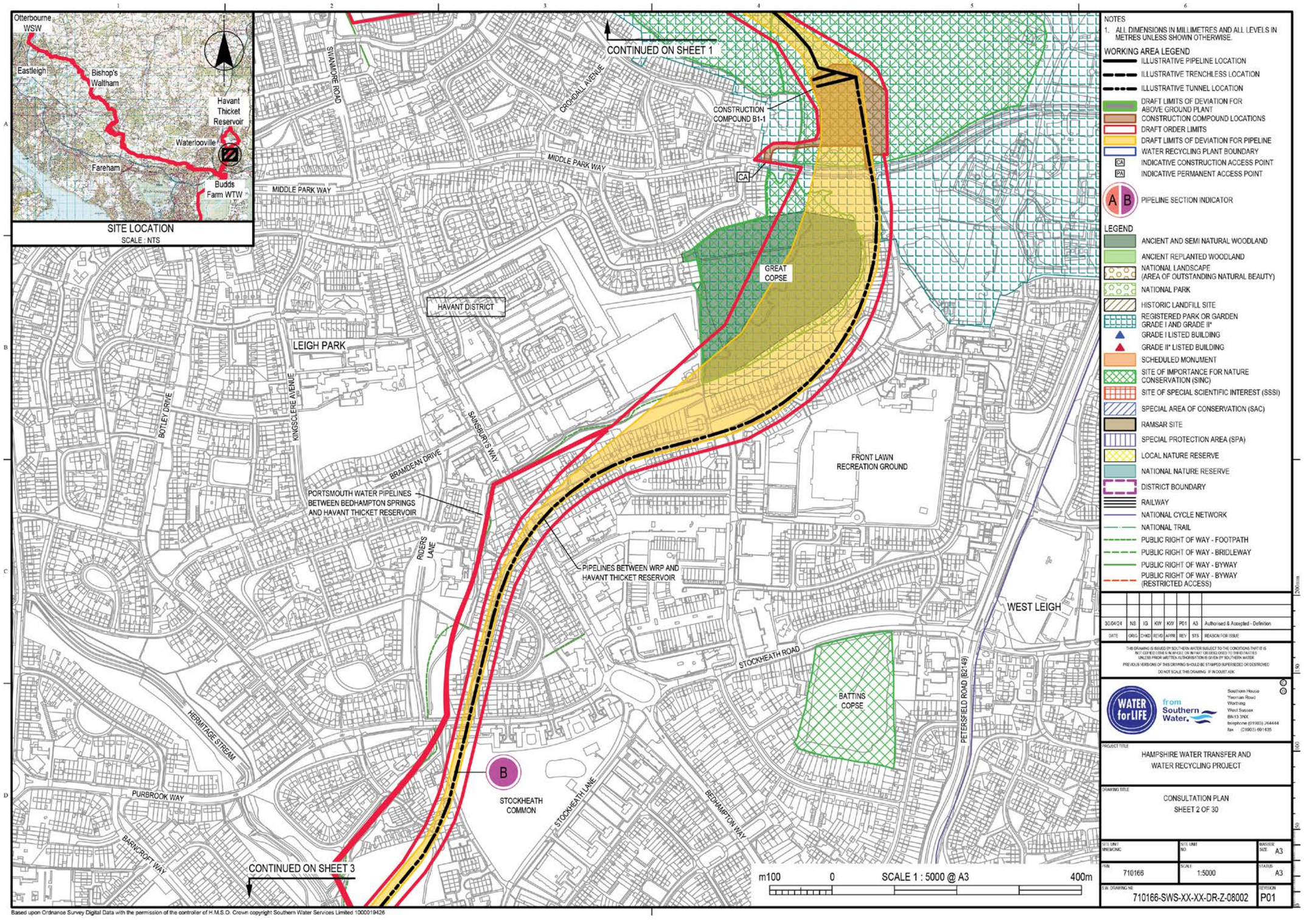


Sheet 1 of 30

Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section B



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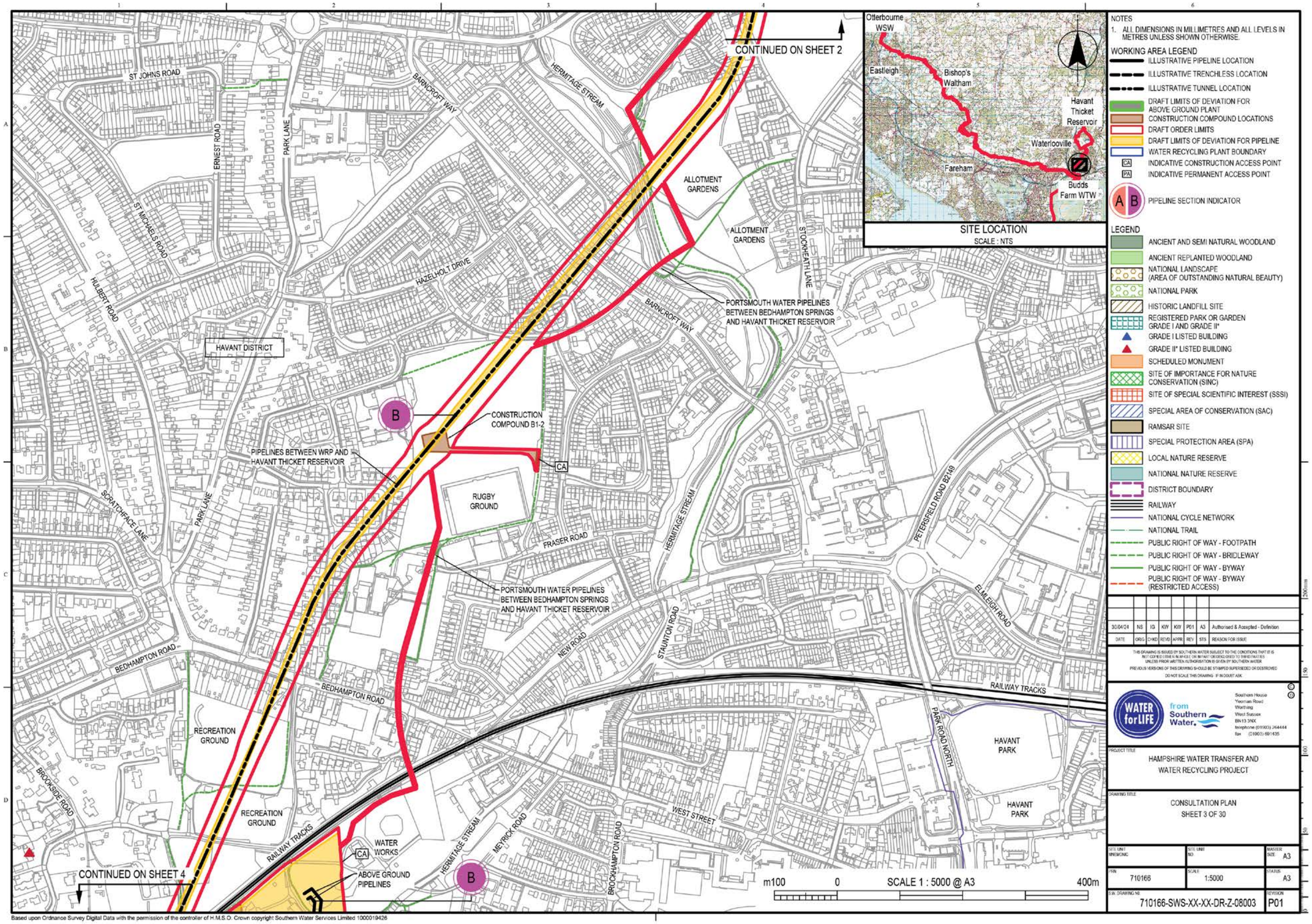
Section B



NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

WORKING AREA LEGEND
- ILLUSTRATIVE PIPELINE LOCATION
- ILLUSTRATIVE TRENCHLESS LOCATION
- ILLUSTRATIVE TUNNEL LOCATION
- DRAFT LIMITS OF DEVIATION FOR ABOVE GROUND PLANT
- CONSTRUCTION COMPOUND LOCATIONS
- DRAFT ORDER LIMITS
- DRAFT LIMITS OF DEVIATION FOR PIPELINE
- WATER RECYCLING PLANT BOUNDARY
- CA INDICATIVE CONSTRUCTION ACCESS POINT
- PA INDICATIVE PERMANENT ACCESS POINT
- A B PIPELINE SECTION INDICATOR

LEGEND
- ANCIENT AND SEMI NATURAL WOODLAND
- ANCIENT REPLANTED WOODLAND
- NATIONAL LANDSCAPE (AREA OF OUTSTANDING NATURAL BEAUTY)
- NATIONAL PARK
- HISTORIC LANDFILL SITE
- REGISTERED PARK OR GARDEN GRADE I AND GRADE II*
- GRADE I LISTED BUILDING
- GRADE II* LISTED BUILDING
- SCHEDULED MONUMENT
- SITE OF IMPORTANCE FOR NATURE CONSERVATION (SINC)
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- SPECIAL AREA OF CONSERVATION (SAC)
- RAMSAR SITE
- SPECIAL PROTECTION AREA (SPA)
- LOCAL NATURE RESERVE
- NATIONAL NATURE RESERVE
- DISTRICT BOUNDARY
- RAILWAY
- NATIONAL CYCLE NETWORK
- NATIONAL TRAIL
- PUBLIC RIGHT OF WAY - FOOTPATH
- PUBLIC RIGHT OF WAY - BRIDLEWAY
- PUBLIC RIGHT OF WAY - BYWAY
- PUBLIC RIGHT OF WAY - BYWAY (RESTRICTED ACCESS)

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
30/04/24	NS	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

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WATER for LIFE from Southern Water

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PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE
CONSULTATION PLAN
SHEET 3 OF 30

SITE UNIT WINDMONC	SITE UNIT NO	MASTER SIZE A3
JOB NO 710166	SCALE 1:5000	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-08003		REVISION P01

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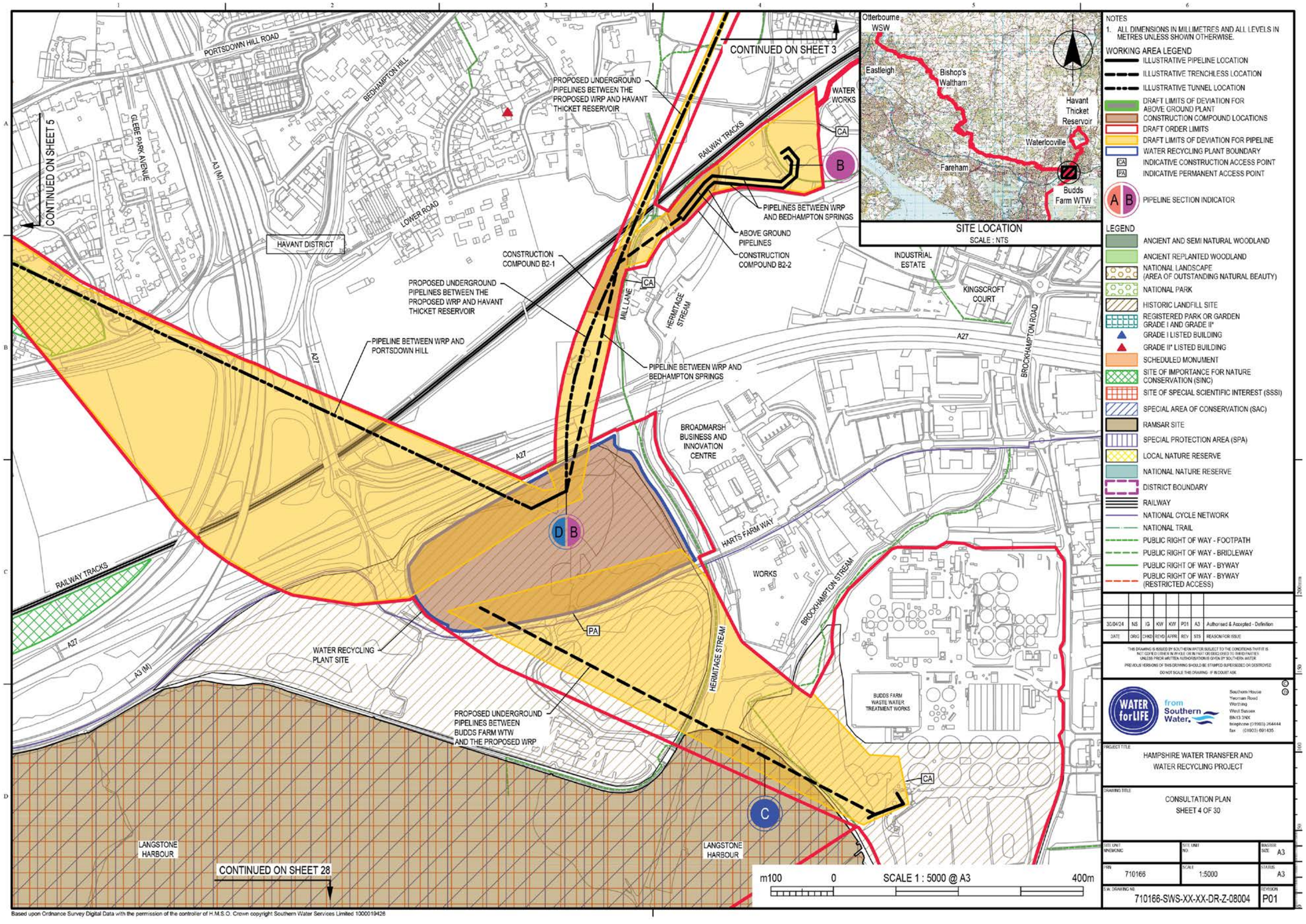
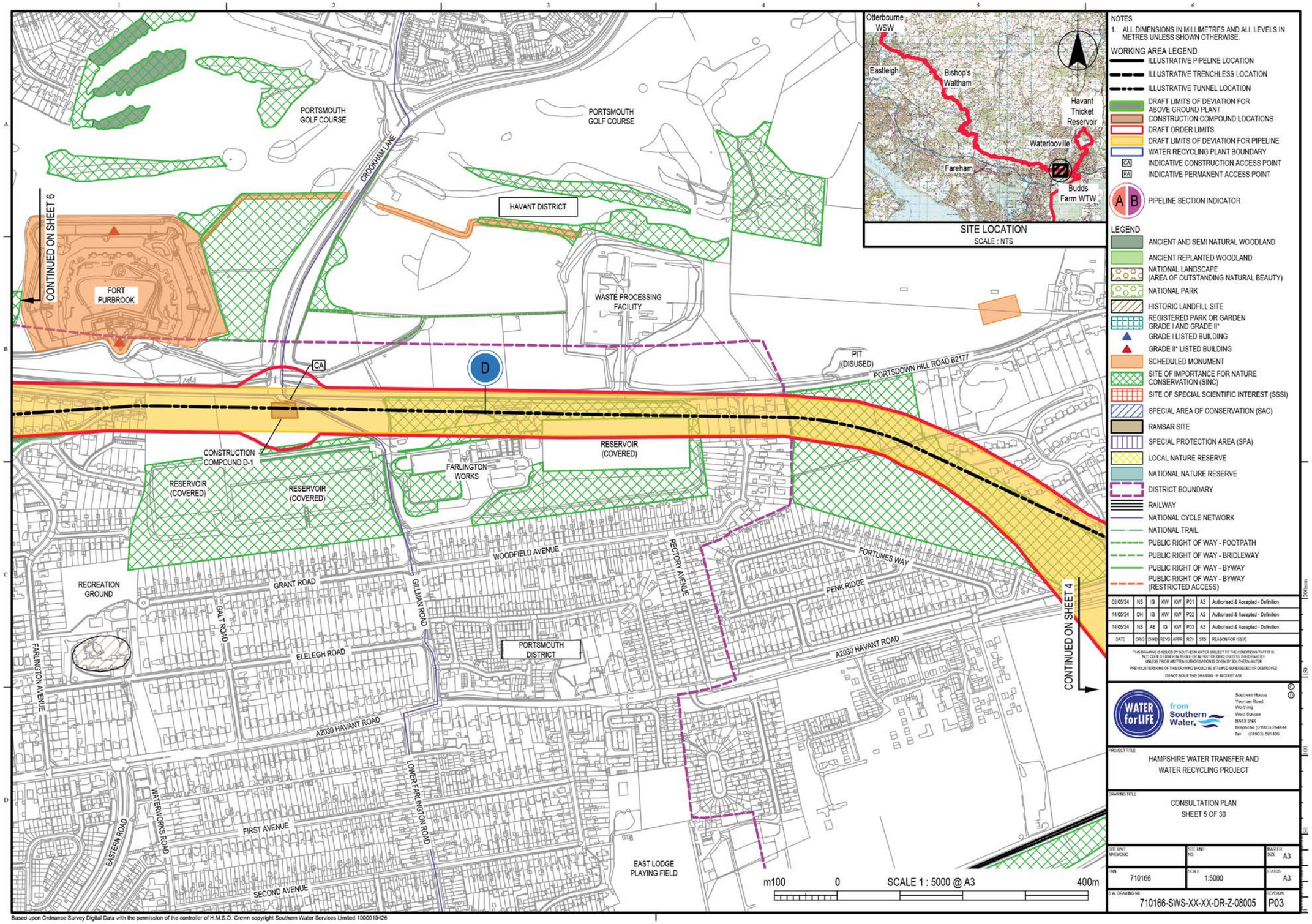
Section B, C and D and Eastney Long Sea Outfall



Section D

A B C D E F G H J K L M



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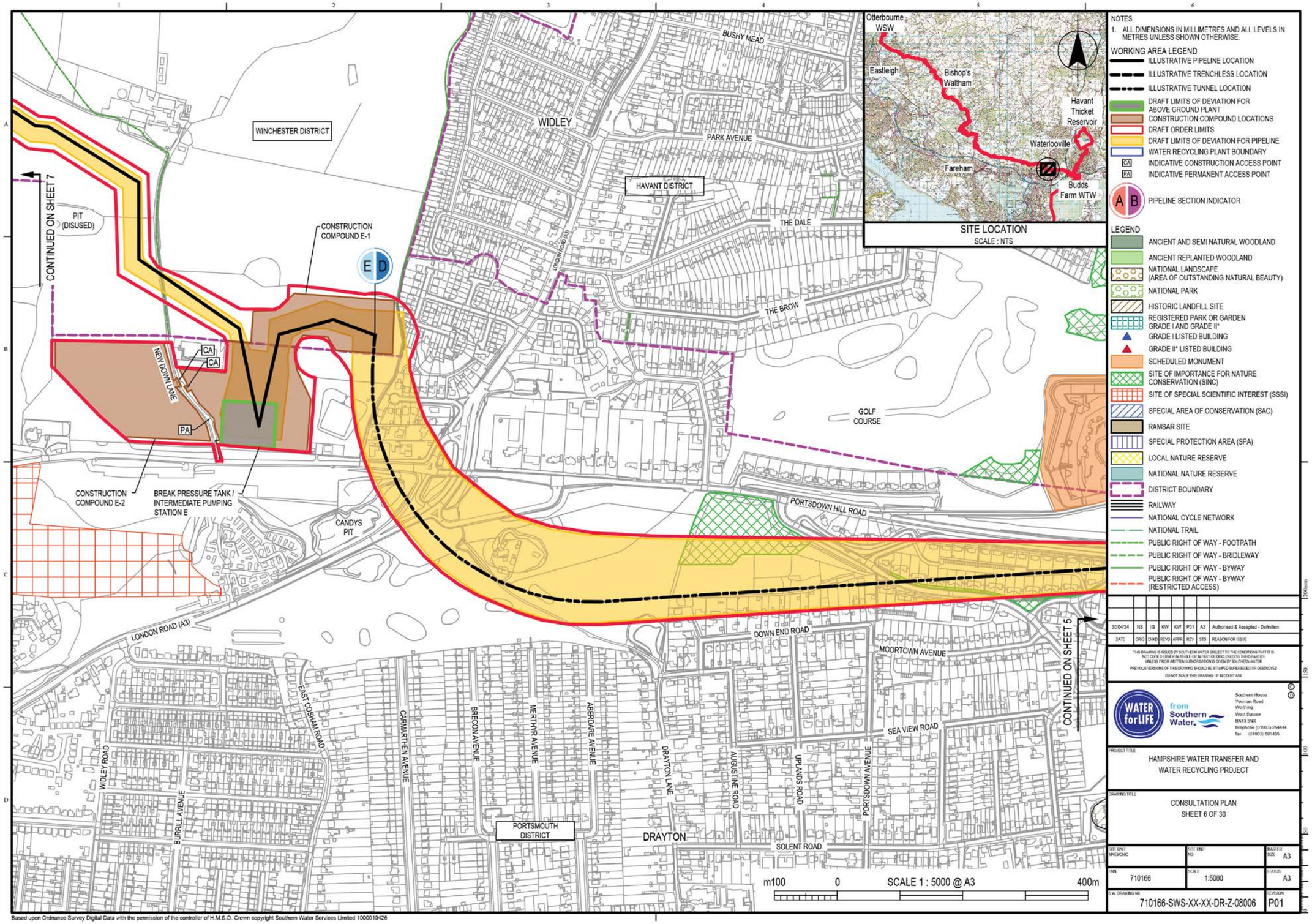
Section D and E



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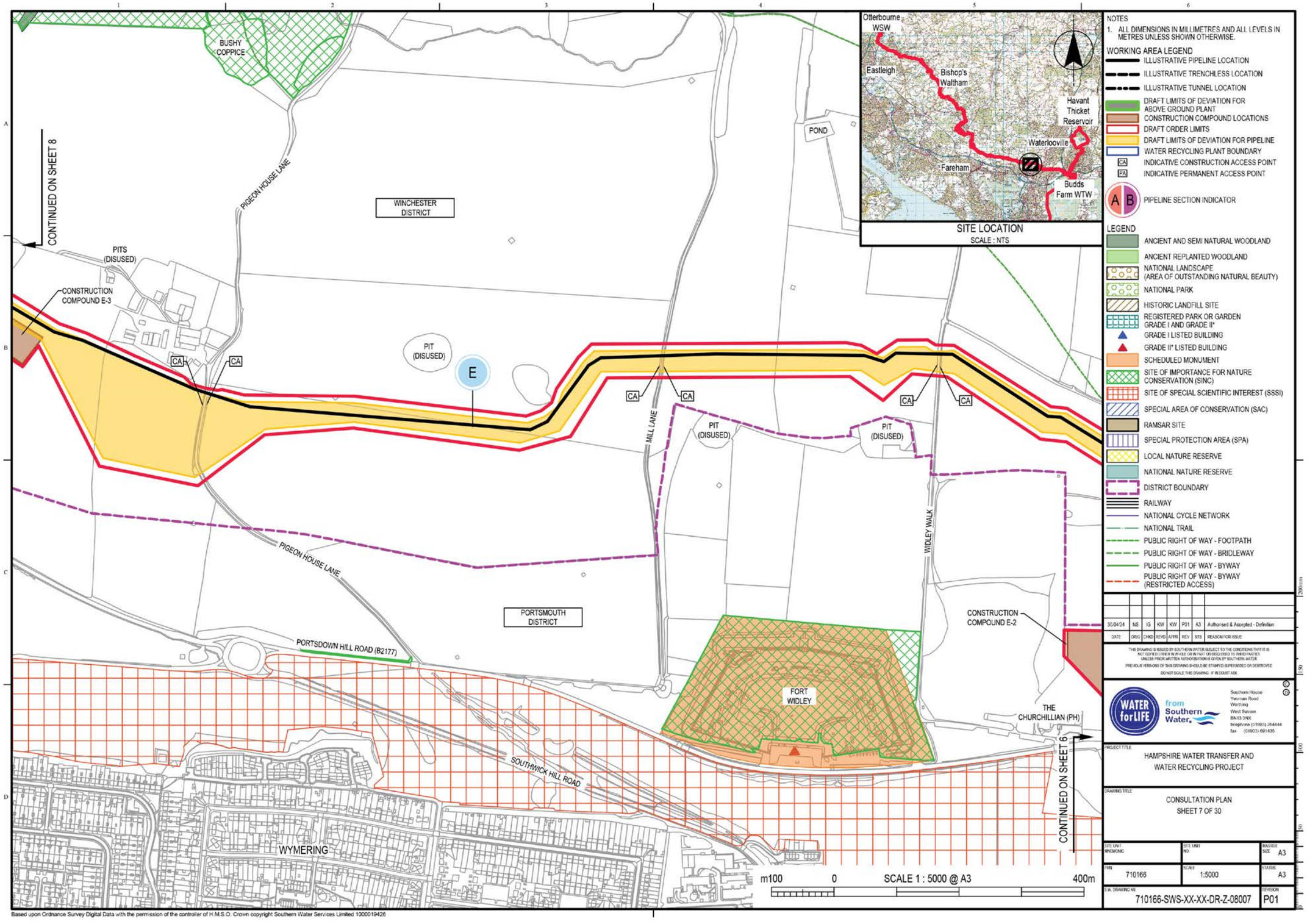
Section E



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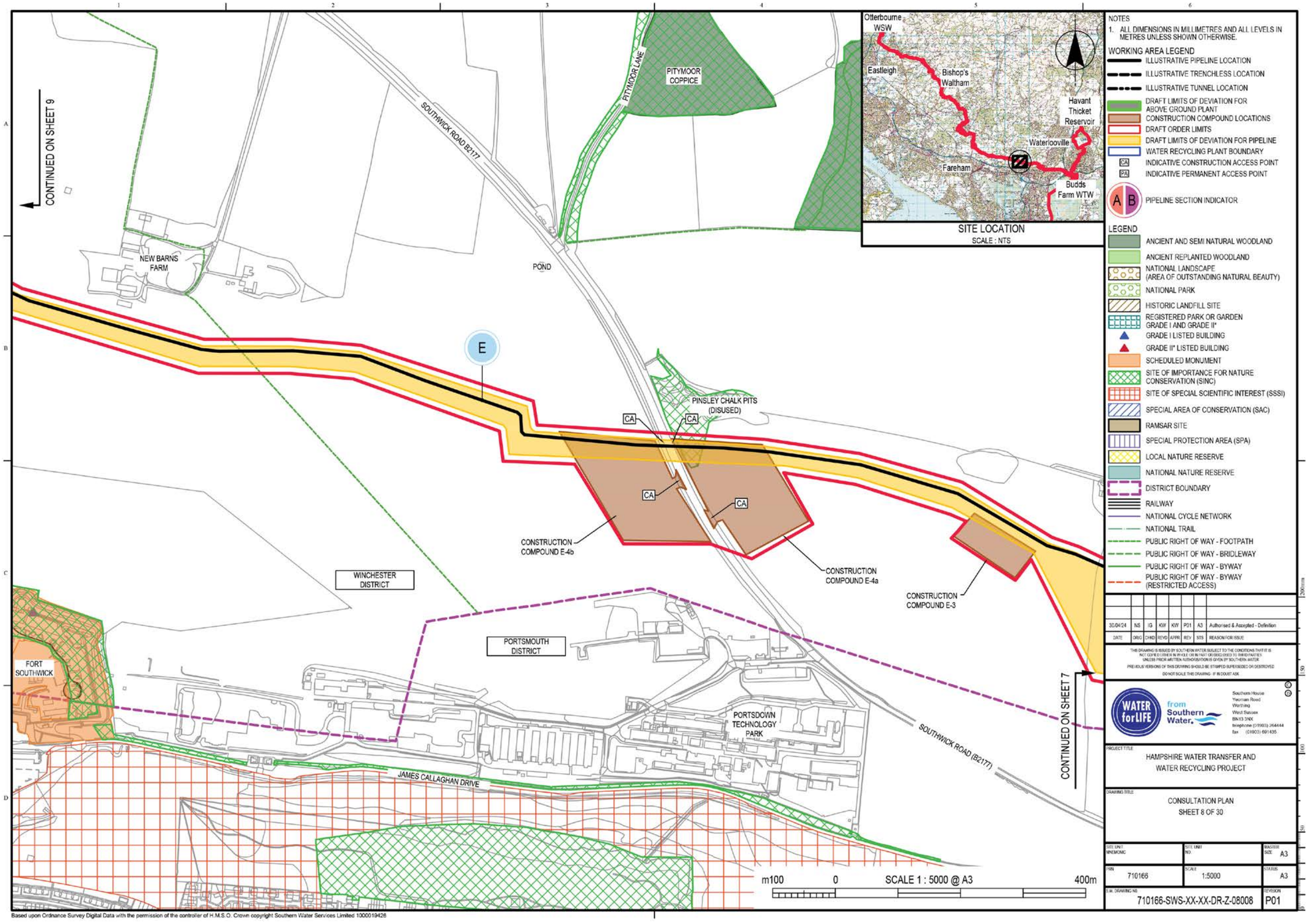

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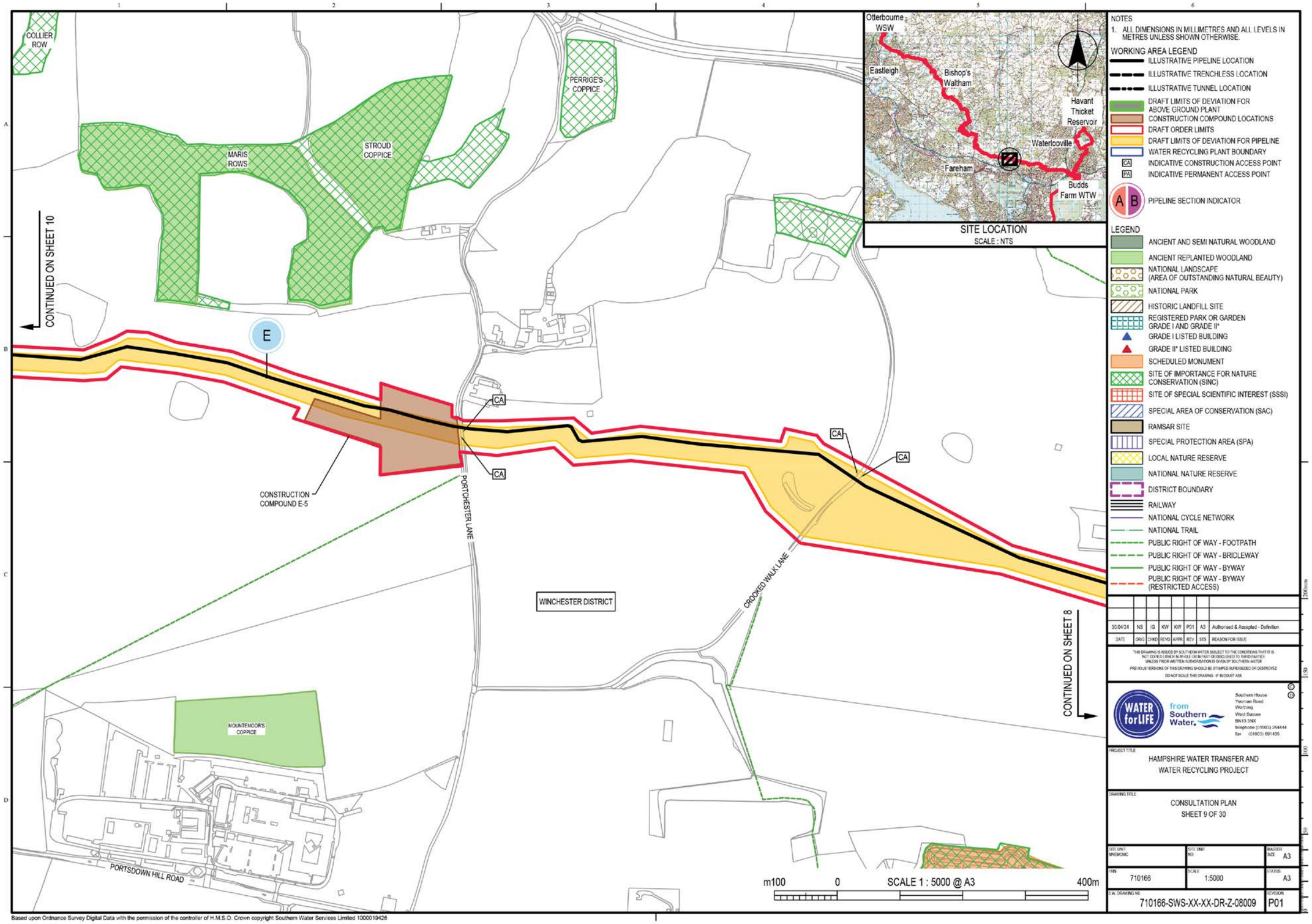

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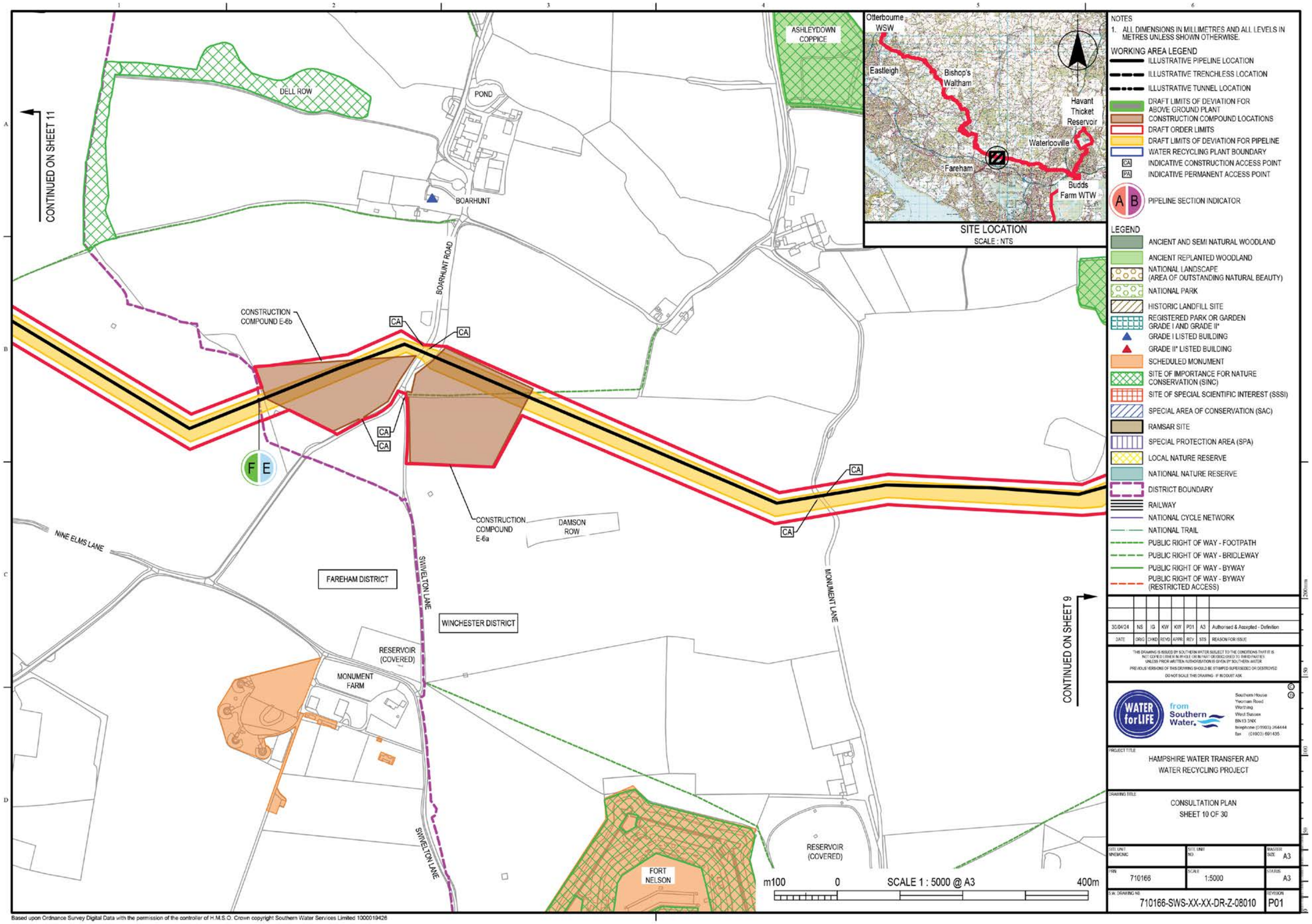
Section E and F



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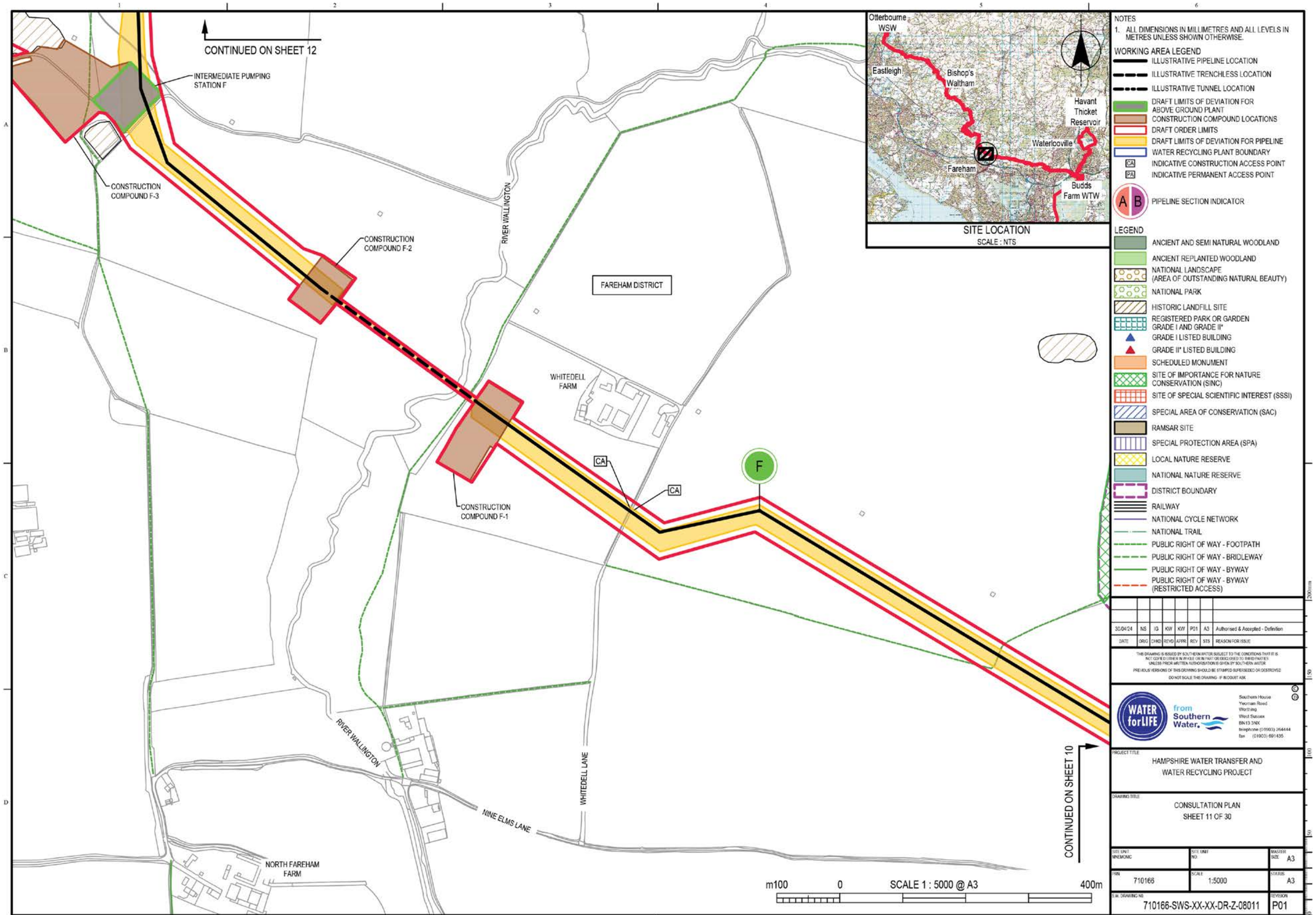
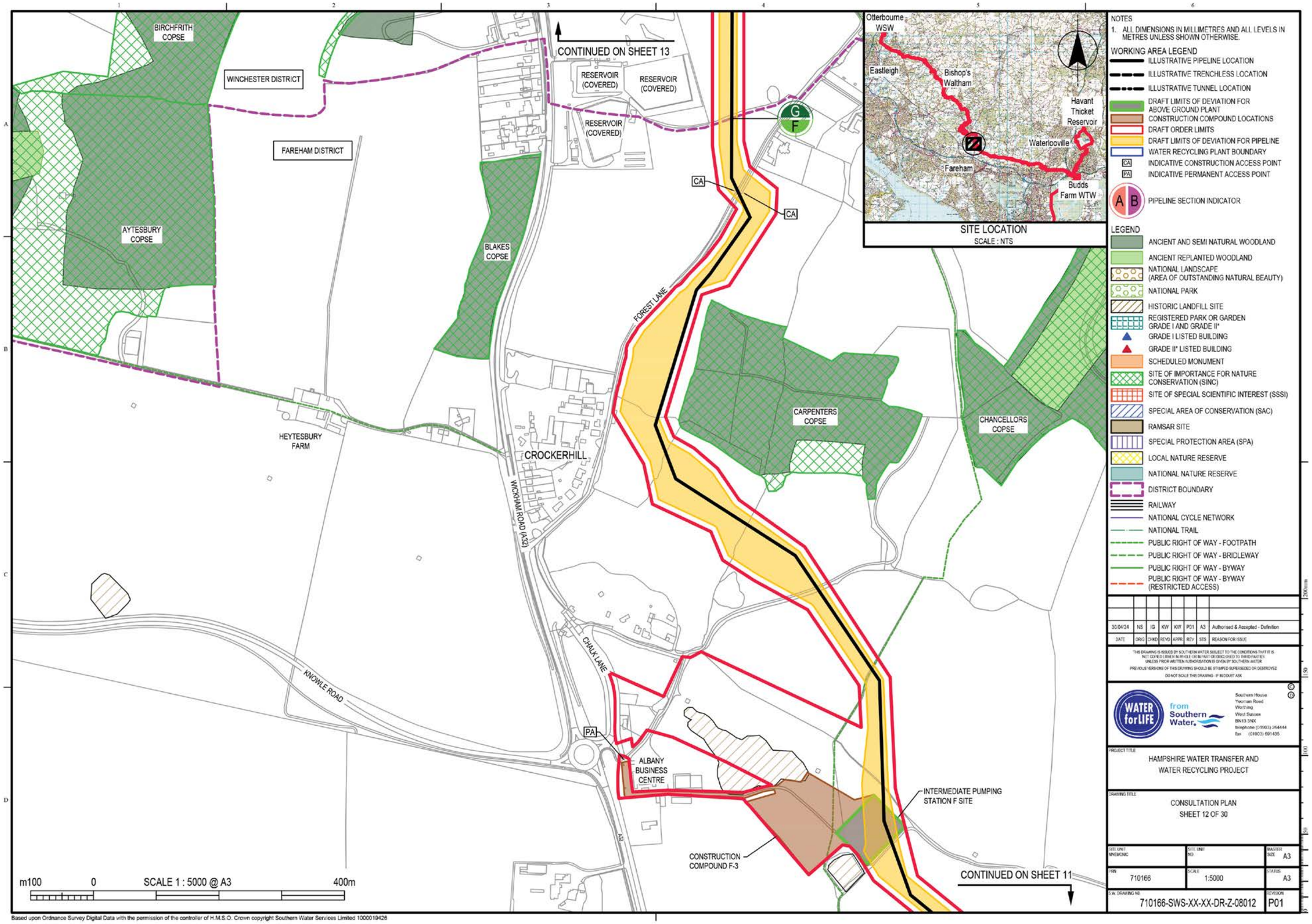
Section F



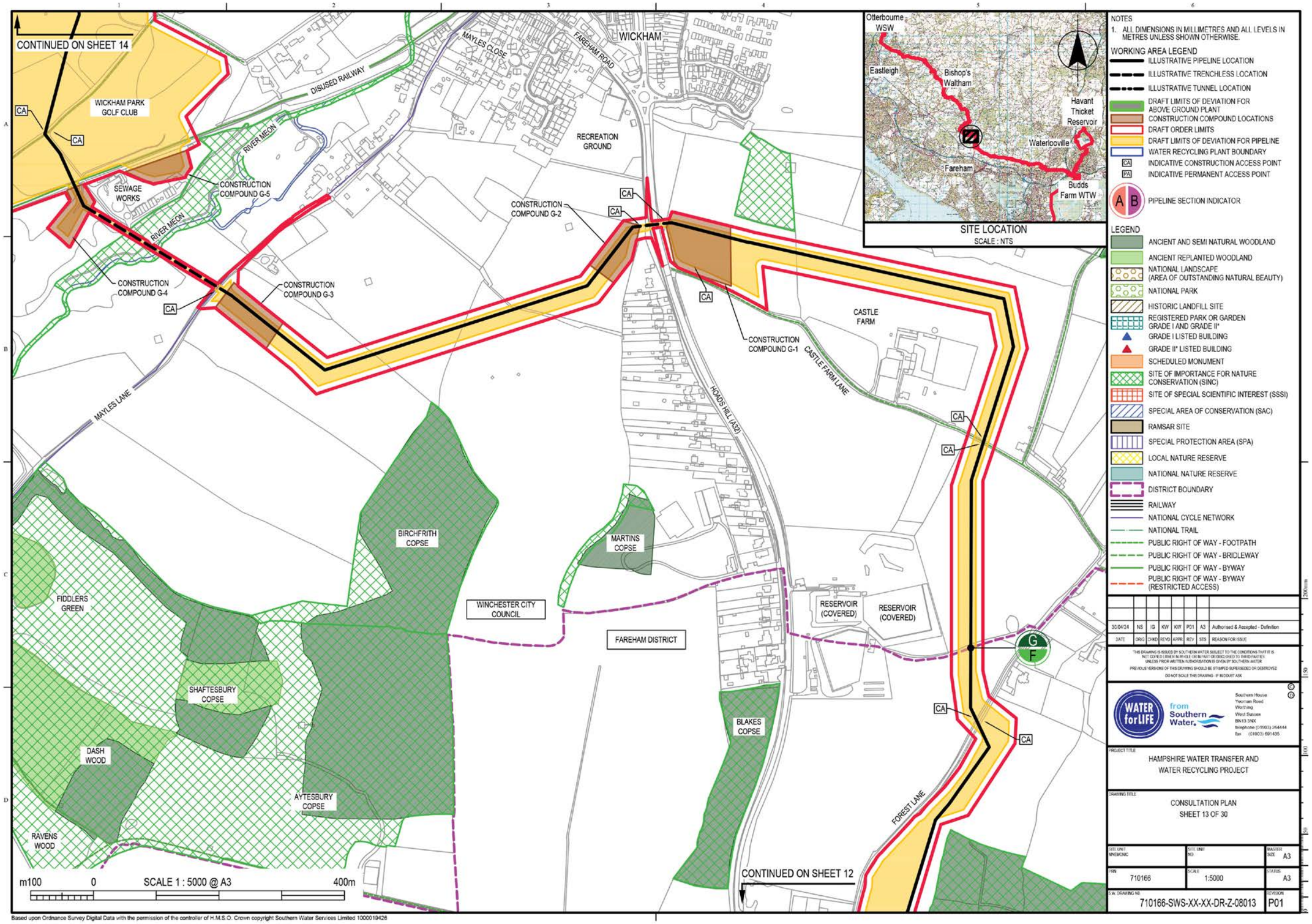
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section F and G



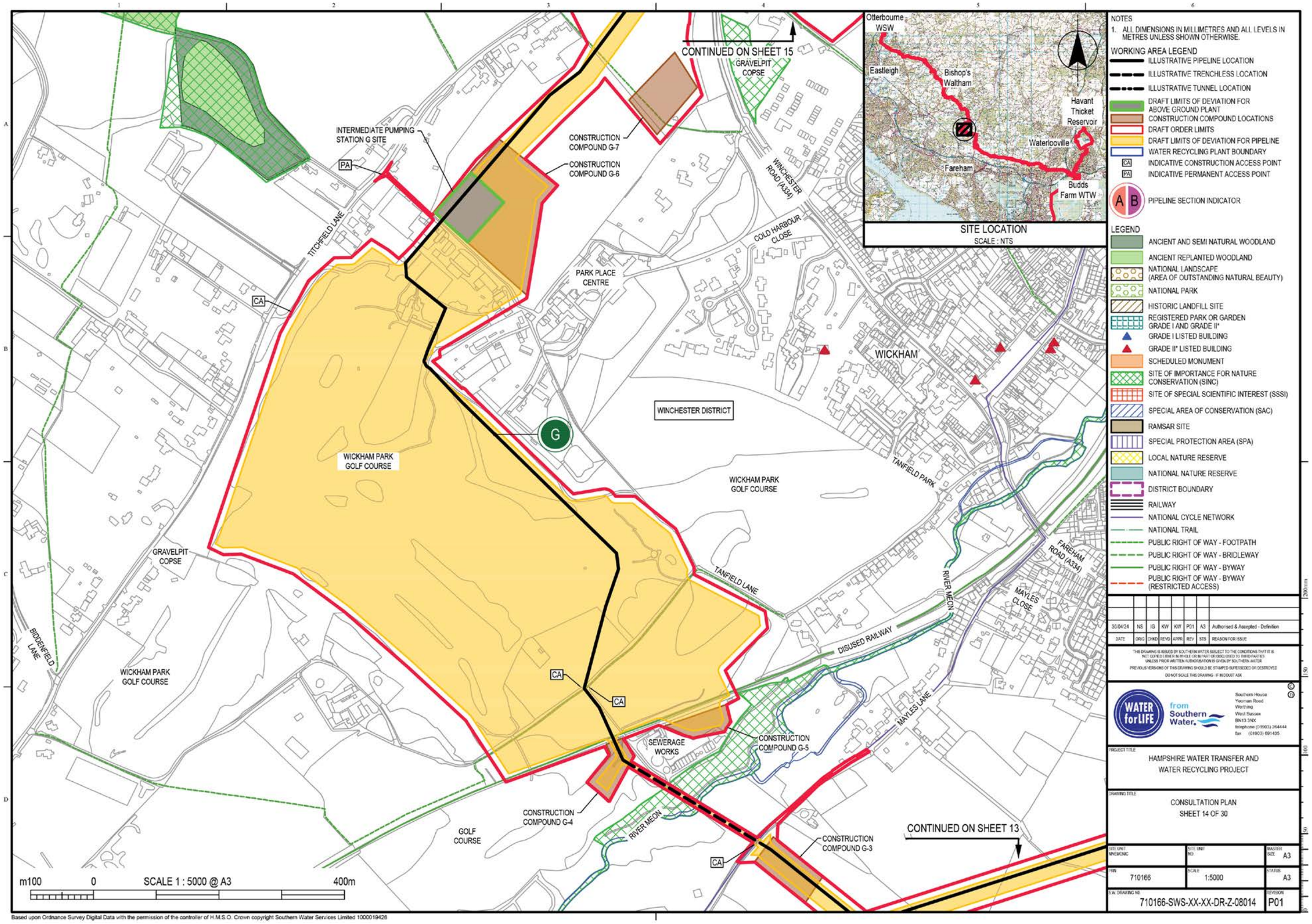
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section F and G



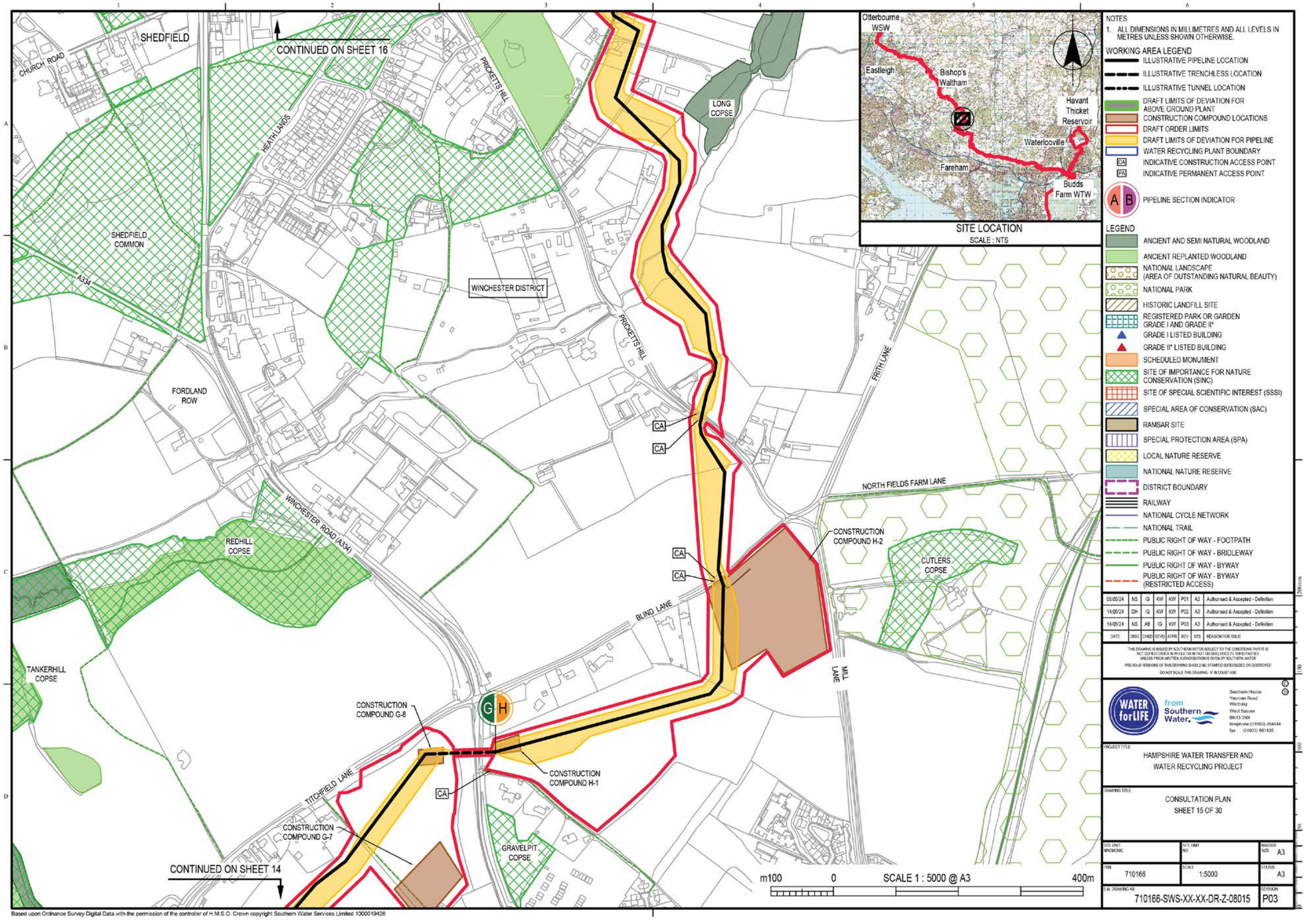
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section G



Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

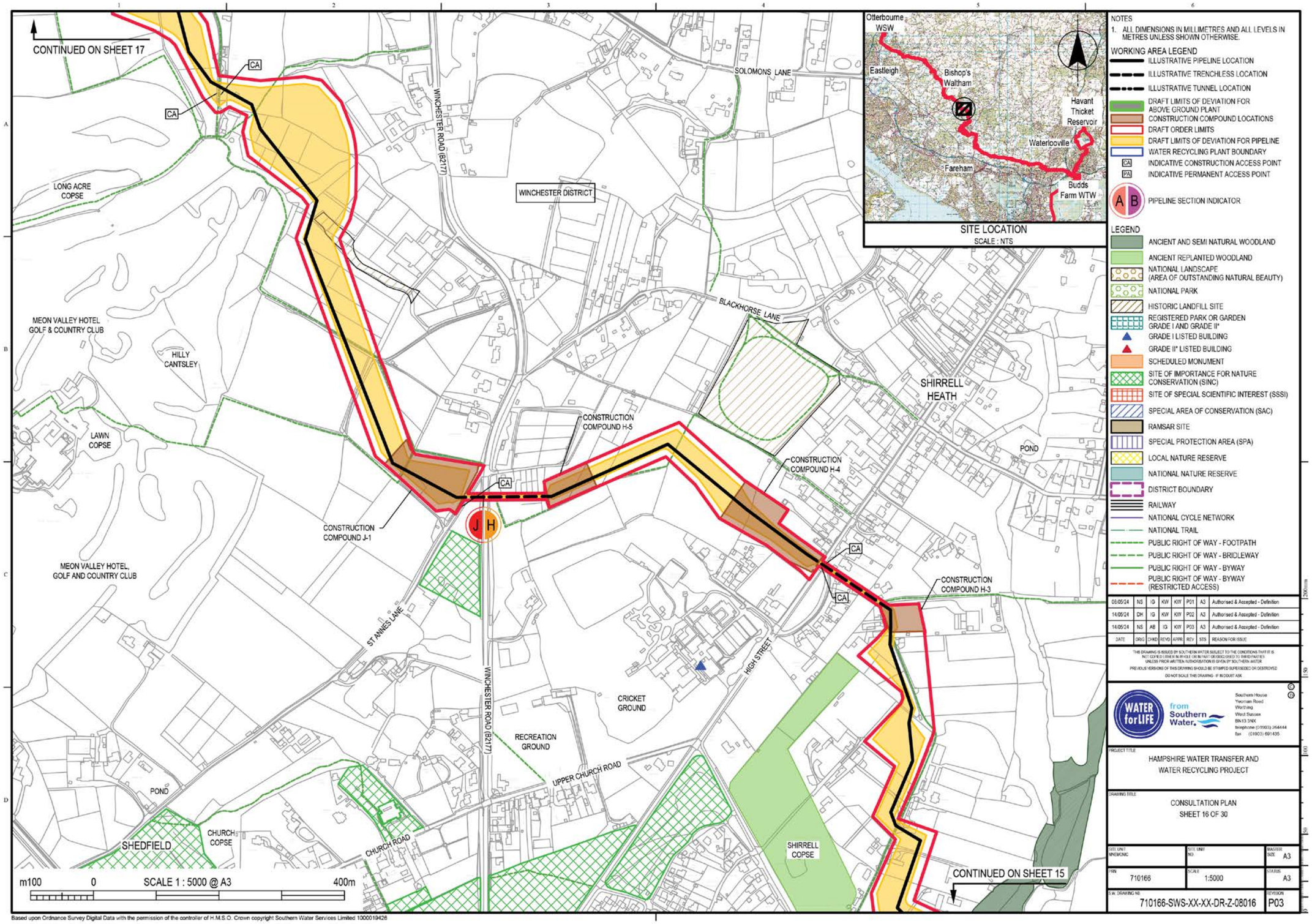
Section G and H



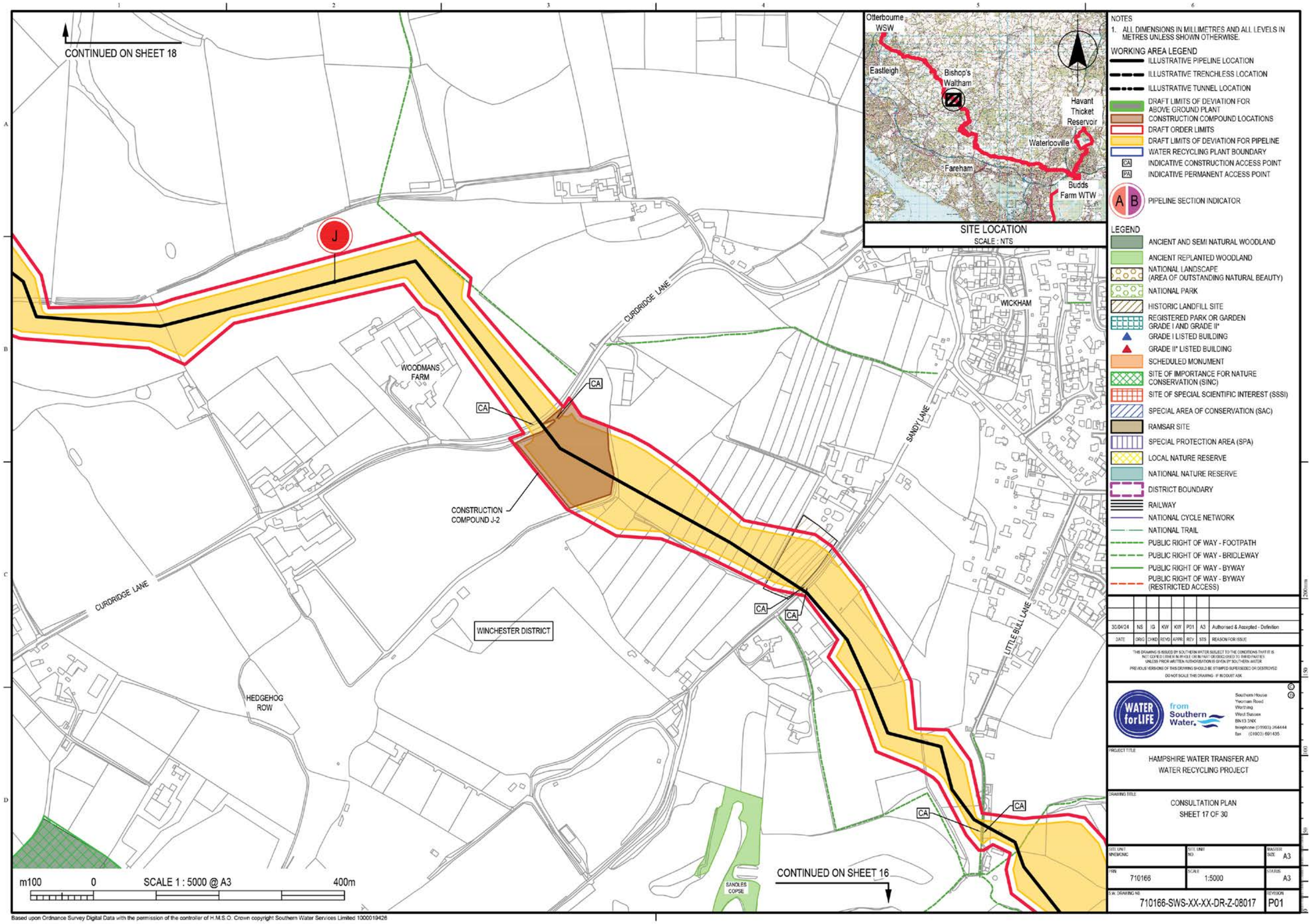
Sheet 15 of 30

Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section H and J

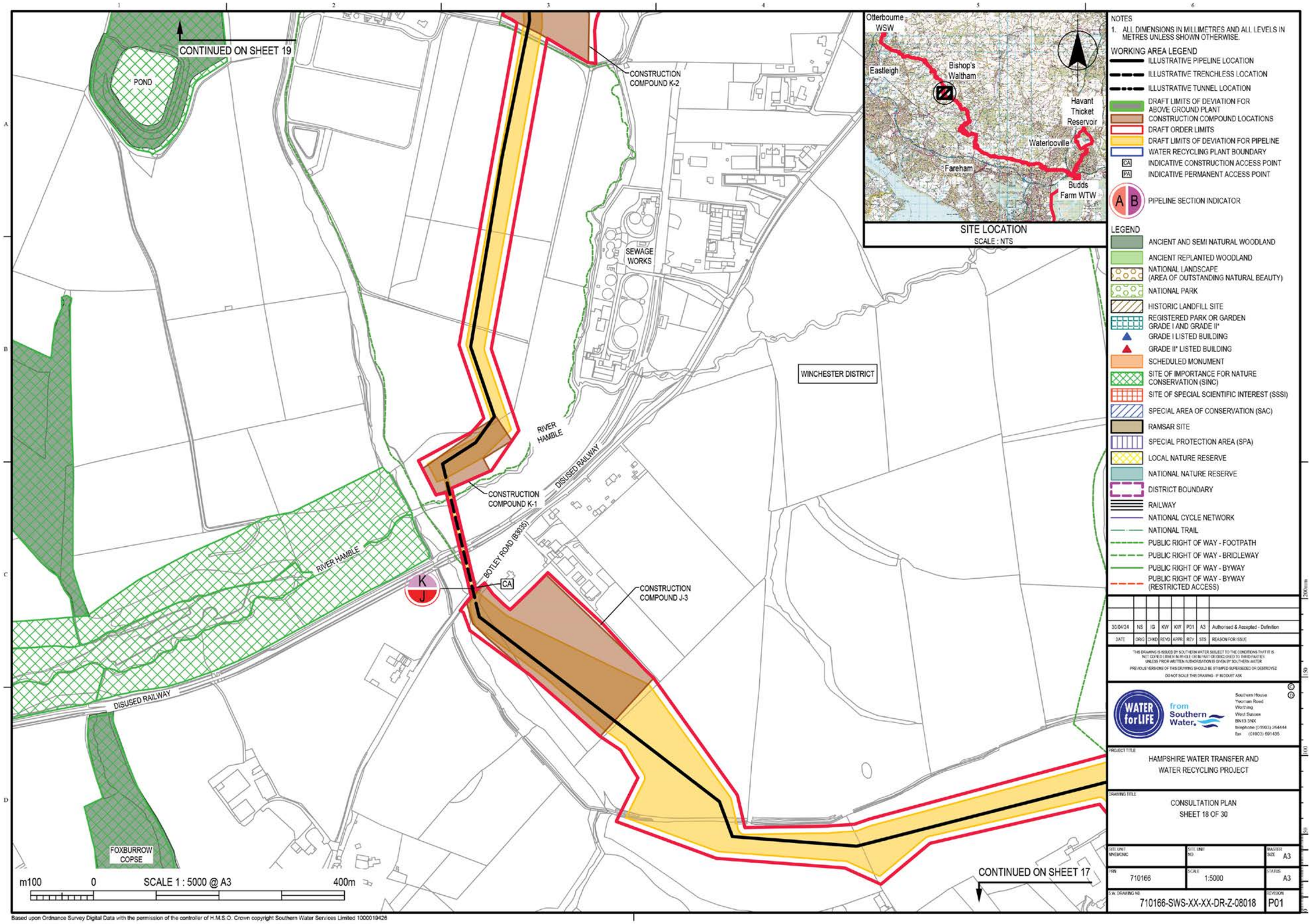


Section J

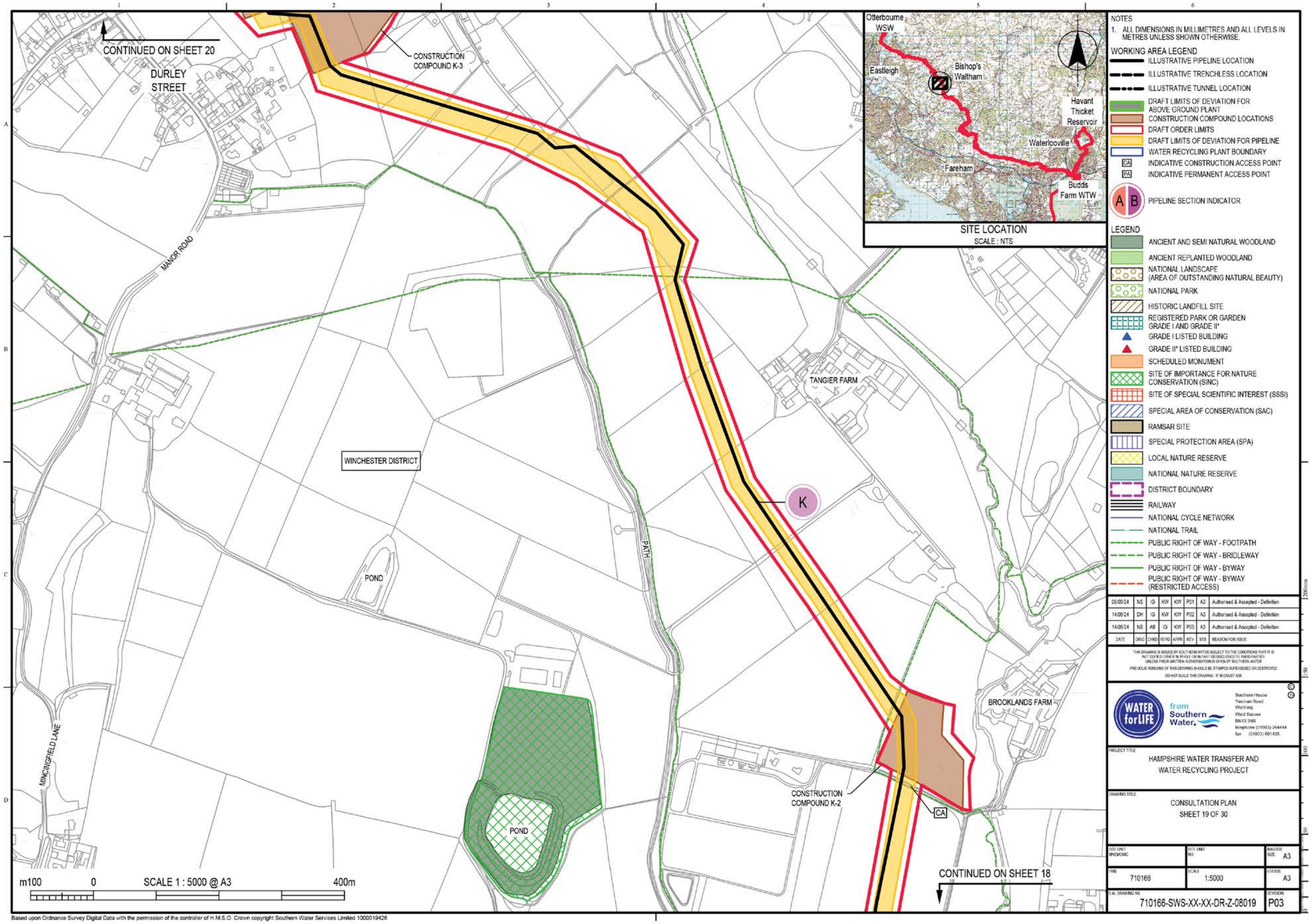


Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section J and K

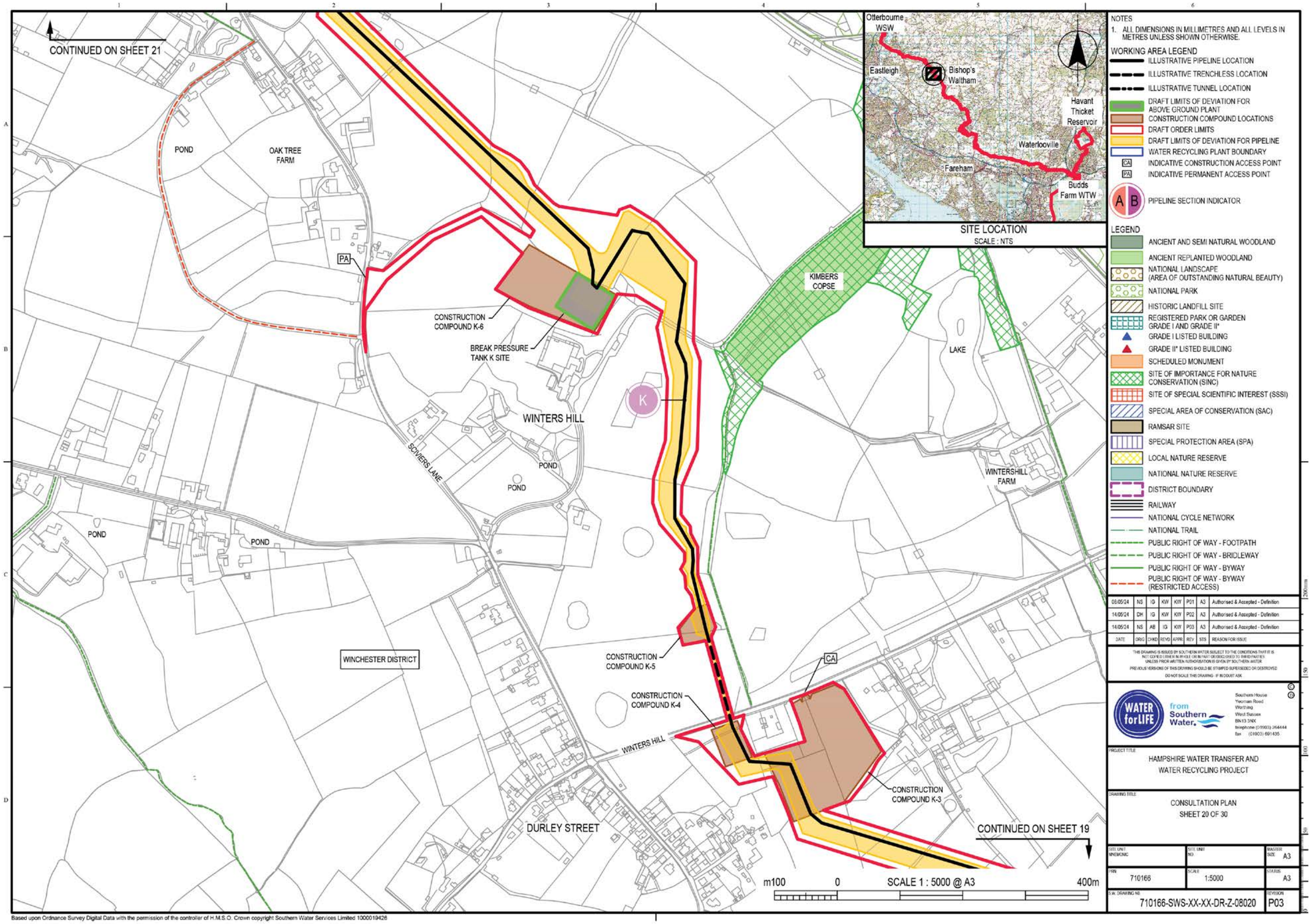


Section K



Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section K



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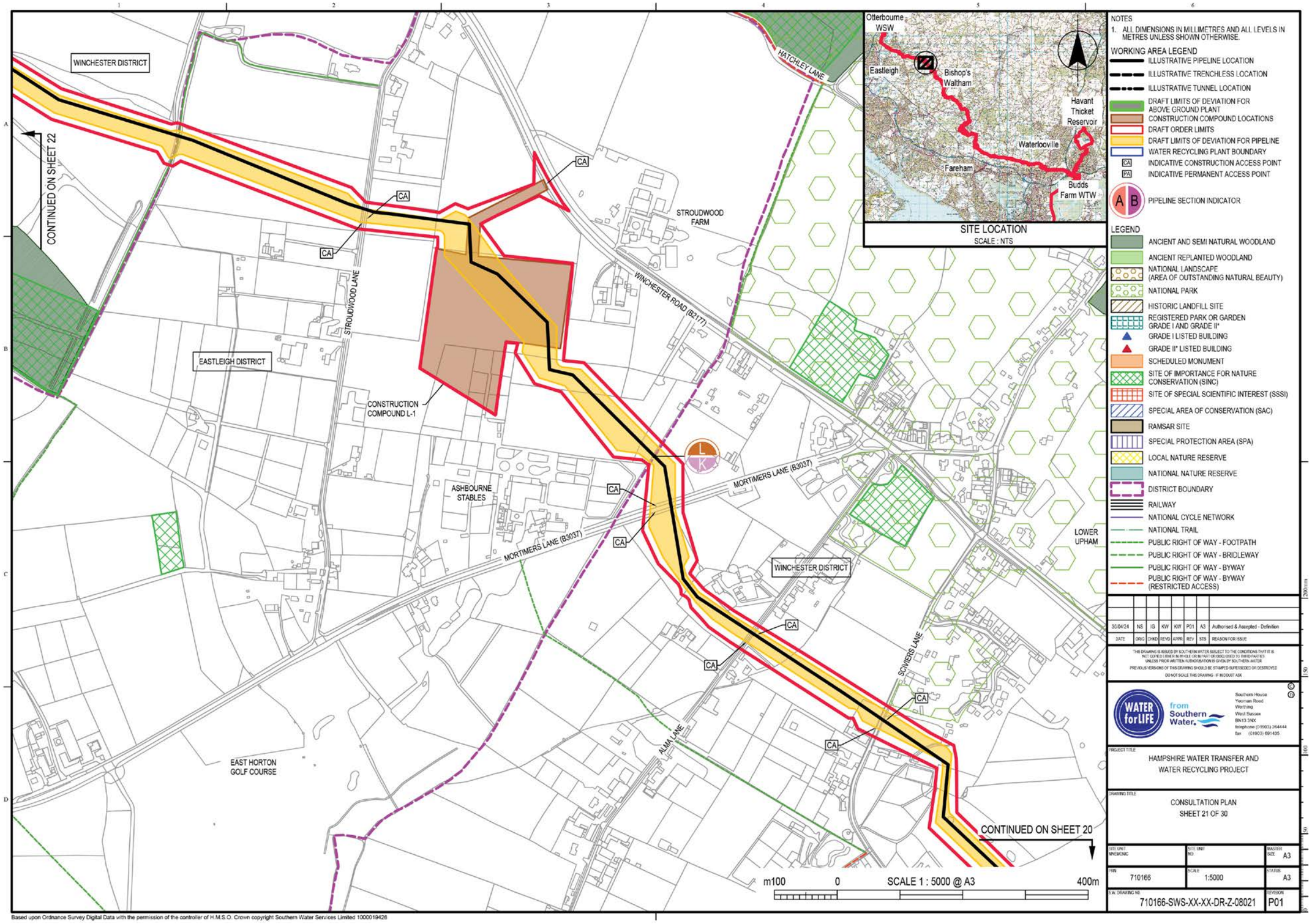
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

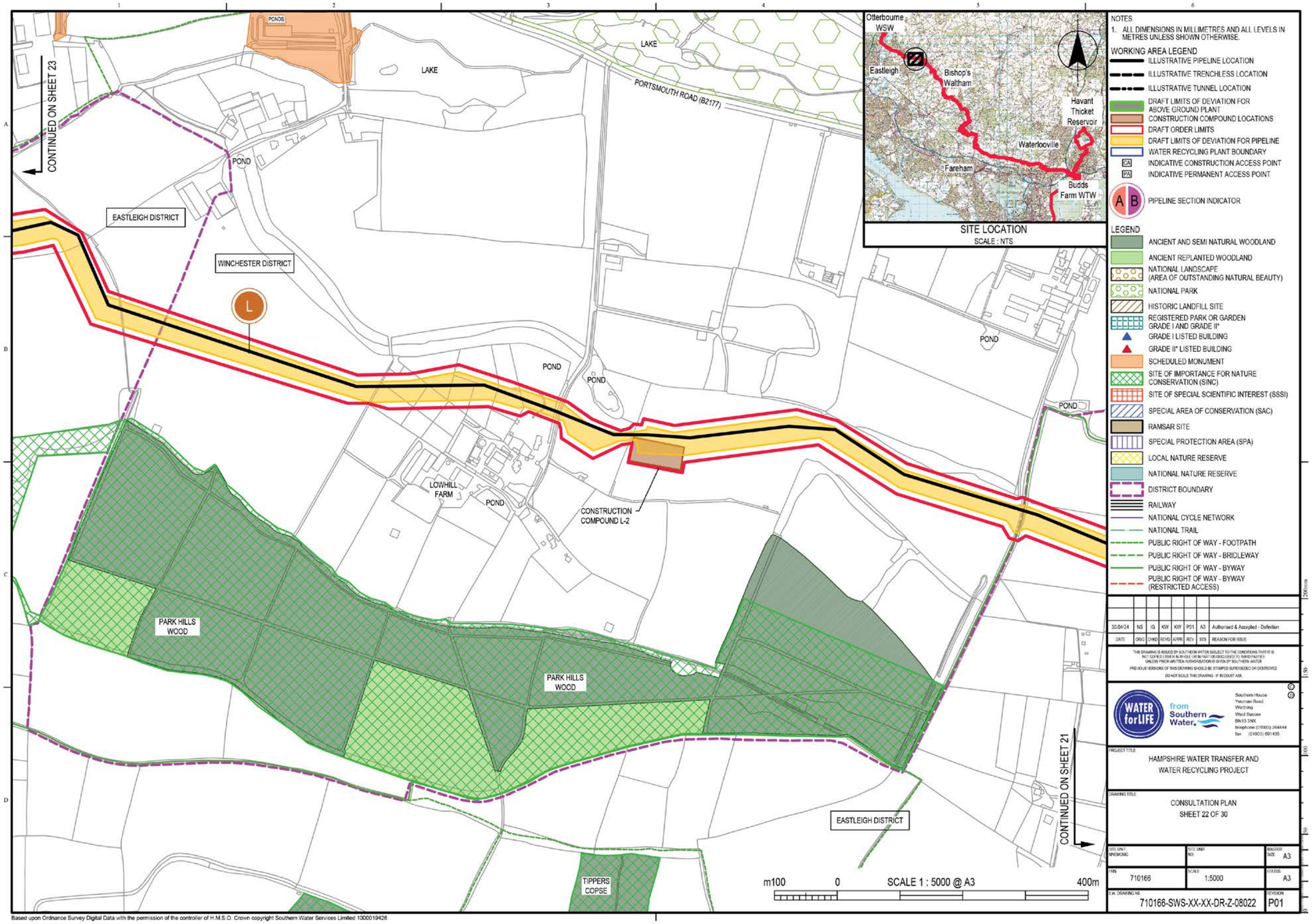
Section K and L



Sheet 21 of 30

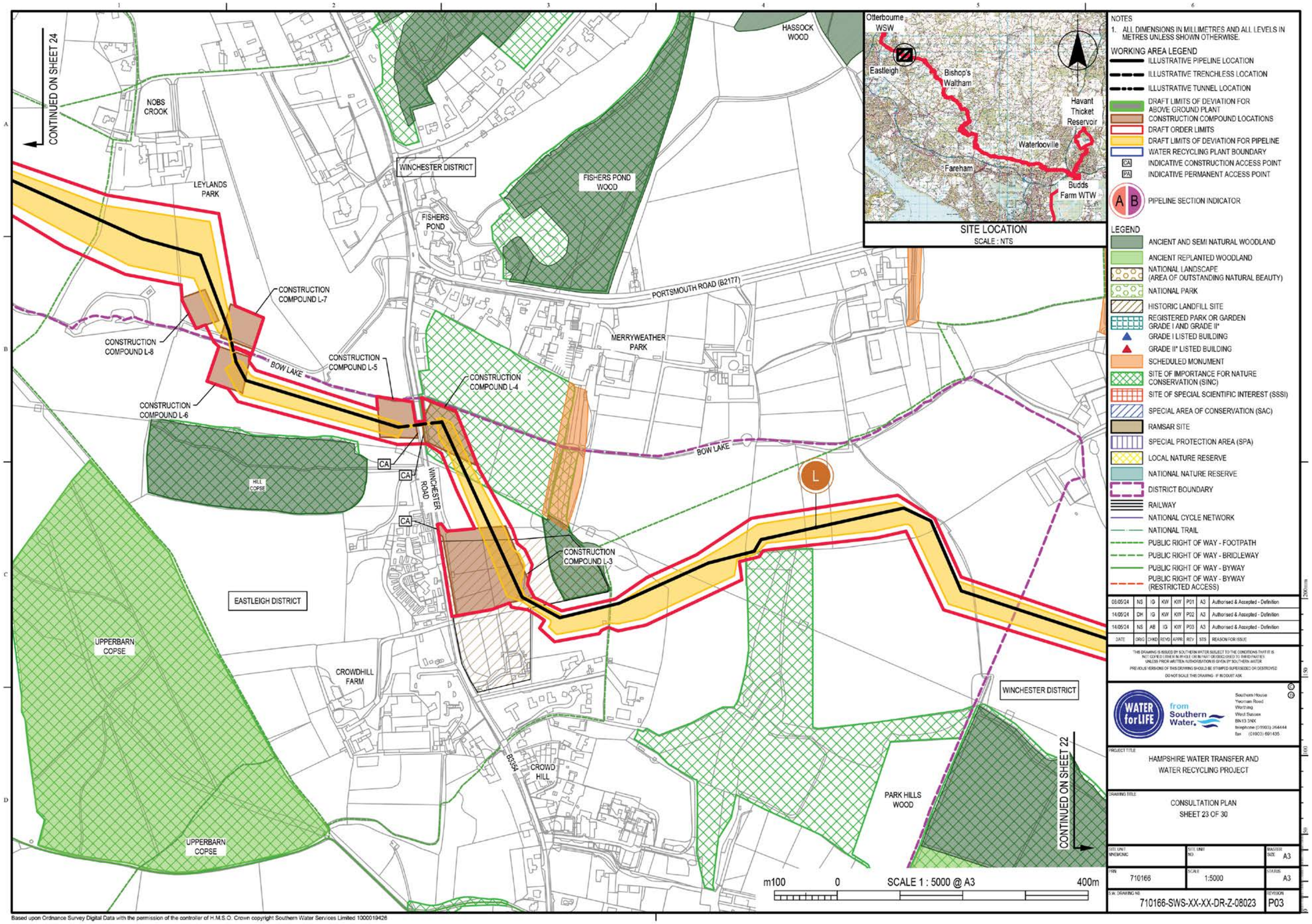
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section L



Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

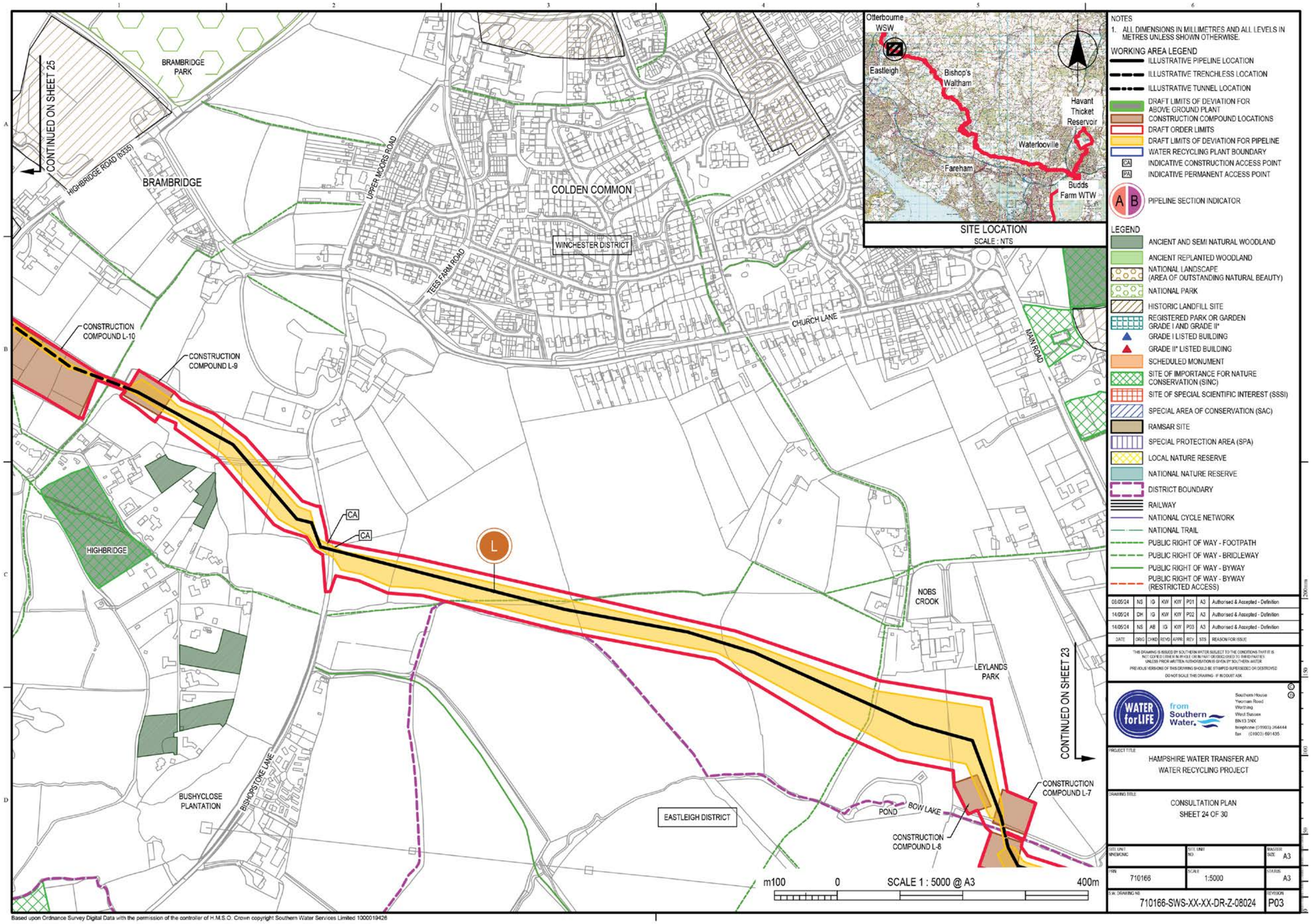
Section L



Sheet 23 of 30

Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section L


CONTINUED ON SHEET 25
BRAMBRIDGE PARK
HIGHBRIDGE ROAD (b3354)
BRAMBRIDGE
UPPER MOORS ROAD
COLDEN COMMON
WINCHESTER DISTRICT
TEES FARM ROAD
CHURCH LANE
MAIN ROAD
CONSTRUCTION COMPOUND L-10
CONSTRUCTION COMPOUND L-9
CA
CA
L
HIGHBRIDGE
BUSHYCLOSE PLANTATION
BISHOPSTOKE LANE
EASTLEIGH DISTRICT
POND
BOW LAKE
CONSTRUCTION COMPOUND L-8
CONSTRUCTION COMPOUND L-7
NOBS CROOK
LEYLANDS PARK
CONTINUED ON SHEET 23
Otterbourne WSW
Eastleigh
Bishop's Waltham
Havant Thicket Reservoir
Waterlooville
Fareham
Budds Farm WTW
SITE LOCATION
SCALE : NTS
NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.
WORKING AREA LEGEND
ILLUSTRATIVE PIPELINE LOCATION
ILLUSTRATIVE TRENCHLESS LOCATION
ILLUSTRATIVE TUNNEL LOCATION
DRAFT LIMITS OF DEVIATION FOR ABOVE GROUND PLANT
CONSTRUCTION COMPOUND LOCATIONS
DRAFT ORDER LIMITS
DRAFT LIMITS OF DEVIATION FOR PIPELINE
WATER RECYCLING PLANT BOUNDARY
CA INDICATIVE CONSTRUCTION ACCESS POINT
PA INDICATIVE PERMANENT ACCESS POINT
A B PIPELINE SECTION INDICATOR
LEGEND
ANCIENT AND SEMI NATURAL WOODLAND
ANCIENT REPLANTED WOODLAND
NATIONAL LANDSCAPE (AREA OF OUTSTANDING NATURAL BEAUTY)
NATIONAL PARK
HISTORIC LANDFILL SITE
REGISTERED PARK OR GARDEN GRADE I AND GRADE II*
GRADE I LISTED BUILDING
GRADE II* LISTED BUILDING
SCHEDULED MONUMENT
SITE OF IMPORTANCE FOR NATURE CONSERVATION (SINC)
SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
SPECIAL AREA OF CONSERVATION (SAC)
RAMSAR SITE
SPECIAL PROTECTION AREA (SPA)
LOCAL NATURE RESERVE
NATIONAL NATURE RESERVE
DISTRICT BOUNDARY
RAILWAY
NATIONAL CYCLE NETWORK
NATIONAL TRAIL
PUBLIC RIGHT OF WAY - FOOTPATH
PUBLIC RIGHT OF WAY - BRIDLEWAY
PUBLIC RIGHT OF WAY - BYWAY
PUBLIC RIGHT OF WAY - BYWAY (RESTRICTED ACCESS)
08/05/24 NS IG KW KW P01 A3 Authorised & Accepted - Definition
14/05/24 DH IG KW KW P02 A3 Authorised & Accepted - Definition
14/05/24 NS AB IG KW P03 A3 Authorised & Accepted - Definition
DATE ORIG CHKD REVD APPR REV STS REASON FOR ISSUE
THIS DRAWING IS ISSUED BY SOUTHERN WATER SUBJECT TO THE CONDITIONS THAT IT IS NOT COPIED EITHER IN WHOLE OR IN PART OR DISCLOSED TO THIRD PARTIES UNLESS PRIOR WRITTEN AUTHORISATION IS GIVEN BY SOUTHERN WATER
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WATER for LIFE
from Southern Water
Southern House
Yeoman Road
Worthing
West Sussex
BN13 3NX
telephone (01903) 264444
fax (01903) 691435
PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT
DRAWING TITLE
CONSULTATION PLAN
SHEET 24 OF 30
SITE UNIT MNEMONIC
SITE UNIT NO.
MASTER SIZE A3
PBN 710166
SCALE 1:5000
STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-08024
REVISION P03
m100 0 SCALE 1 : 5000 @ A3 400m
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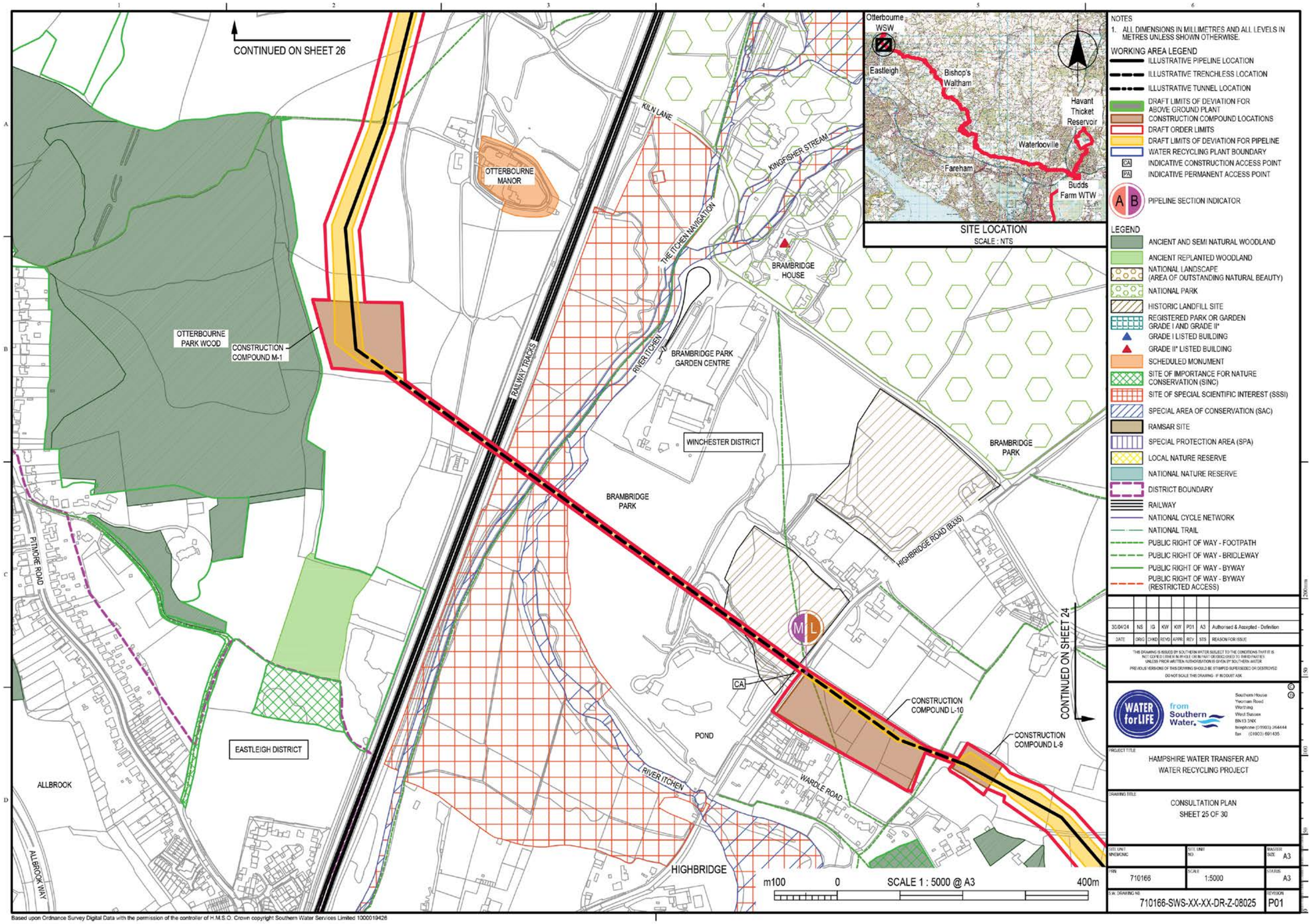
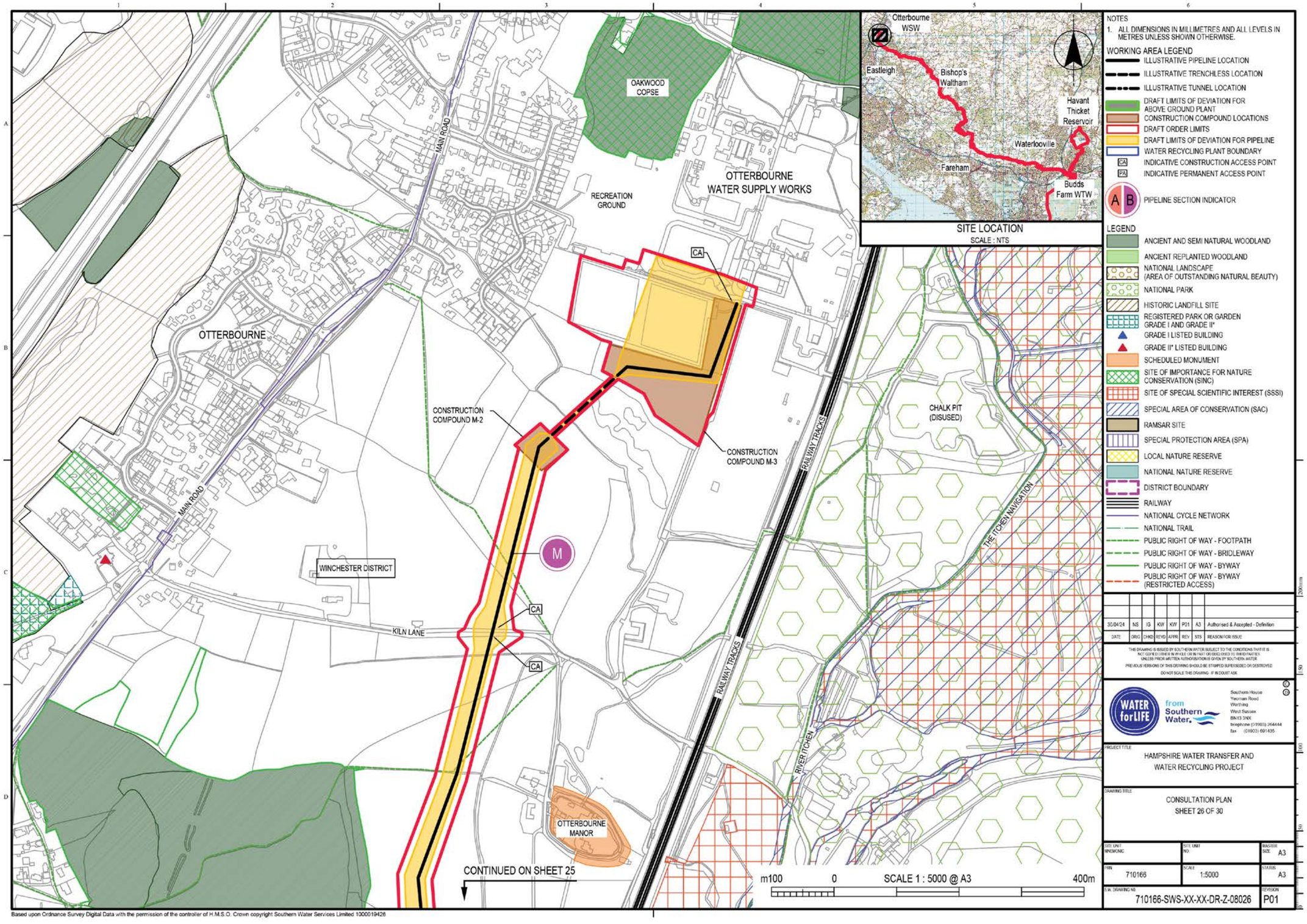
Section L and M



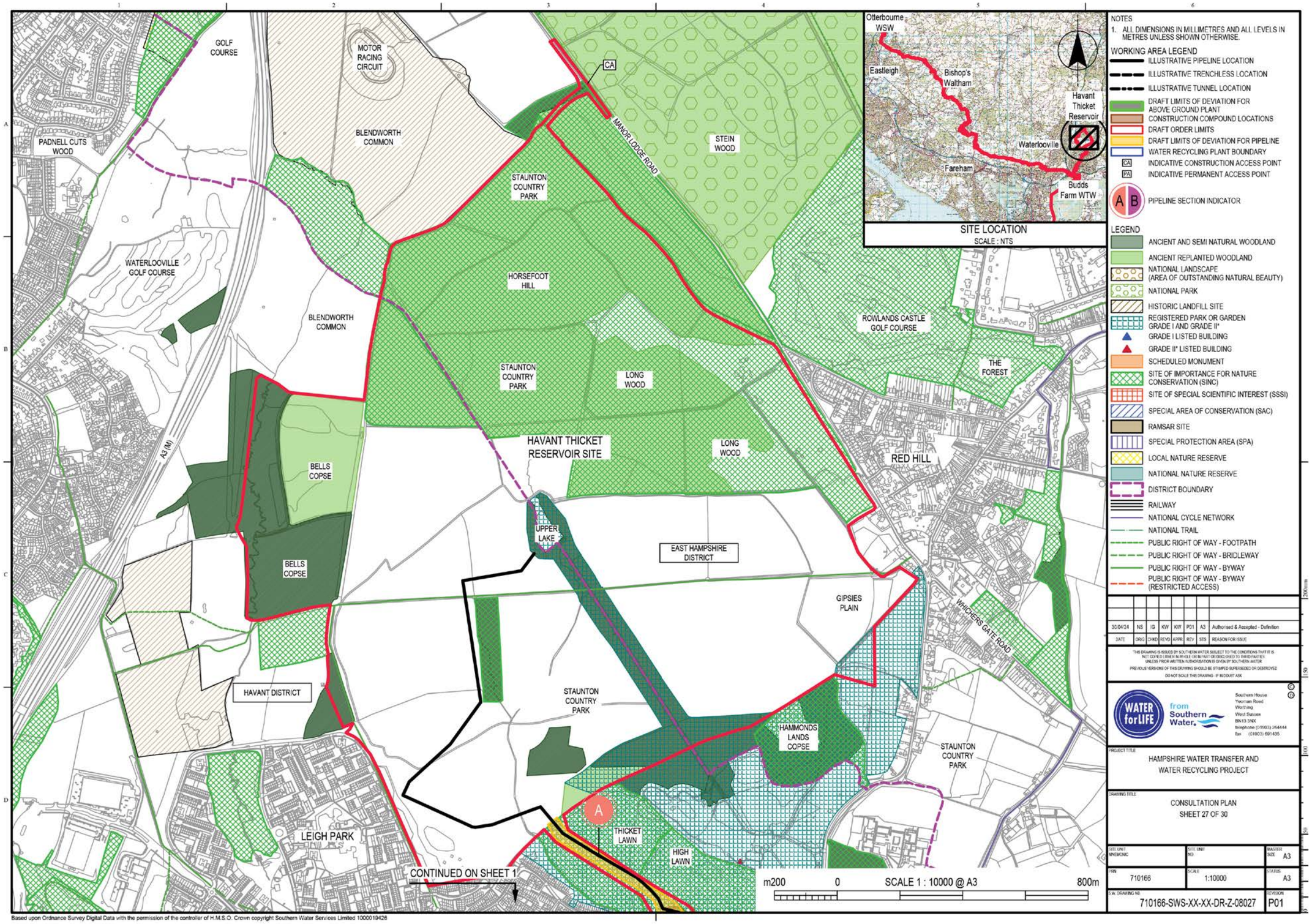
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section M



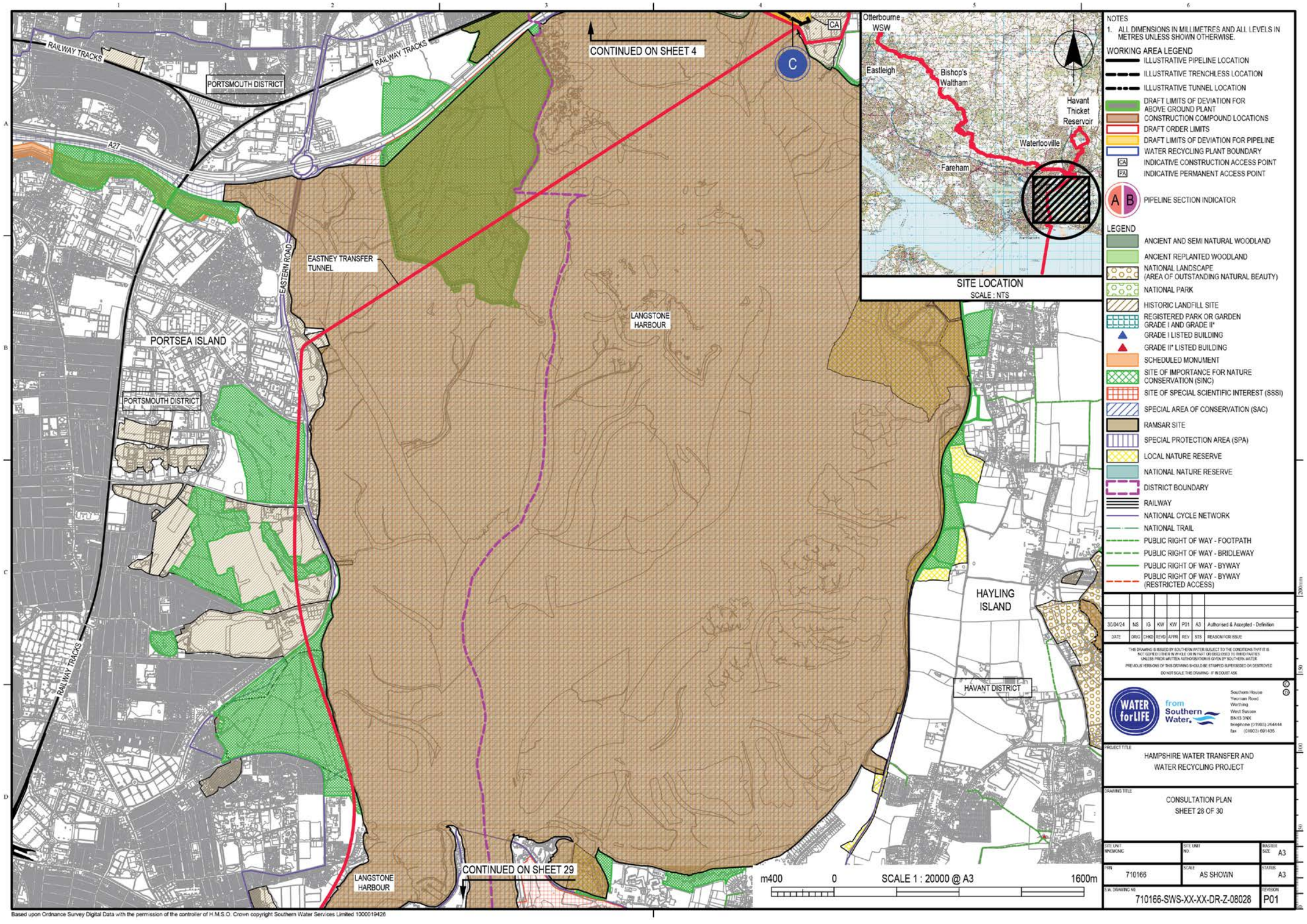
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section A and Havant Thicket Reservoir



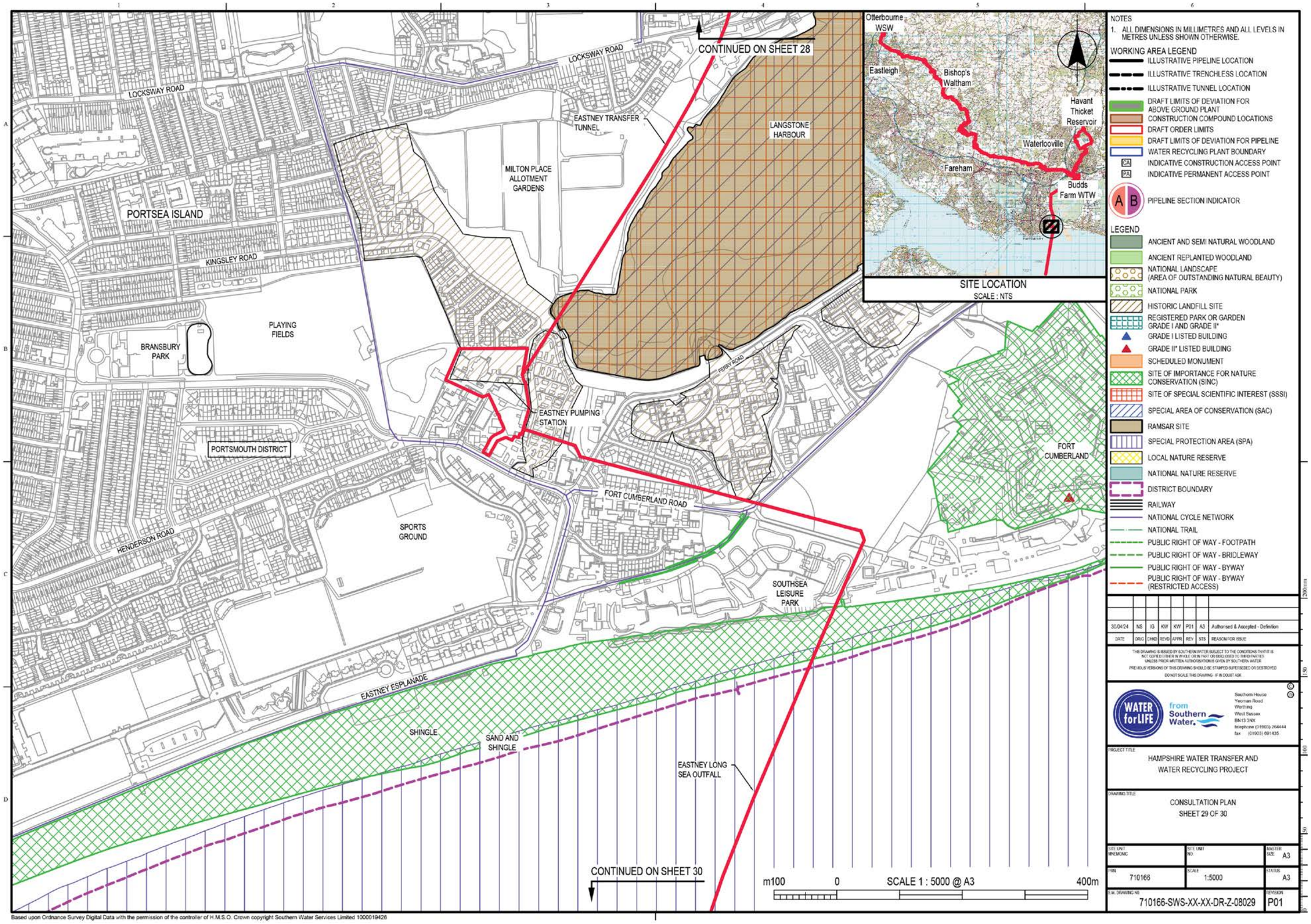
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Section C and the Eastney Long Sea Outfall



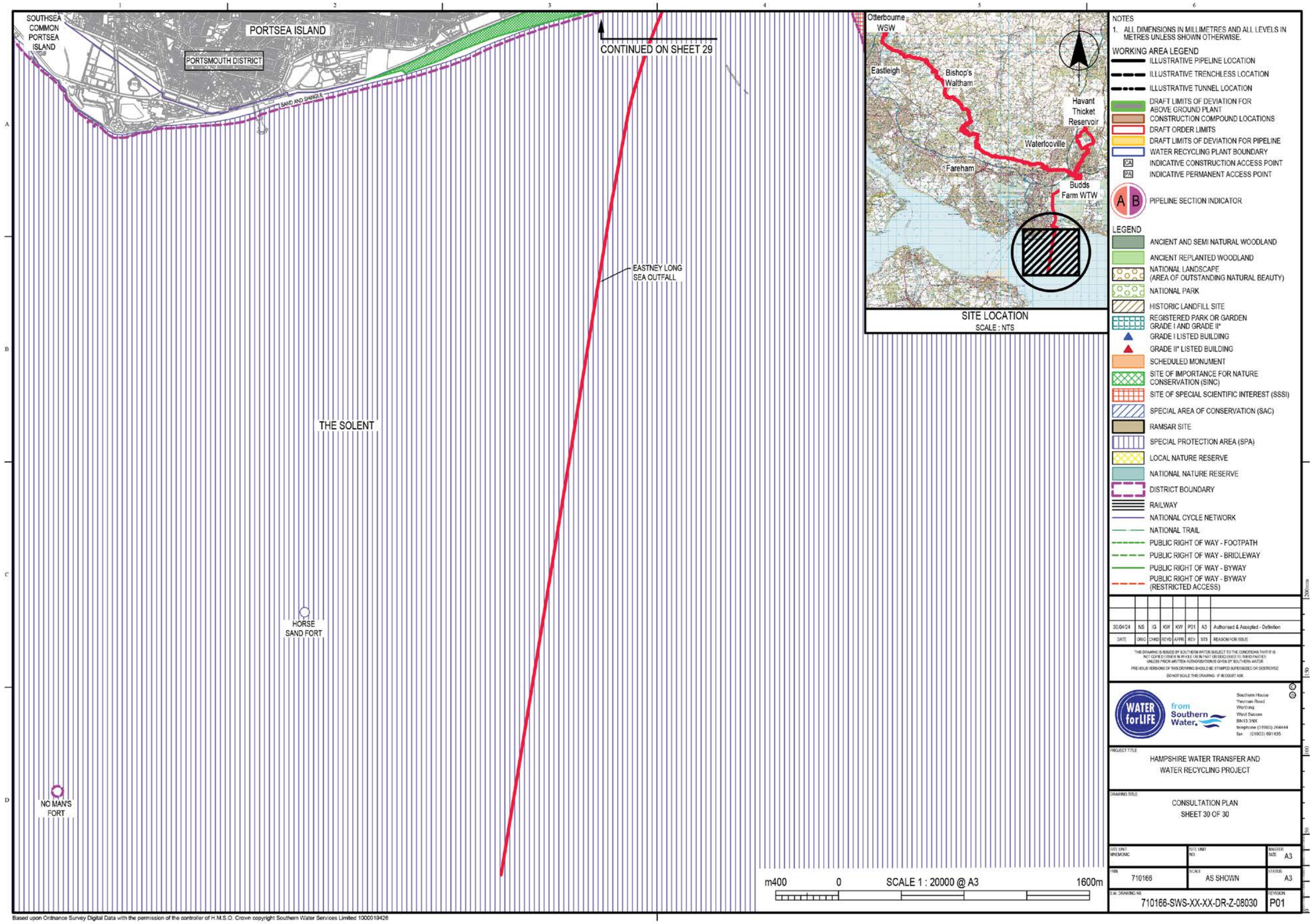
Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Eastney Long Sea Outfall



Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

Eastney Long Sea Outfall



Where colours of some designations may appear distorted due to multiple overlaying designations, please refer to the interactive map where designations can be turned on and off

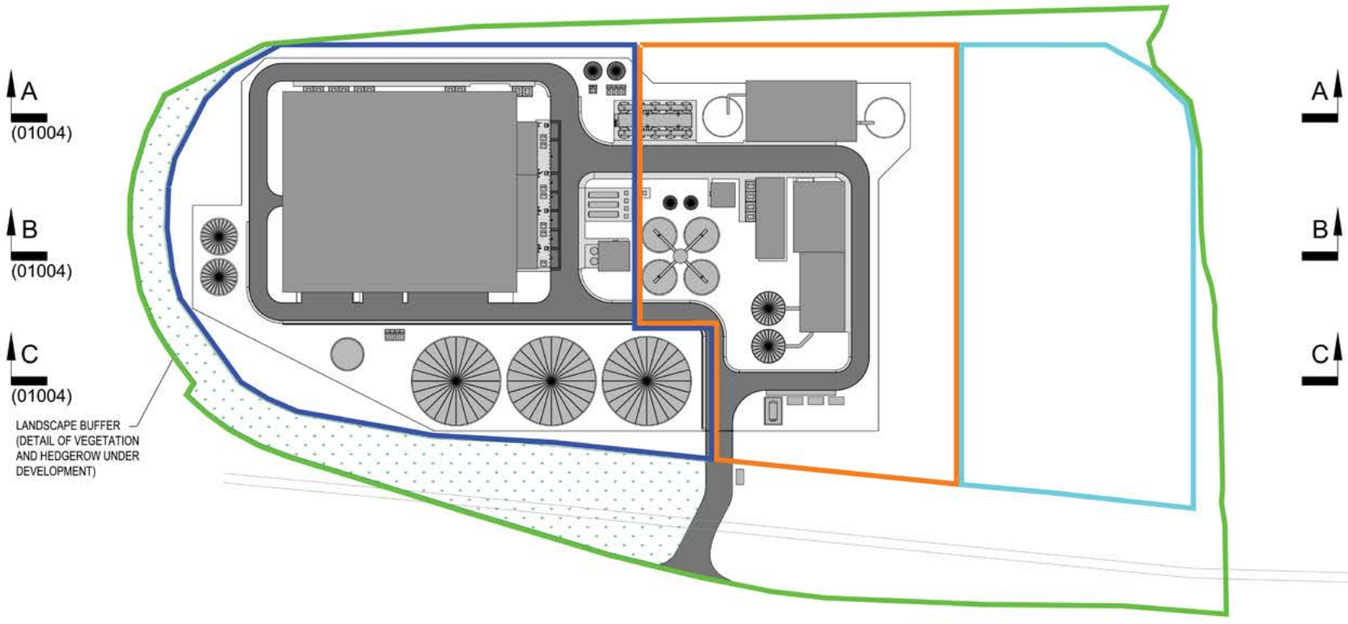
Illustrative Water Recycling Plant plans and drawings

WATER for LIFE®

from Southern Water®

Illustrative Layout

PARAMETER TABLE	
ASPECT	PARAMETER
MAXIMUM FOOTPRINT OF WATER RECYCLING PLANT SITE	63750m²
MAXIMUM DIMENSIONS OF WATER RECYCLING PLANT SITE	375m x 170m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 1 OF THE WATER RECYCLING PLANT	13m
MAXIMUM DIMENSIONS OF WATER RECYCLING PLANT MAIN PROCESS BUILDING WITHIN ZONE 1	170m x 115m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 2 OF THE WATER RECYCLING PLANT	9.8m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 3 OF THE WATER RECYCLING PLANT	5m



NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND
- WATER RECYCLING PLANT SITE BOUNDARY
- ZONE 1 : MAIN PROCESS BUILDING, ADMINISTRATION BUILDING, CHEMICAL STORAGE UNITS, HOLDING TANKS, FURTHER PLANT AND EQUIPMENT AND PARKING
- ZONE 2 : CHEMICAL STORAGE UNITS, HOLDING TANKS, FURTHER PLANT AND EQUIPMENT, HIGH LIFT PUMPING STATION AND PARKING.
- ZONE 3 : FURTHER PLANT AND EQUIPMENT, RENEWABLE ENEGY GENERATION, STORAGE AND LAYDOWN
- ILLUSTRATIVE LANDSCAPE BUFFER
- A — SECTION INDICATOR

CURRENT VERSION INFORMATION
UPDATED FOR WORK PLAN ISSUE.

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
10/01/24	PJ	CT	SO	NB	C01	A2	Authorised & Accepted - Concept
04/03/24	PJ	CT	SO	JK	C02	A3	Authorised & Accepted - Definition
01/05/24	NS	CT	IG	KW	P03	A3	Authorised & Accepted - Definition

WATER forLIFE from Southern Water.
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fax (01903) 691435

PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE
WATER RECYCLING PLANT ILLUSTRATIVE LAYOUT

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE
		A3
PRN	SCALE	STATUS
710166	1:2000	A3
S.W. DRAWING NO.		REVISION
710166-SWS-XX-XX-DR-Z-01003		P03

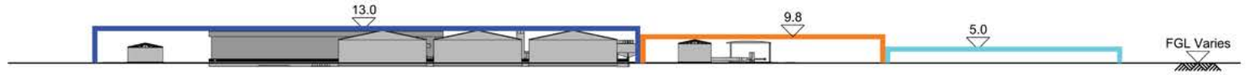
SCALE 1 : 2000 @ A3

m100 0 100m

Illustrative Elevation

SECTION A-A
(01003)

SECTION B-B
(01003)



SECTION C-C
(01003)

PARAMETER TABLE	
ASPECT	PARAMETER
MAXIMUM FOOTPRINT OF WATER RECYCLING PLANT SITE	63750m²
MAXIMUM DIMENSIONS OF WATER RECYCLING PLANT SITE	375m x 170m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 1 OF THE WATER RECYCLING PLANT	13m
MAXIMUM DIMENSIONS OF WATER RECYCLING PLANT MAIN PROCESS BUILDING WITHIN ZONE 1	170m x 115m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 2 OF THE WATER RECYCLING PLANT	9.8m
MAXIMUM BUILDING HEIGHT WITHIN ZONE 3 OF THE WATER RECYCLING PLANT	5m

NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND
- ZONE 1 : MAIN PROCESS BUILDING, ADMINISTRATION BUILDING, CHEMICAL STORAGE UNITS, HOLDING TANKS, FURTHER PLANT AND EQUIPMENT AND PARKING
- ZONE 2 : CHEMICAL STORAGE UNITS, HOLDING TANKS, FURTHER PLANT AND EQUIPMENT, HIGH LIFT PUMPING STATION AND PARKING.
- ZONE 3 : FURTHER PLANT AND EQUIPMENT, RENEWABLE ENEGY GENERATION, STORAGE AND LAYDOWN

SCALE 1 : 2000 @ A3

m100 0 100m

CURRENT VERSION INFORMATION
UPDATED FOR WORK PLAN ISSUE.

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
04/03/24	PJ	CT	SO	JK	C01	A3	Authorised & Accepted - Definition
01/05/24	NS	CT	IG	KW	P02	A3	Authorised & Accepted - Definition

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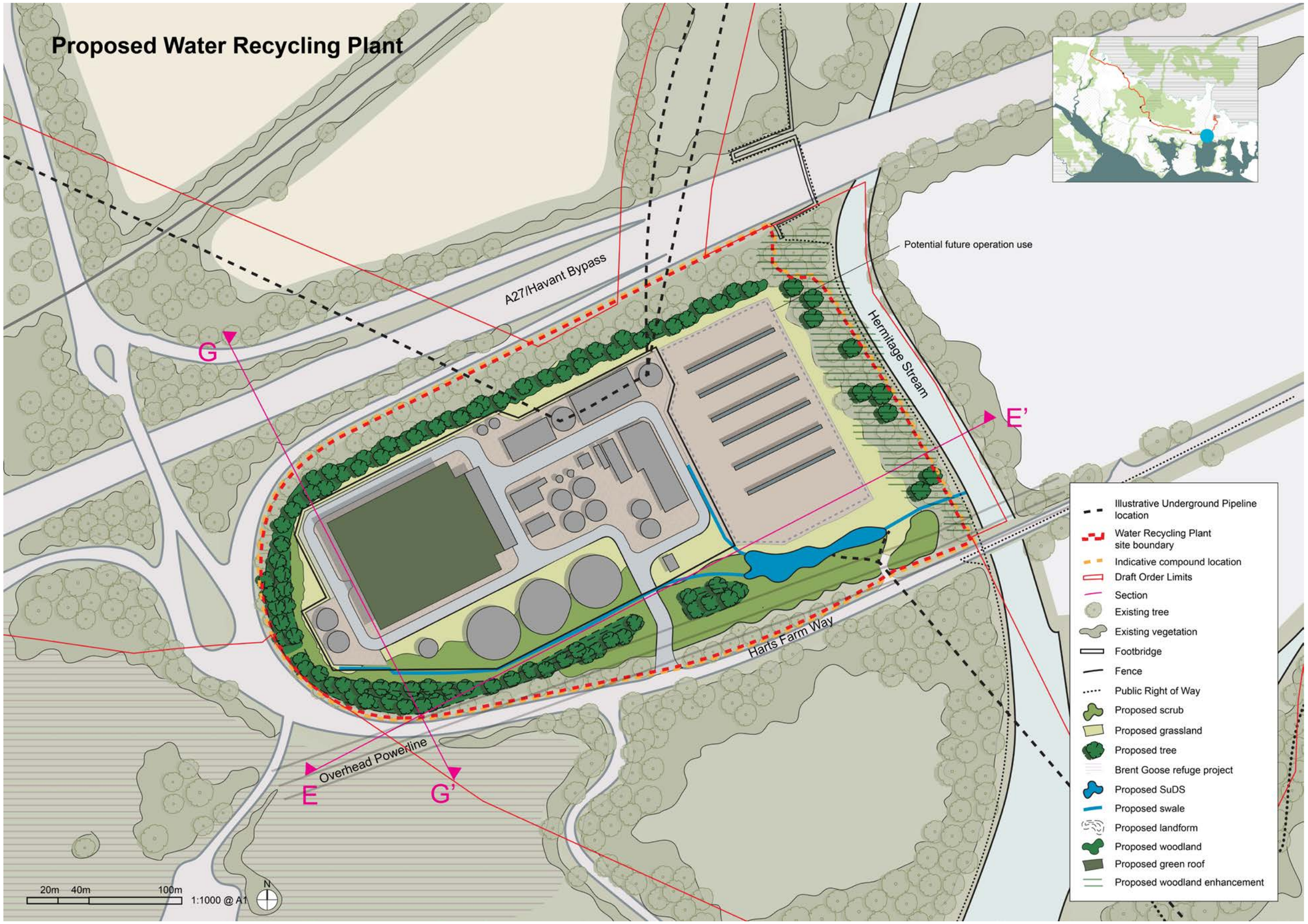
Worthing
West Sussex
BN13 3NX
telephone (01903) 264444
fax (01903) 691435

PROJECT TITLE: HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

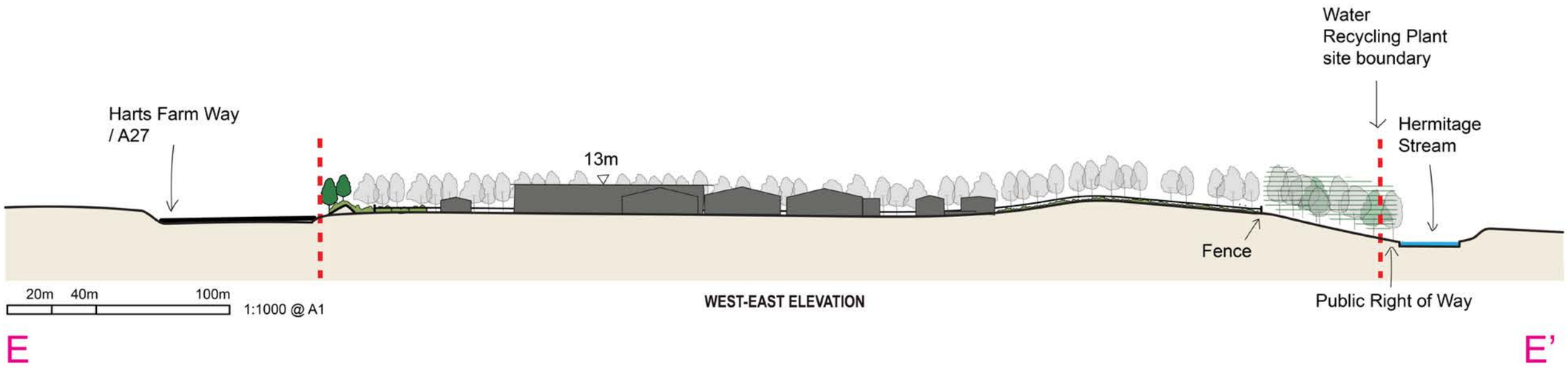
DRAWING TITLE: WATER RECYCLING PLANT ILLUSTRATIVE ELEVATIONS

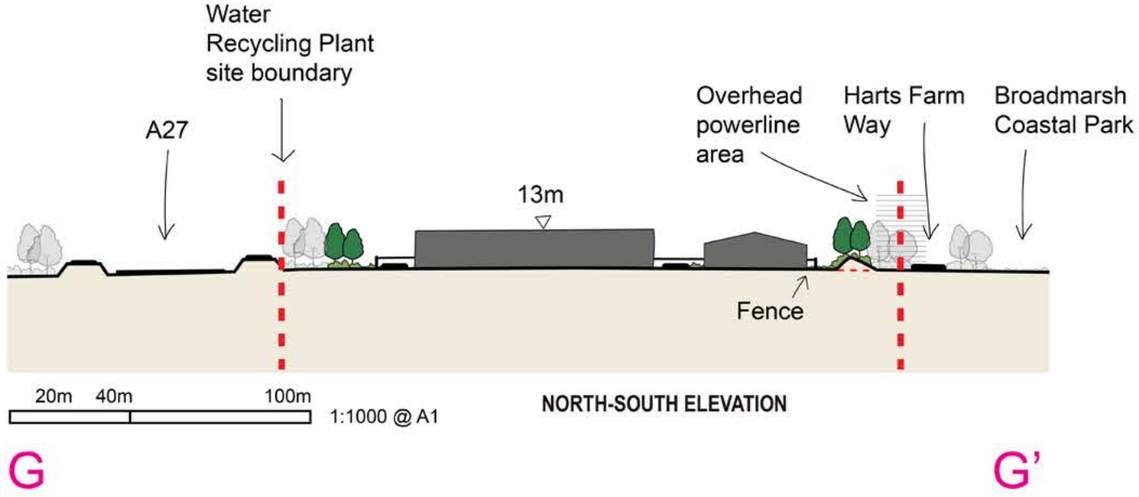
SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE A3
PRN 710166	SCALE 1:2000	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-01004		REVISION P02

Environmental Masterplan Illustrative Layout



Environmental Masterplan Illustrative Elevation





Environmental Masterplan Illustrative Visualisation

Illustrative Above Ground Plant plans and drawings

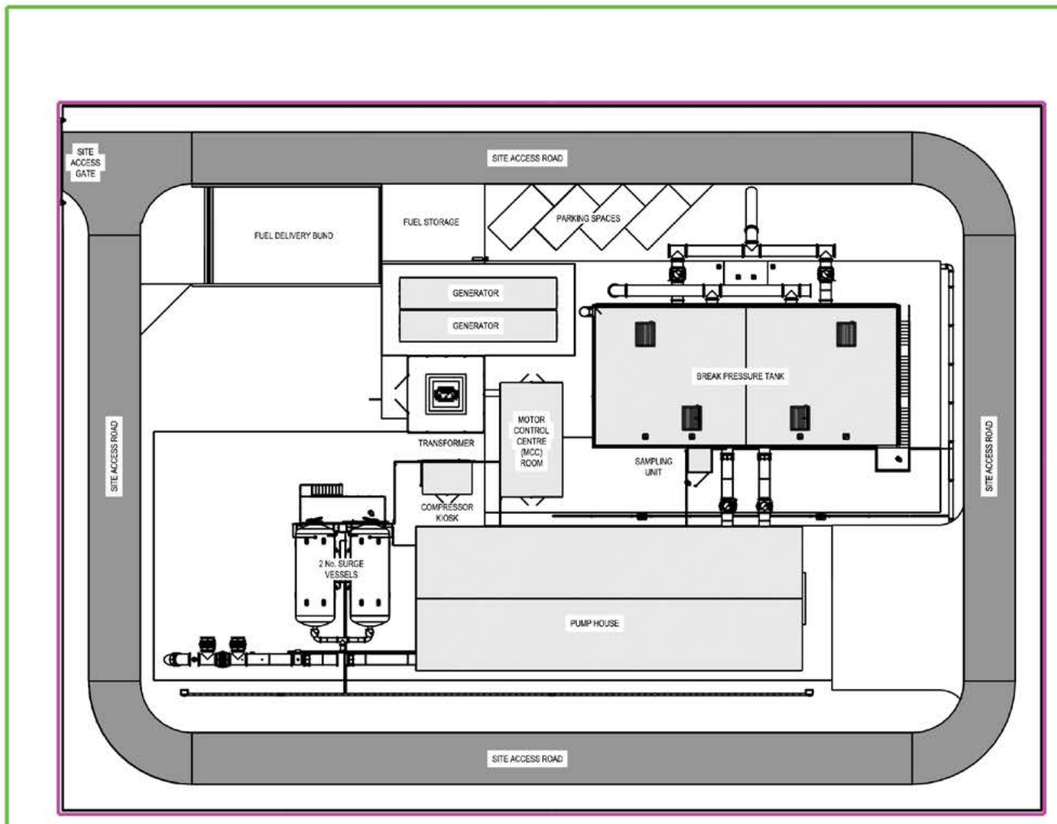
from Southern Water®

Break Pressure Tank/ Intermediate Pumping Station E

WATER for LIFE®

from Southern Water®

Illustrative Layout



VIEW B
(00984)

(00984) VIEW A

NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

DRAFT LIMITS OF DEVIATION FOR BPT/IPS

MAXIMUM FOOTPRINT OF BPT/IPS WITHIN THE DRAFT LIMITS OF DEVIATION.

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR BPT/IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF BPT/IPS	85m x 70m
MAXIMUM FOOTPRINT OF BPT/IPS WITHIN THE DRAFT LIMITS OF DEVIATION	4484m²
MAXIMUM DIMENSIONS OF BPT/IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 59m
MAXIMUM BUILDING HEIGHT OF BPT/IPS	8m

SCALE 1 : 400 @ A3
m20 0 20m

CURRENT VERSION INFORMATION

DATE	DRG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
30/04/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

WATER for LIFE
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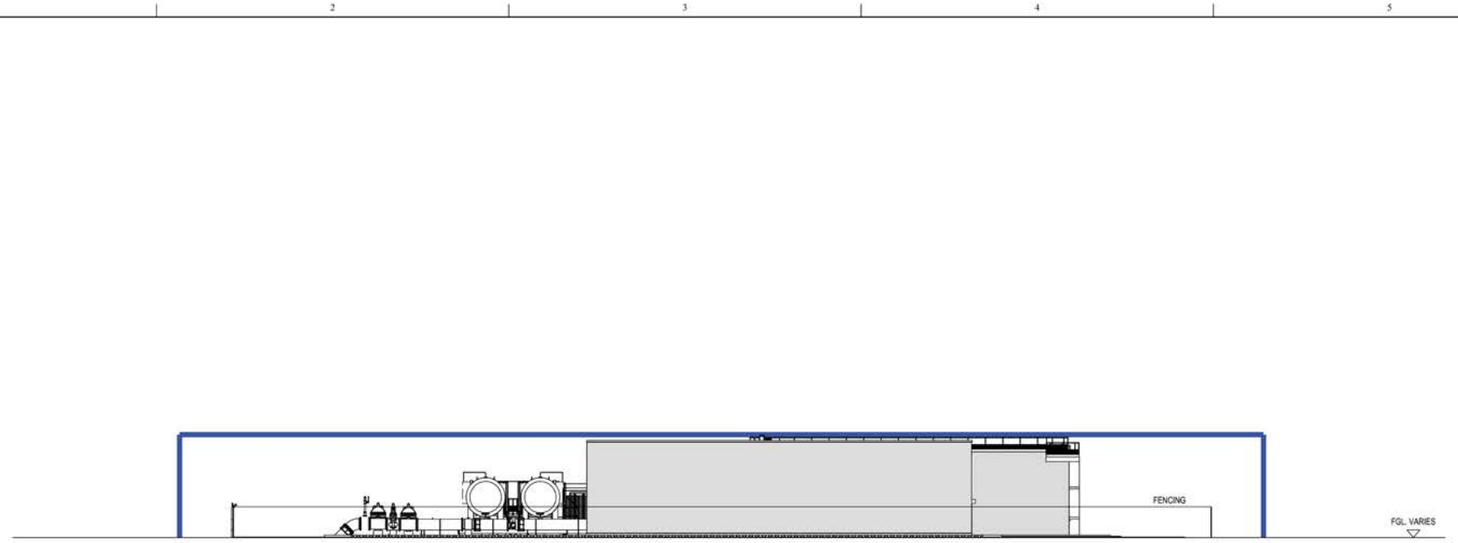
Yeoman Road
Worthing
West Sussex
BN13 3NX
telephone (01903) 264444
fax (01903) 691435

PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

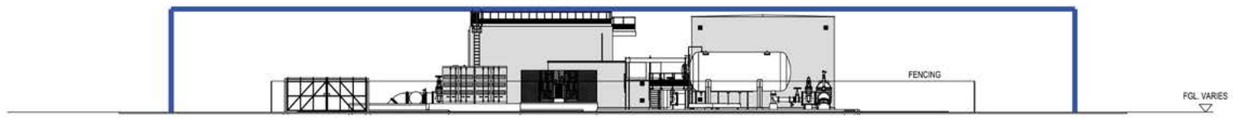
DRAWING TITLE
ABOVE GROUND PLANT
BREAK PRESSURE TANK/
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE LAYOUT

SITE UNIT MNEMONIC	SITE UNIT NO	MASTER SIZE A3
PRN 710166	SCALE AS SHOWN	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-00983		REVISION P01

Illustrative Elevation



VIEW 'A'
(00983)



VIEW 'B'
(00983)

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

MAXIMUM BUILDING HEIGHT OF BPT/IPS

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR BPT/IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF BPT/IPS	85m x 70m
MAXIMUM FOOTPRINT OF BPT/IPS WITHIN THE DRAFT LIMITS OF DEVIATION	4484m²
MAXIMUM DIMENSIONS OF BPT/IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 59m
MAXIMUM BUILDING HEIGHT OF BPT/IPS	8m

SCALE 1 : 400 @ A3

m20 0 20m

CURRENT VERSION INFORMATION

SHADING FOR BUILDINGS ADDED.

16/05/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition
16/05/24	DH	IG	KW	KW	P02	A3	Authorised & Accepted - Definition
DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE

WATER forLIFE from Southern Water

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Yeoman Road
Worthing
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fax (01903) 691435

PROJECT TITLE

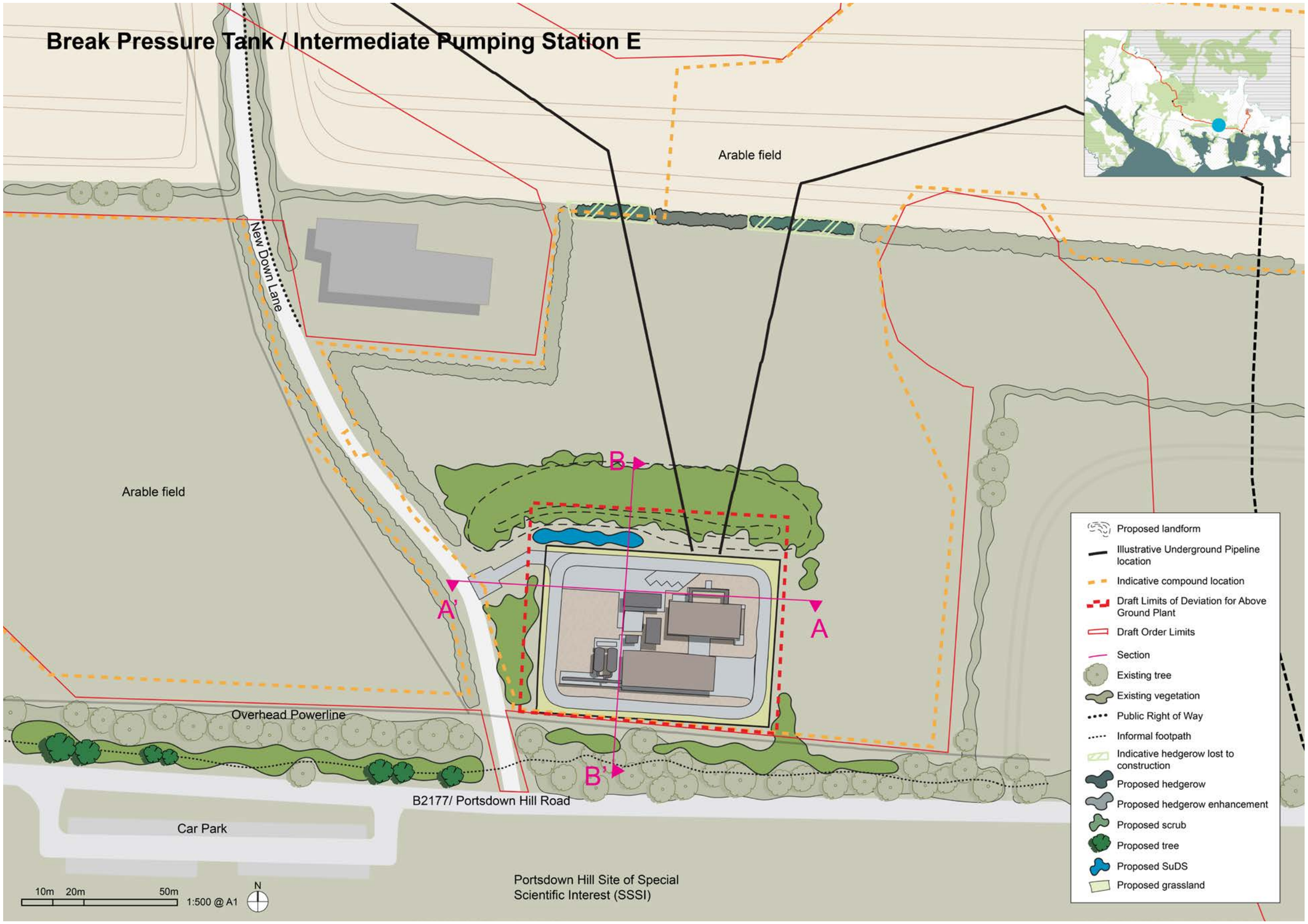
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE

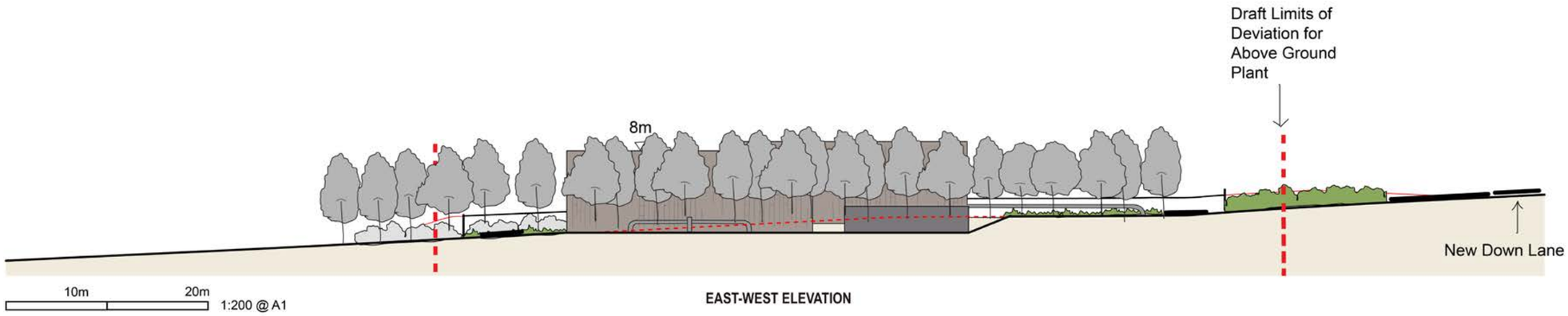
ABOVE GROUND PLANT
BREAK PRESSURE TANK/
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE ELEVATIONS

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE
		A3
PRN	SCALE	STATUS
710166	AS SHOWN	A3
S.W. DRAWING No.		REVISION
710166-SWS-XX-XX-DR-Z-00984		P02

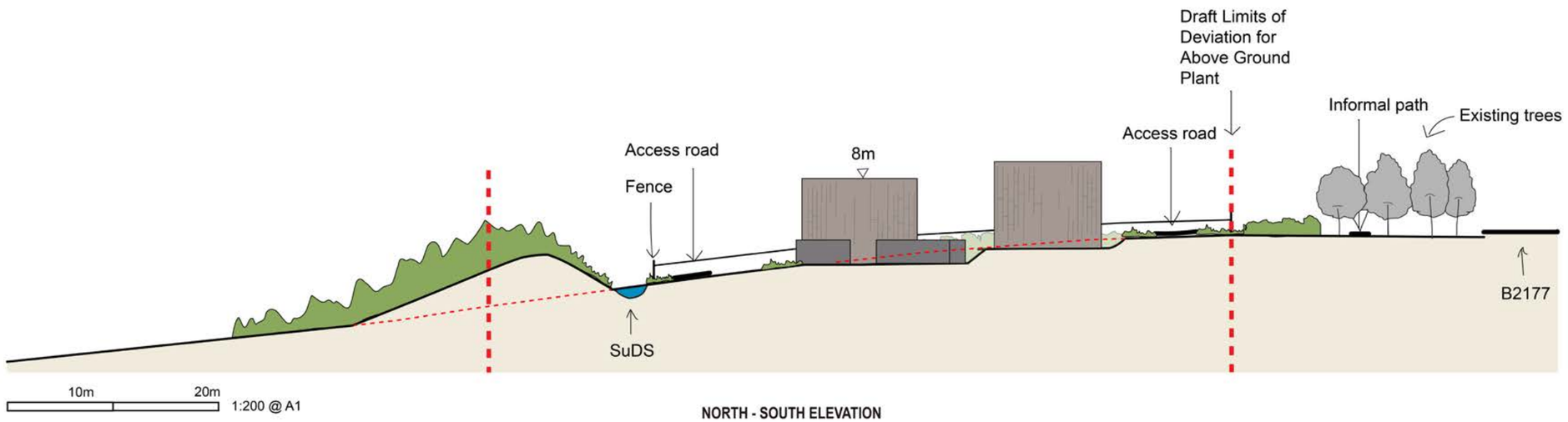
Environmental Masterplan Illustrative Layout



Environmental Masterplan Illustrative Elevation



EAST-WEST ELEVATION



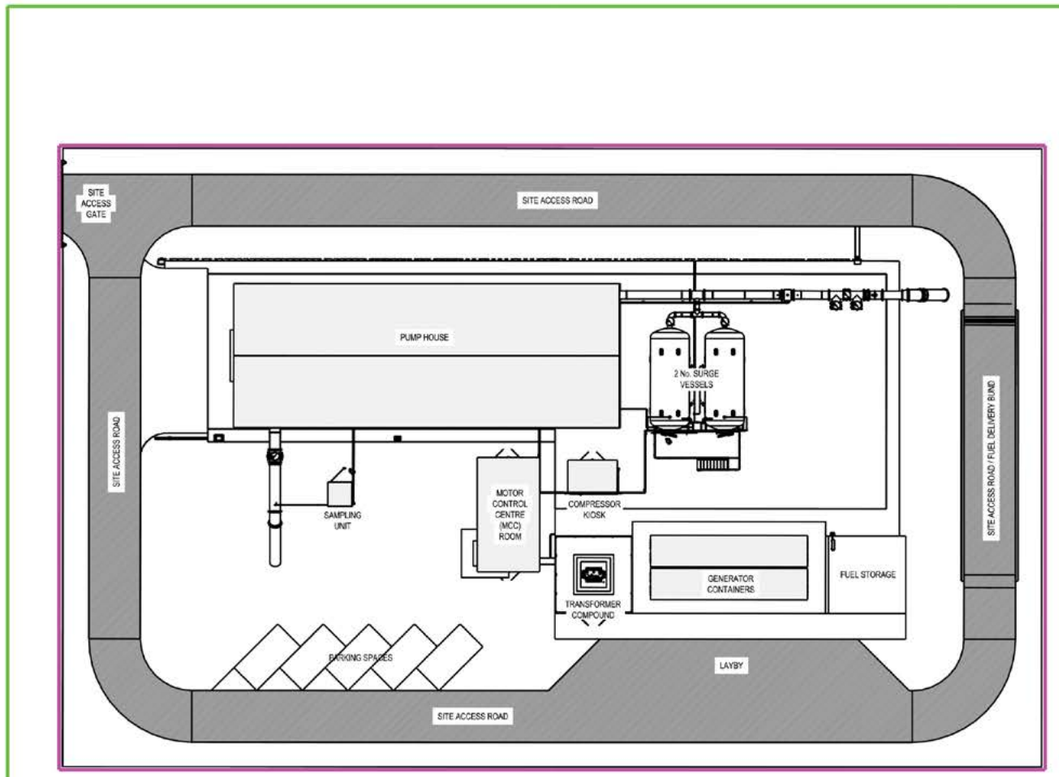
NORTH - SOUTH ELEVATION

Environmental Masterplan Illustrative Visualisation

Intermediate Pumping Station F

from Southern Water

Illustrative Layout



VIEW B
(00989)

(00989) VIEW A

NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

DRAFT LIMITS OF DEVIATION FOR IPS

MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION

PARAMETER TABLE

ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF IPS	85m x 70m
MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	3344m²
MAXIMUM DIMENSIONS OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 44m
MAXIMUM BUILDING HEIGHT OF IPS	8m

SCALE 1 : 400 @ A3
m 20 0 20m

CURRENT VERSION INFORMATION

DATE	DRG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
30/04/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

WATER forLIFE from Southern Water.
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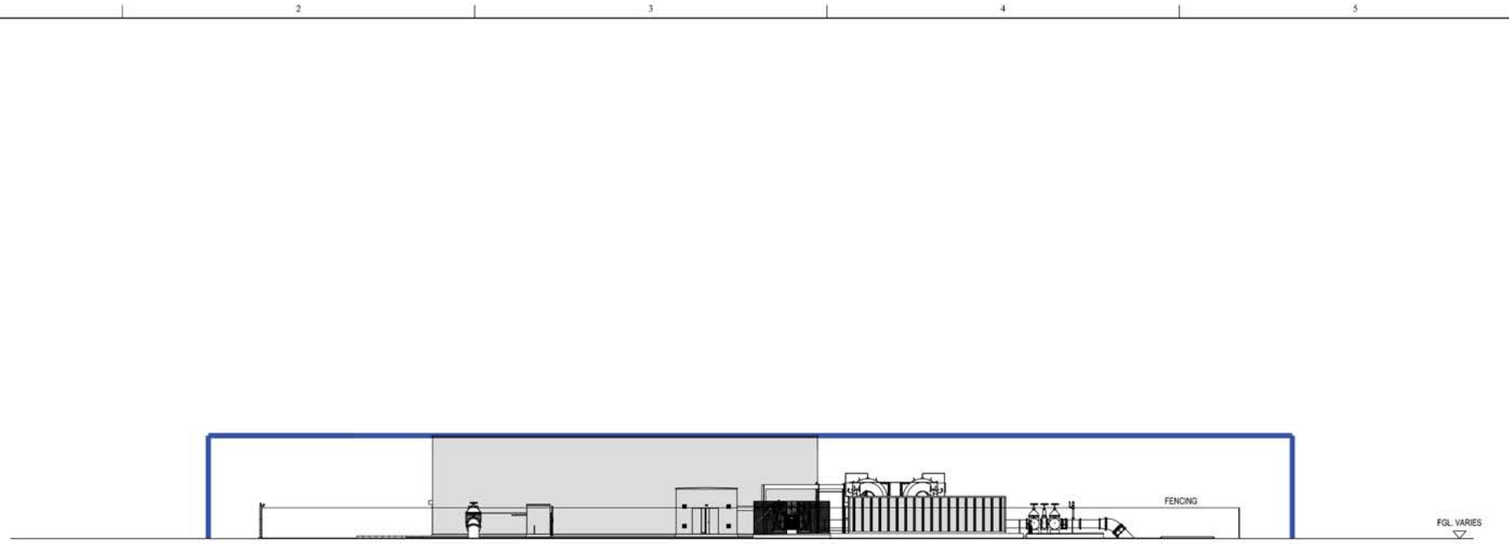
PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

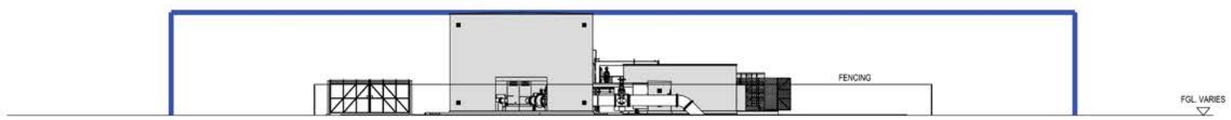
DRAWING TITLE
ABOVE GROUND PLANT
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE LAYOUT

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE A3
PRN 710166	SCALE AS SHOWN	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-00988		REVISION P01

Illustrative Elevation



VIEW 'A'
(00988)



VIEW 'B'
(00988)

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

MAXIMUM BUILDING HEIGHT OF IPS

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF IPS	85m x 70m
MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	3344m²
MAXIMUM DIMENSIONS OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 44m
MAXIMUM BUILDING HEIGHT OF IPS	8m

SCALE 1 : 400 @ A3

m20 0 20m

CURRENT VERSION INFORMATION

SHADING FOR BUILDINGS ADDED.

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
16/05/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition
16/05/24	DH	IG	KW	KW	P02	A3	Authorised & Accepted - Definition

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PROJECT TITLE

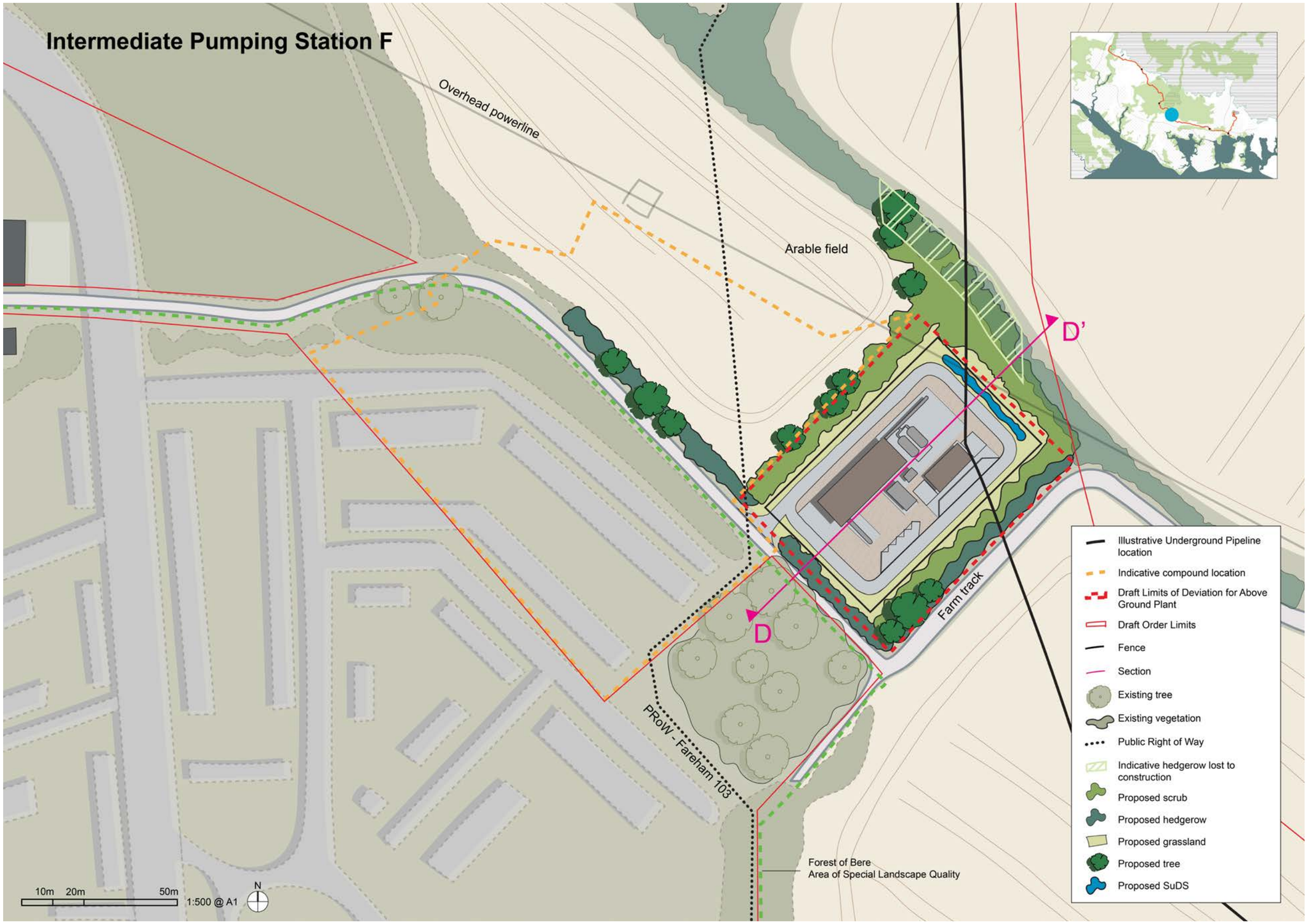
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE

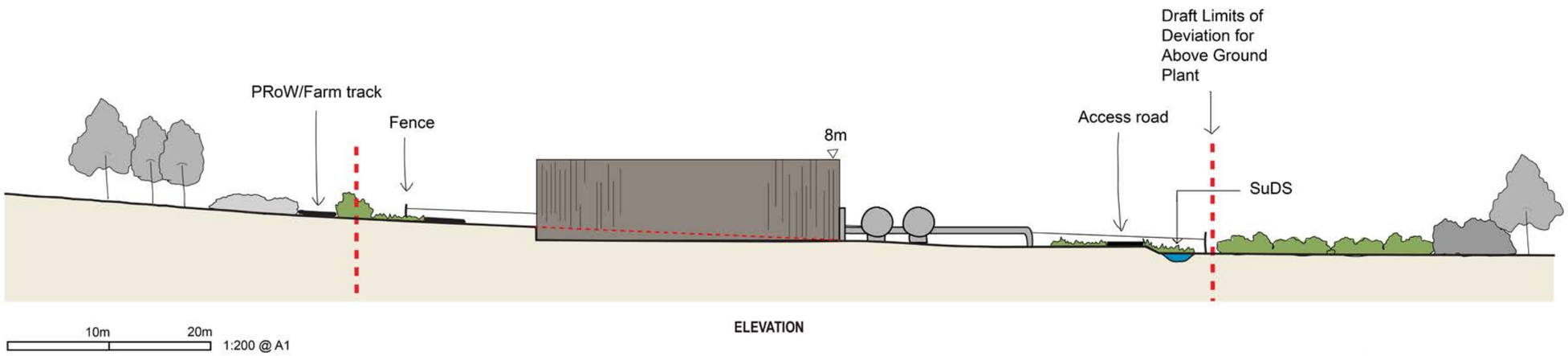
ABOVE GROUND PLANT
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE ELEVATIONS

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE A3
PRN 710166	SCALE AS SHOWN	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-00989		REVISION P02

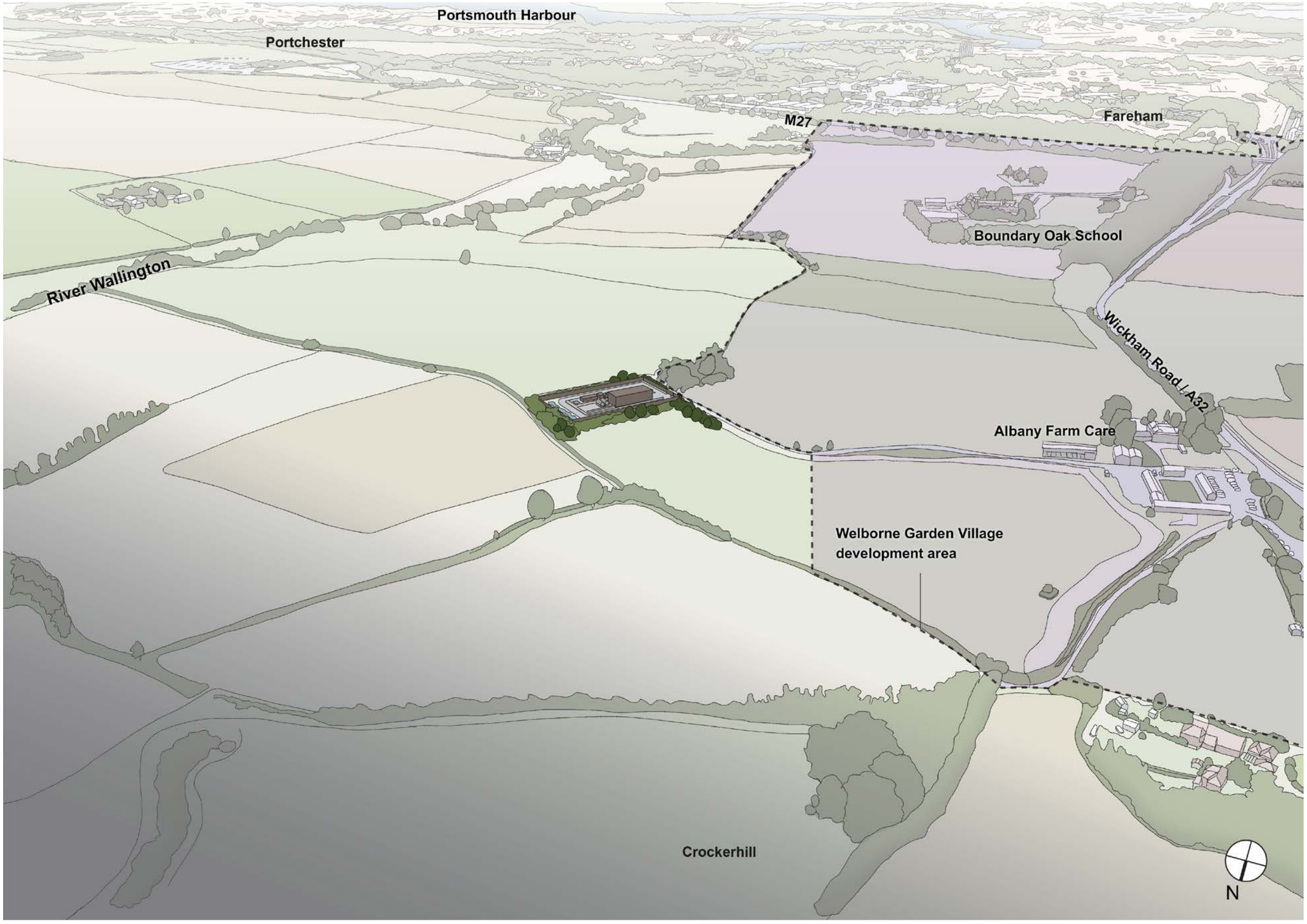
Environmental Masterplan Illustrative Layout



Environmental Masterplan Illustrative Elevation



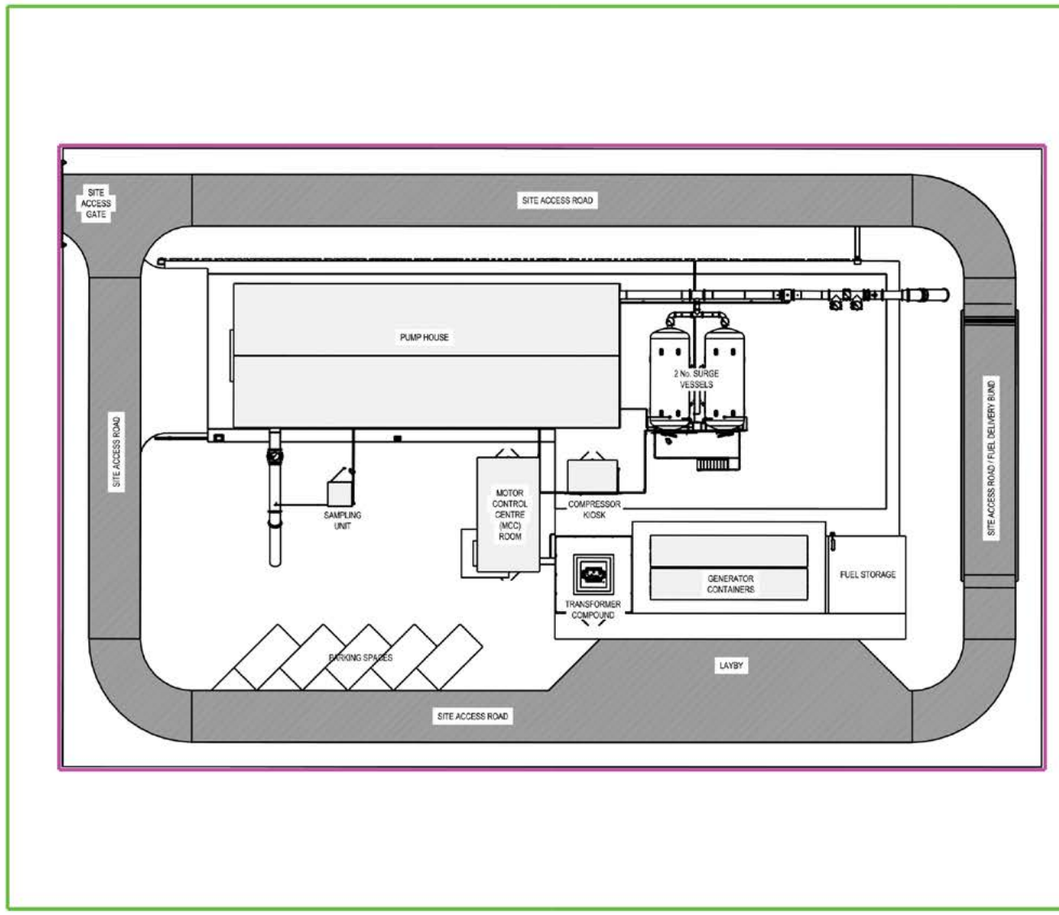
Environmental Masterplan Illustrative Visualisation



Intermediate Pumping Station G

from Southern Water

Illustrative Layout



VIEW B
(00989)

(00989) VIEW A

NOTES
1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

DRAFT LIMITS OF DEVIATION FOR IPS

MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF IPS	85m x 70m
MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	3344m²
MAXIMUM DIMENSIONS OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 44m
MAXIMUM BUILDING HEIGHT OF IPS	8m

SCALE 1 : 400 @ A3
m20 0 20m

CURRENT VERSION INFORMATION

DATE	DRG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
30/04/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

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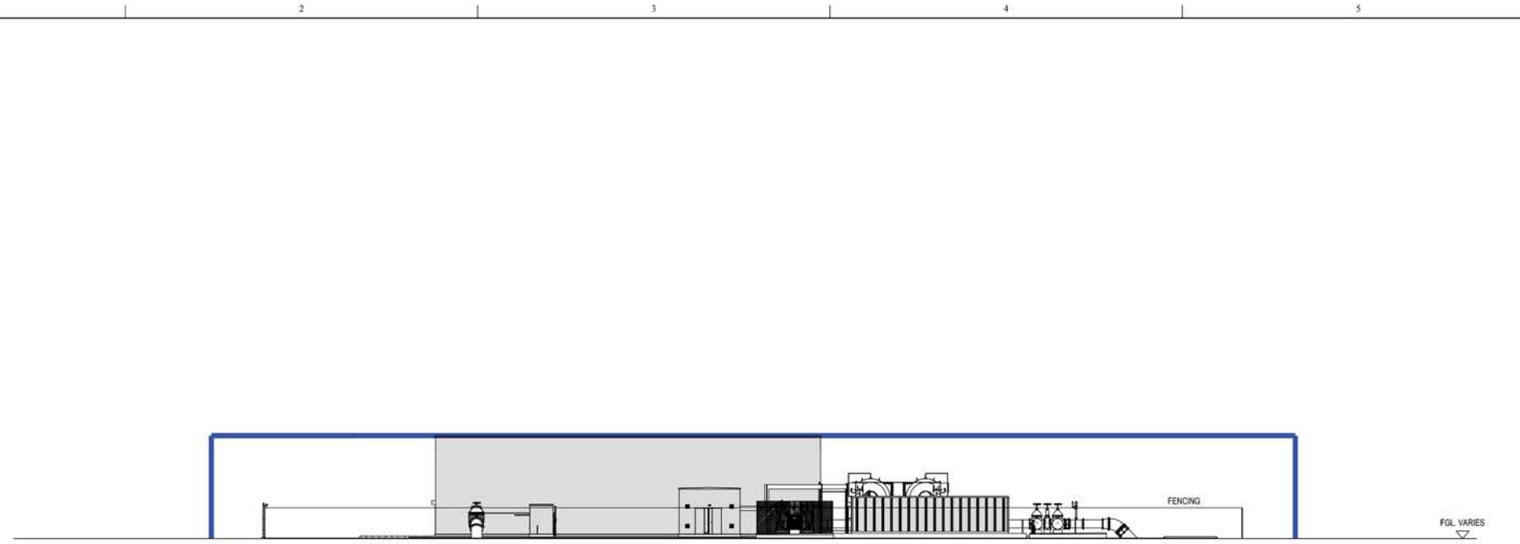
PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

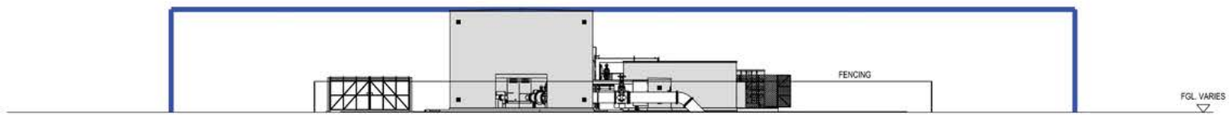
DRAWING TITLE
ABOVE GROUND PLANT
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE LAYOUT

SITE UNIT MNEMONIC	SITE UNIT NO	MASTER SIZE A3
PRN 710166	SCALE AS SHOWN	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-00988		REVISION P01

Illustrative Elevation



VIEW 'A'
(00988)



VIEW 'B'
(00988)

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

MAXIMUM BUILDING HEIGHT OF IPS

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR IPS	5950m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF IPS	85m x 70m
MAXIMUM FOOTPRINT OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	3344m²
MAXIMUM DIMENSIONS OF IPS WITHIN THE DRAFT LIMITS OF DEVIATION	76m x 44m
MAXIMUM BUILDING HEIGHT OF IPS	8m

SCALE 1 : 400 @ A3

m20 0 20m

CURRENT VERSION INFORMATION

SHADING FOR BUILDINGS ADDED.

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
16/05/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition
16/05/24	DH	IG	KW	KW	P02	A3	Authorised & Accepted - Definition

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PROJECT TITLE

HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

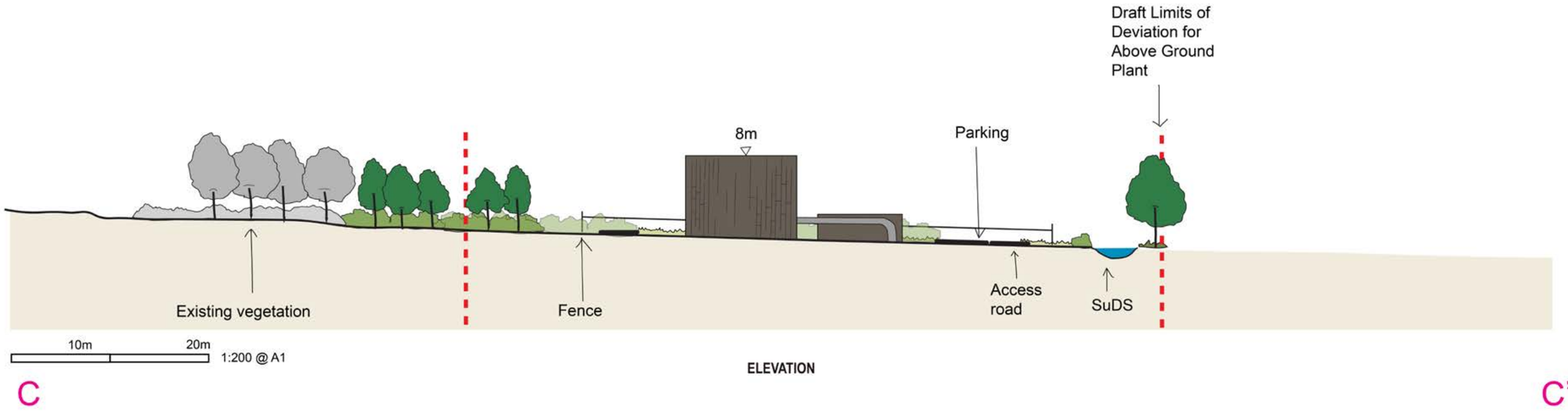
DRAWING TITLE

ABOVE GROUND PLANT
INTERMEDIATE PUMPING STATION
ILLUSTRATIVE ELEVATIONS

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE
		A3
PRN	SCALE	STATUS
710166	AS SHOWN	A3
S.W. DRAWING NO.		REVISION
710166-SWS-XX-XX-DR-Z-00989		P02

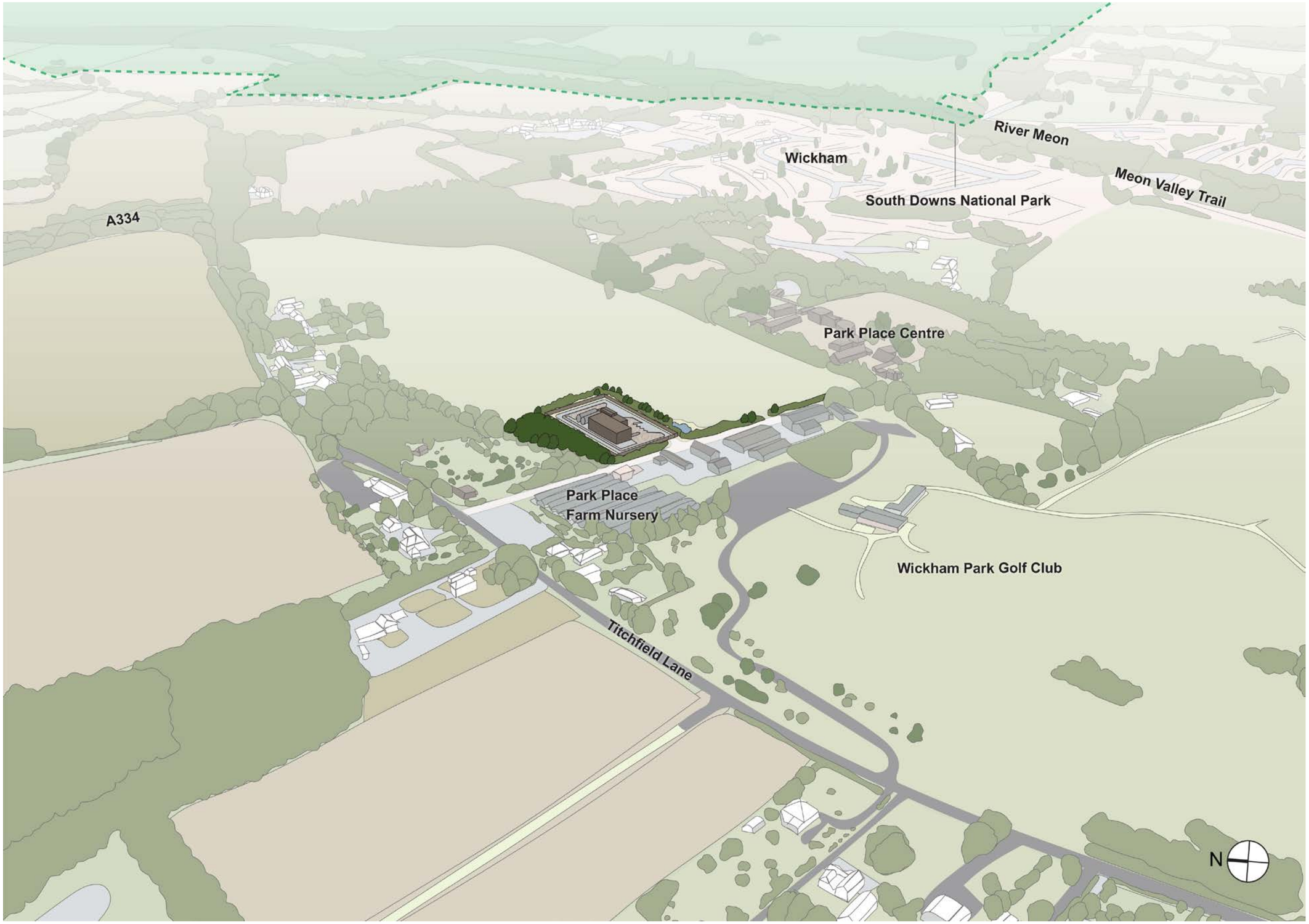
Environmental Masterplan Illustrative Layout

Environmental Masterplan Illustrative Elevation



ELEVATION

Environmental Masterplan Illustrative Visualisation

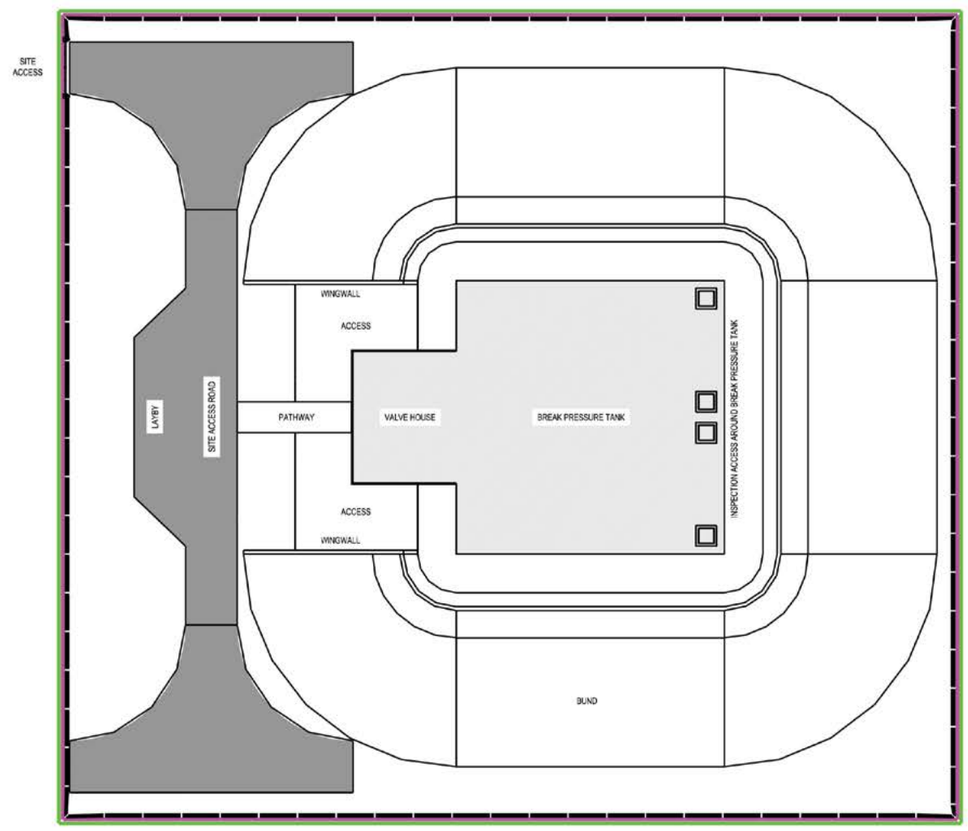


Break Pressure Tank K

WATER forLIFE®

from Southern Water®

Illustrative Layout



VIEW B
(00994)

(00994) VIEW A

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

DRAFT LIMITS OF DEVIATION FOR BPT

MAXIMUM FOOTPRINT OF BPT WITHIN THE DRAFT LIMITS OF DEVIATION.

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR BPT	4347m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF BPT	69m x 63m
MAXIMUM FOOTPRINT OF BPT WITHIN THE DRAFT LIMITS OF DEVIATION	4347m²
MAXIMUM DIMENSIONS OF BPT WITHIN THE DRAFT LIMITS OF DEVIATION	69m x 63m
MAXIMUM BUILDING HEIGHT OF BPT	3.5m

SCALE 1 : 400 @ A3

m20 0 20m

CURRENT VERSION INFORMATION

DATE	ORIG	CHKD	REVD	APVD	REV	STS	REASON FOR ISSUE
30/04/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition

WATER for LIFE from Southern Water.

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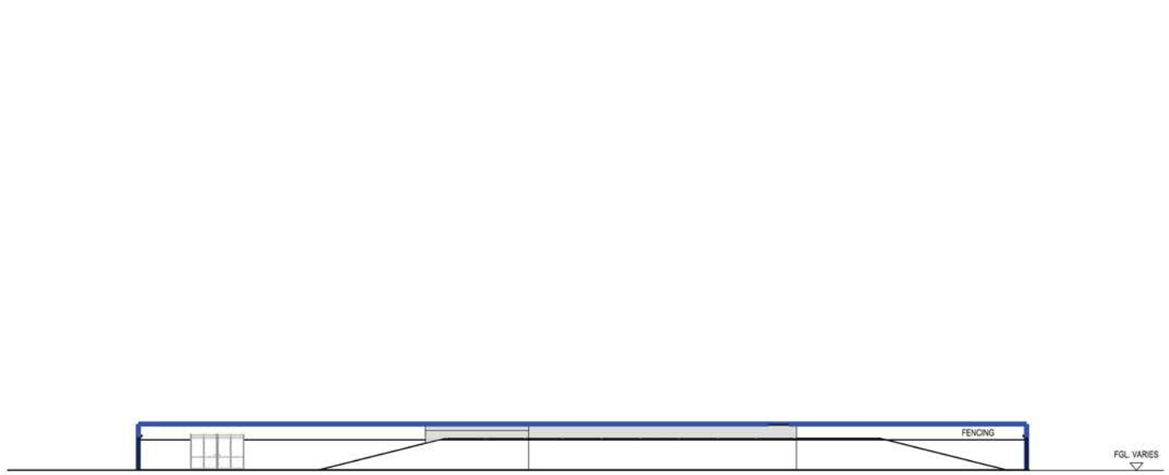
telephone (01903) 264444
fax (01903) 691435

PROJECT TITLE
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE
ABOVE GROUND PLANT
BREAK PRESSURE TANK
ILLUSTRATIVE LAYOUT

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE A3
PRN 710166	SCALE AS SHOWN	STATUS A3
S.W. DRAWING NO. 710166-SWS-XX-XX-DR-Z-00993		REVISION P01

Illustrative Elevation



VIEW 'A'
(00993)

VIEW 'B'
(00993)

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.

LEGEND

MAXIMUM BUILDING HEIGHT OF BPT

PARAMETER TABLE	
ASPECT	PARAMETER
DRAFT LIMITS OF DEVIATION FOR BPT	4347m²
DIMENSIONS OF THE DRAFT LIMITS OF DEVIATION OF BPT	69m x 63m
MAXIMUM FOOTPRINT OF BPT WITHIN THE DRAFT LIMITS OF DEVIATION	4347m²
MAXIMUM DIMENSIONS OF BPT WITHIN THE DRAFT LIMITS OF DEVIATION	69m x 63m
MAXIMUM BUILDING HEIGHT OF BPT	3.5m

SCALE 1 : 400 @ A3

m20 0 20m

CURRENT VERSION INFORMATION

SHADING FOR BUILDINGS ADDED.

DATE	ORIG	CHKD	REVD	APPR	REV	STS	REASON FOR ISSUE
16/05/24	DH	IG	KW	KW	P01	A3	Authorised & Accepted - Definition
16/05/24	DH	IG	KW	KW	P02	A3	Authorised & Accepted - Definition

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PROJECT TITLE

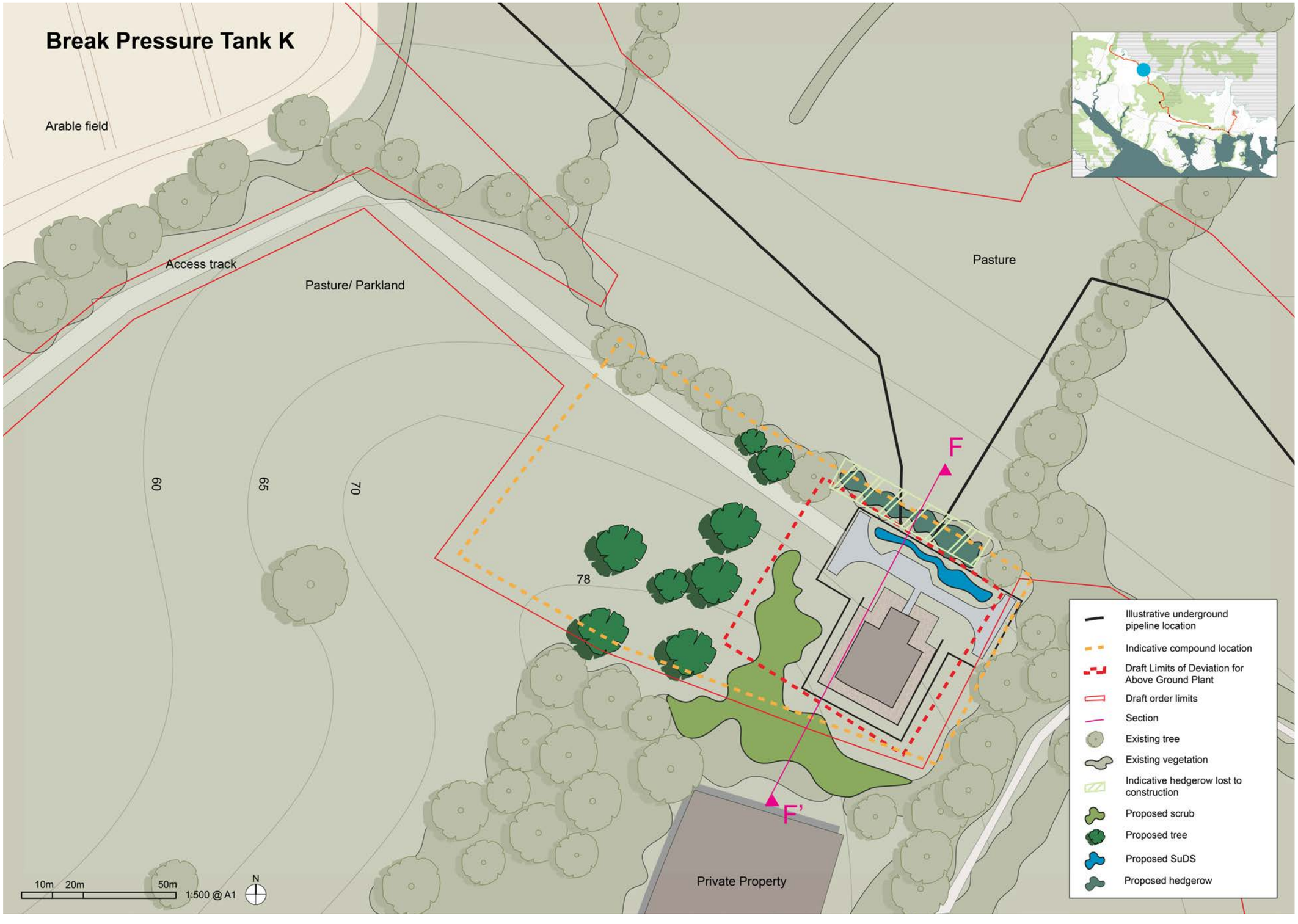
HAMPSHIRE WATER TRANSFER AND WATER RECYCLING PROJECT

DRAWING TITLE

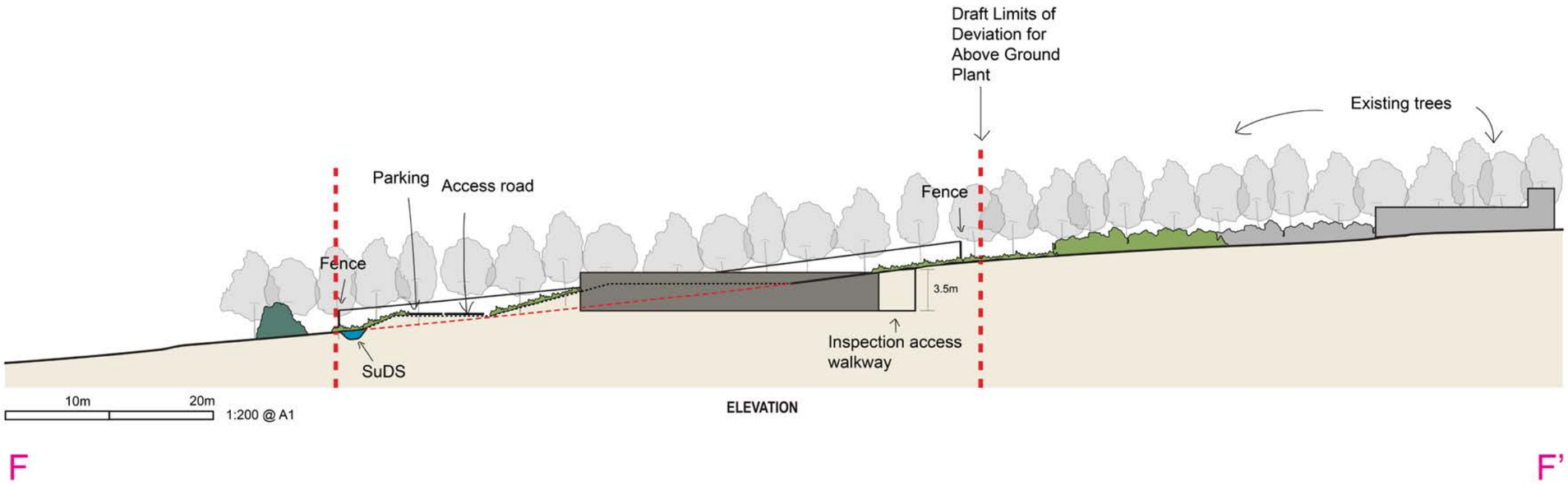
ABOVE GROUND PLANT
BREAK PRESSURE TANK
ILLUSTRATIVE ELEVATIONS

SITE UNIT MNEMONIC	SITE UNIT NO.	MASTER SIZE
		A3
PRN	SCALE	STATUS
710166	AS SHOWN	A3
S.W. DRAWING NO.		REVISION
710166-SWS-XX-XX-DR-Z-00994		P02

Environmental Masterplan Illustrative Layout



Environmental Masterplan Illustrative Elevation



Environmental Masterplan Illustrative Visualisation

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