



# ANNEX E5

## Project Plan Report

This document has been written in line with the requirements of the RAPID gate two guidance and to comply with the regulatory process pursuant to Severn Trent Water's and Affinity Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Severn Trent Water and Affinity Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This document should be read with those duties in mind.

# GUC SRO Project Plan

Annex E5

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## 1. Introduction

This technical annex to the Gate 2 submission for the Grand Union Canal SRO sets out key solution-specific milestones to scheme delivery and includes key activities and outputs that need to be undertaken and achieved prior to each subsequent gate. It includes the proposed programme for delivery of the scheme, scope of work and future submission of consent applications, as well as an assessment of the key delivery risks and proposed mitigation strategies.

## 2. Development scenarios

### 2.1 Regional Plan

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The Project Plan for GUC SRO is based upon scheme selection in the draft Regional Plan, requiring a DO of 50MI/d in 2031/32 and 100MI/d DO by 2040 to 2050.

The publication of the Final Regional Plan, currently programmed for December 2023, will confirm which scenario the GUC SRO is to follow.

### 2.2 Key Outputs

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The outputs required in future project phases is shown in table 1 below. RAPID Gate 1 submission was completed in July 2021 and RAPID Gate 2 submission will be complete in November 2022.

Table 1: Project Phasing – outputs required

Description	Outputs required				
	Regulator / Water companies	Engineering/ bid documentation	Planning	Procurement	Land
<b>Gate 3</b>	<ul style="list-style-type: none"> <li>Publication of Final Water Resource Management Plan (WRMP) and Final Regional Plan</li> <li>Gate 2 approval</li> </ul>	<ul style="list-style-type: none"> <li>Design sufficiently developed to support each stage of the DCO planning process</li> </ul>	<ul style="list-style-type: none"> <li>PINS Environmental Impact Assessment (EIA) Scoping Opinion</li> <li>Statement of Community Consultation</li> <li>Preliminary Environmental Impact Report</li> <li>Response to Statutory Consultation</li> </ul>	<ul style="list-style-type: none"> <li>Ofwat Control Point B Strategic Outline Case (SOC) approved</li> </ul>	<ul style="list-style-type: none"> <li>Referencing to establish acquisition and wayleave requirements</li> </ul>
<b>Gate 4</b>	<ul style="list-style-type: none"> <li>Gate 3 approval</li> </ul>	<ul style="list-style-type: none"> <li>Progress Pre-Qualification Questionnaire (PQQ) and Invitation to Tender (ITT) for procuring the Competitively Appointed Provider (CAP)</li> <li>Progress similar prequalification and Bid documents for scheme components to be delivered under design and build procurement route.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Statement</li> <li>Partner company approval to submit DCO application</li> <li>DCO application</li> <li>Secretary of State's award of DCO</li> </ul>	<ul style="list-style-type: none"> <li>Ofwat Control Point C (Procurement plan) approved</li> <li>Ofwat Control Point D (tender documents) approved</li> <li>Ofwat Control Point E (outline business case) approved</li> </ul>	<ul style="list-style-type: none"> <li>Land acquisition contracts prepared</li> <li>Way leave agreements prepared</li> <li>Powers of compulsory land acquisition through DCO award</li> </ul>
<b>Contract award</b>	<ul style="list-style-type: none"> <li>Gate 4 approval</li> </ul>			<ul style="list-style-type: none"> <li>Ofwat Control Point F (Final Business Case) approved</li> <li>Final contract negotiations and CAP award</li> </ul>	<ul style="list-style-type: none"> <li>Confirm securement of land control / acquisition</li> </ul>
<b>Construction</b>				<ul style="list-style-type: none"> <li>Scheme design, build, commission and operation</li> </ul>	

## 2.3 Key activities

The key activities to achieve the planned outcome for future phases of the scheme are shown in **Error! Reference source not found.2** below. The tender process for project elements not procured under a Direct Procurement for Customers (DPC) will follow similar key steps, however they will not be delivered by a CAP but by a Design & Build (D&B) appointed contractor.

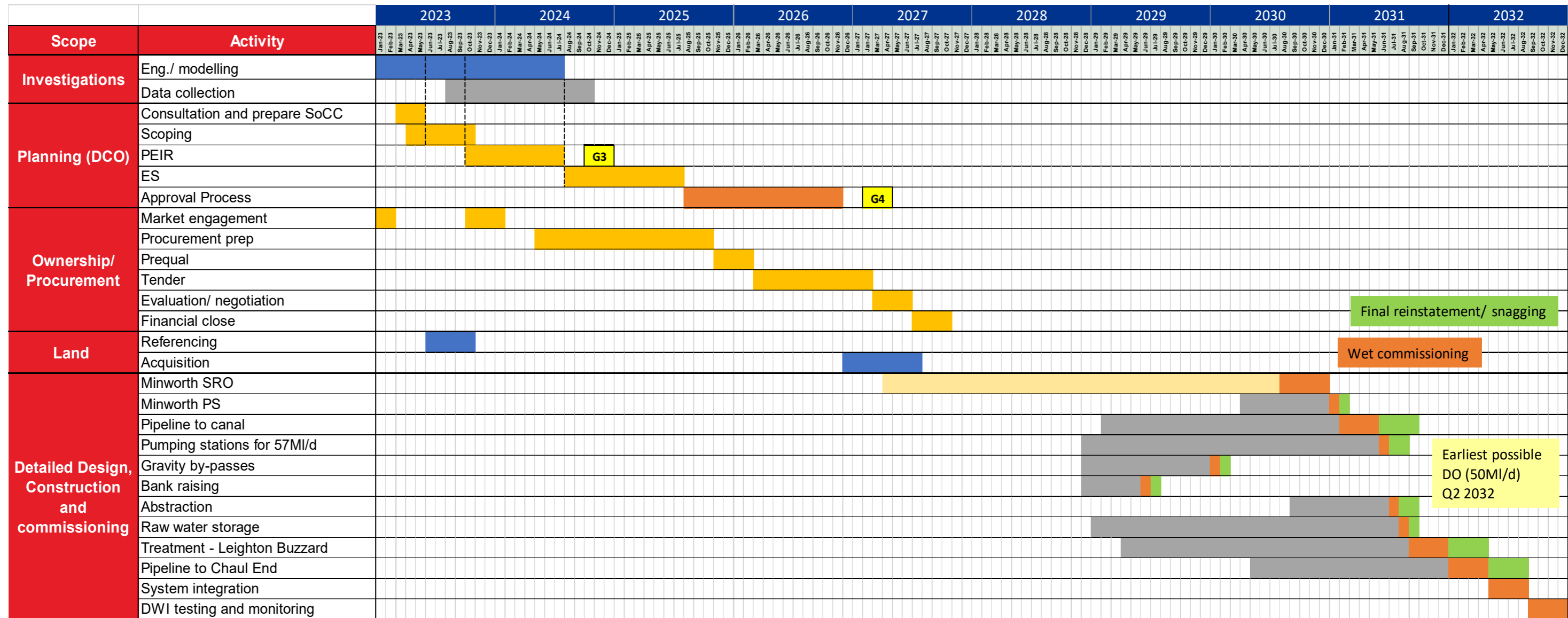
A detailed work breakdown structure and programme for Gate 3 is given in section 4.1.

Table 2: Expected key activities and decisions

Timing	Name	Key Activities	Decisions
July 2021 – Nov 2022	Gate 2	<ul style="list-style-type: none"> <li>RAPID Gate 2 submission - work included gathering environmental and water quality data, along with targeted topographical and hydrological data, in order to complete canal hydraulic and water quality modelling. From this, we identify the preferred options and scheme capacity, and prepare and cost the overall concept solution and designs.</li> </ul>	<ul style="list-style-type: none"> <li>RAPID Gate 1 approval</li> <li>(December 2021)</li> <li>Draft Regional Plan (November 2022)</li> </ul>
Dec 2022 – Q4 2024	Gate 3	<ul style="list-style-type: none"> <li>Alignment of scheme need, timing and scale to Final Water Resources Management Plan (WRMP)24 and final Draft Regional Plan (winter 2023)</li> <li>Statement of Community Consultation (SoCC) drafted, agreed and published</li> <li>Commence and complete engineering data collection and survey</li> <li>Commence environmental baseline data collection and survey</li> <li>Land referencing</li> <li>Complete remaining options technical appraisal for key aspects of the project</li> <li>Undertake Non-statutory consultation(s) on options and initial preferred scheme</li> <li>Develop EIA Scoping Report, submit to the Planning Inspectorate (PINS) and receive formal EIA Scoping Opinion</li> <li>Response to Scoping Opinion – clarity sought on issues raised (non-statutory consultation(s)) on options and initial preferred scheme</li> <li>Draft Value for Money assessment and DPC Strategic Outline Case and submit for approval of Ofwat DPC Control Point B</li> <li>Complete baseline data collection and survey</li> <li>Preliminary Environmental Information Report (PEIR)</li> <li>Statutory consultation(s) on final scheme</li> <li>Further design refinement and development of initial preferred scheme to reflect survey data collection and stakeholder feedback at consultation</li> <li>Ongoing liaison and negotiation with affected landowners</li> <li>Submission for RAPID Gate 3 document suite</li> </ul>	<ul style="list-style-type: none"> <li>RAPID Gate 2 approval</li> <li>(draft decision March 23, final June 23)</li> <li>PINS EIA Scoping Opinion</li> <li>Ofwat Control Point B - Strategic Outline Case (SOC).</li> </ul>

Timing	Name	Key Activities	Decisions
Q1 2025 – Q1 2027	Gate 4	<ul style="list-style-type: none"> <li>Formal Environmental Impact Assessment</li> <li>Creation of full DCO document suite</li> <li>DCO submission to PINS, preparation, preliminary meeting and examination in public</li> <li>Planning Inspector's report to Secretary of State</li> <li>Development of Procurement Plan, tender documents and outline business case and submit for approval of Ofwat DPC Control Point C, D and E</li> <li>Progress Pre-Qualification Questionnaire (PQQ) and Invitation to Tender (ITT) for procuring the Competitively Appointed Provider (CAP)</li> <li>Bidding</li> <li>Submission for RAPID Gate 4</li> </ul>	<ul style="list-style-type: none"> <li>Partner company approval to submit DCO application</li> <li>RAPID Gate 3 approval</li> <li>Ofwat Control Point C (Procurement plan)</li> <li>Ofwat Control Point D (tender documents)</li> <li>Ofwat Control Point E (outline business case)</li> <li>Secretary of State's award of DCO</li> </ul>
Q1 2027 - Q4 2027	Contract award	<ul style="list-style-type: none"> <li>Bid evaluations</li> <li>Ongoing negotiations with preferred bidder(s) DPC</li> <li>Final contract negotiations and CAP award</li> <li>Preferred bidder and financial close</li> <li>Final Business Case submission to Ofwat (as required for Ofwat Control Point F)</li> <li>Confirm securement of land control / acquisition</li> </ul>	<ul style="list-style-type: none"> <li>RAPID Gate 4 Approval</li> <li>Contract award for delivery</li> <li>Land acquisition contracts</li> <li>Ofwat Control Point F (for DPC)</li> </ul>
Q4 2027 – Q4 2032	Construction	<ul style="list-style-type: none"> <li>Detailed design by CAP (or Design &amp; Build (D&amp;B) contractor for elements procured under this route)</li> <li>Construction lead-in and pre-mobilisation activities</li> <li>Construction and commissioning 50MI/d</li> </ul>	<ul style="list-style-type: none"> <li>Design approvals</li> <li>Final system testing</li> <li>Handover</li> </ul>

Figure 1: Project Programme



Refer to Annex A1 Engineer CDR for additional information on the construction programme.

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Programme for delivery

## 3.1 Delivery parties

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The report on commercial and procurement issues (Annex E1) sets out recommended work packages that maximise the amount of works delivered via a Competitively Appointed Provider (CAP) and includes procurement option consisting of DPC and in-house delivery for different elements of the scheme.

**Error! Reference source not found.** shows a potential set of contractual arrangements based on the following assumptions:

The scheme is split into three works packages, these are;

- Minworth pumping station and pipeline to the canal at Atherstone
  - Canal works e.g. pumping stations and bank raising
  - Abstraction from the canal, storage, treatment and pipeline to Affinity Water (AfW) network
- Work at Minworth WwTW and the transfer to the canal at Atherstone will be implemented by Severn Trent Water (STW) under PR24. Any works undertaken by STW will covered under the Bulk Supply Agreement for the water resources;
  - Options for work to be undertaken on the canal are (i) by the Trust (financed by the Trust), (ii) by the Trust (financed by AfW making milestone payments to the Trust), (iii) by AfW's supply chain (financed by AfW milestone payments), (iv) the Trust (financed by the CAP).

All of these options present the potential for LDs based on the size of potential loss of revenue to the CAP, not only associated with the canal work but with those of the GUC southern assets. Given the potential difference in scale between the canal works' contract and the associated LDs, contractors may be unwilling to enter into such an arrangement. The concern with delay LDs may be somewhat reduced by the CAP using its own contractors to undertake the canal works. However the Trust would still need to facilitate the works, for example by providing access. AfW may need to provide the CAP with relief from penalties in the event of the Trust causing delay.

These options for funding work on The Trust's assets would need to be explored further at the next stage with The Trust and through market engagement with potential contractors and bidders.

The work on the canal will be adopted by the Trust on construction completion.

- A CAP will undertake the works at the site for abstraction and treatment, and at the transfer to the AfW network.



Figure 2: Potential delivery parties (incl. CAP contract counterparty)

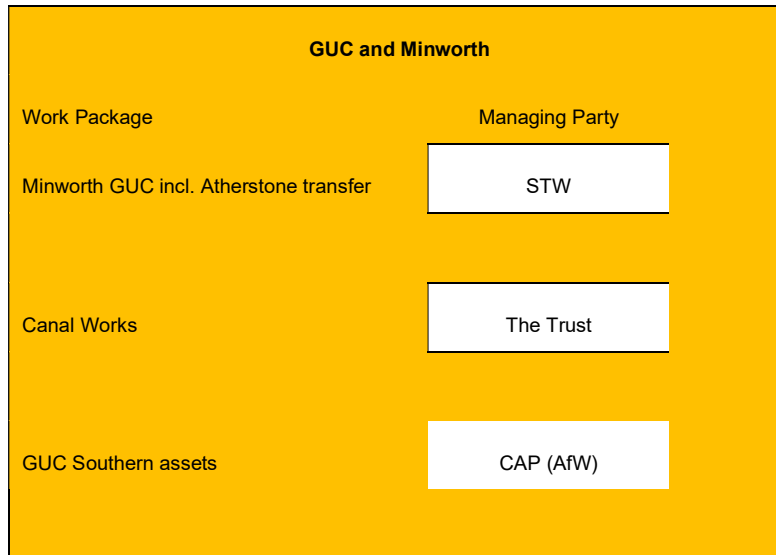


Figure from Annex E1: Procurement Strategy

## 3.2 Procurement timelines

The timeline for the procurement process will vary depending on the selected delivery route as described below.

### 3.2.1 DPC procurement scenario

The abstraction, raw water storage, treatment works and transfer in the southern part of the scheme are to be delivered under a single DPC procurement package. The canal works is to be delivered as part of the DPC contract, but with the relevant assets likely to be transferred to the Trust on completion (subject to market testing).

A DPC procurement process is complex, working towards the appointment of a CAP who will assume responsibility for the Design, Build, Finance, Operation and Maintenance of the SRO. In advance of a DPC procurement process, the Appointee must undertake tender preparation. This will involve the development of tender documentation, and the staged progression through Ofwat's DPC Control Point process, including:

- Control Point B - the preparation and submission of a Strategic Outline Case (SOC).
- Control Point C - the preparation and submission of a procurement plan.
- Control Point D - the preparation and submission of the tender documentation.
- Control Point E - the preparation and submission of an Outline Business Case (an updated version of the SOC). This stage reflects the end of the tender preparation

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process, as once approval of Control Point E has been received, the DPC procurement can be launched.

- Control Point F - the preparation and submission of a Final Business Case. At this stage Ofwat gives final consent for the CAP agreement to be awarded.

The DPC procurement process will involve the following stages:

- A pre-qualification stage, to identify bidders with the sufficient technical and financial capability to deliver the project.
- An ITT (Invitation to Tender) stage, wherein bidders produce a tender submission.
- An evaluation and negotiation stage; and
- A preferred bidder and financial close stage, where the procuring authority finalises terms with the preferred bidder in order to reach contract award.

An optimistic timeline up to financial close is expected to have a duration of 18 months and a conservative timeline a duration of 24 months.

### 3.2.2 In-house (D&B) procurement scenario

The Atherstone transfer (from Minworth WwTW to the Coventry canal at Atherstone) is to be delivered by in-house procurement. This assumes the appointment of a contractor with responsibility for the Design & Build (D&B), as part of Minworth SRO. STW will be the procuring authority and will retain responsibility for Finance, Operation and Maintenance. This process includes:

- A pre-qualification stage.
- An ITT stage.
- An evaluation and negotiation stage; and
- A preferred bidder and financial close stage.

A timeline for in house procurement is expected to have a duration of 20 months up to financial close (refer to Figure 3: Indicative procurement programme).



### 3.2.3 Planning and procurement interaction assumptions

A development consent order (DCO) is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) in the water industry and other sectors.

The WRSE draft regional plan selects the GUC to provide 50MI/d DO by 2031/32 and 100MI/d DO between 2040 to 2050. A scheme with a DO which exceeds 80 MI/d is defined as an NSIP and must obtain planning permission under a DCO. The NSIP definition is predicated on the total deployable output for which consent is sought; provided that the Project is designed for a deployable output over 80 MI/d in the final phase. It would remain an NSIP even if delivered in phases which individually do not reach the threshold.

The procurement process will be influenced by the planning application process. The assumptions governing the interaction between the procurement and planning scenarios are listed below:

- Bidders will be unwilling to prepare a bid without visibility of submitted planning applications.
- Bidders will be unwilling to submit final bids/prices on the basis of planning applications only, and will prefer to bid on the basis of planning determinations.

It is therefore assumed that ITT process will commence after the DCO application is accepted and that the date of DCO award acts as the principal constraint for the finalisation of the procurement process. Whilst the CAP's detailed design would be complete during ITT, it is assumed that a 3 month period would be required post DCO decision for bids to be finalised.

## 3.3 Timing of Community Engagement

We will continue to maintain our engagement with user groups and other relevant stakeholders throughout gate three. There are also a number of opportunities for formal technical engagement with public stakeholders during the project development process. These may be adjusted as the scheme promotion develops, but are currently envisaged to include the following:

Table 3: Community engagement

Nr	Description	Timing	Purpose
1	Non-statutory consultation nr 1 (pre-scoping)	Spring 23	Information to be provided on and feedback sought on the key choices to be made on the configuration and make-up of the scheme, including aspects such as access, construction phase details, landscaping, wider benefits. This interface will involve technical and community stakeholders.
2	Statement of Community Consultation (SoCC)	Summer 23	Sets out the proposed approach to community consultation
3	EIA scoping report	Late Summer 23	A formal report submitted to the Planning Inspectorate, to request a Scoping Opinion on the subsequent EIA. This will be public domain information.

Nr	Description	Timing	Purpose
4	Non-statutory consultation nr 2	Summer 23	Ongoing consultation with technical and community stakeholders to inform on EIA scoping report.
5	Submit PEIR	Spring 24	Preliminary Environmental Information Report. This will be public domain information.
6	Statutory consultation for the DCO	Summer 24	Feedback sought on the design of the proposed scheme to be submitted for DCO application as outlined in the PEIR.
7	Non-statutory consultation nr 3	Summer 24	Ongoing consultation with technical stakeholders to inform on PEIR.
8	RAPID gate 3 submission	Autumn 24	Setting out the DCO submission and the preparation of the tender documentation
9	Examination in Public for the DCO	Early 26	Opportunity for stakeholder submission to the formal DCO Examination to be managed by the Planning Inspectorate (PINS).
10	Non-statutory consultation nr 4	Spring 26	Ongoing consultation with technical stakeholders to inform on DCO submission.
11	RAPID gate 4 submission	Early 27	Setting out the secured planning application, the outline business case, procurement and land agreement/ acquisition activities in advance of construction commencement.

### 3.4 Work Breakdown Structure to RAPID Gate 3

A work breakdown structure (WBS) has been developed for the programme to RAPID Gate 3 and is summarised in Table 4 below. The WBS is tabulated in accordance with the spend categories requested by RAPID, with envisaged activities against each work category. The work breakdown structure is liable to change as we develop the scheme further. For example, we may want to add in additional activities as a result of feedback on our gate two reports.

We have prepared a programme for the future planning, development and promotion of the GUC SRO scheme as shown in Appendix A. The chart indicates engineering, survey work and data collection to support the planning application stages. It also show the interrelationship between planning and procurement and land acquisition for the works to be delivered under DPC and how this work relates to the RAPID gateways.

On the basis of the activities we believe should be done before the next RAPID governance gateway (Gate 3), and the timing required to achieve these, we request that RAPID Gate 3 for GUC SRO will be in Q4 2024, this aligns with having received feedback from Statutory Consultation under a DCO application for the project.

Table 4: Phase 3 work breakdown structure

RAPID work category	Specified activities
<b>Programme &amp; Project Management</b>	<ul style="list-style-type: none"> <li>▪ Scope of work for consultancy packages and tender process</li> <li>▪ Project management</li> <li>▪ Interface with regulator</li> <li>▪ Gate 3 submission paper</li> <li>▪ Project Plan</li> <li>▪ Design principles</li> <li>▪ CDM principal designer</li> <li>▪ Project Management Board</li> <li>▪ Project Steering Group</li> <li>▪ WRSE regional plan interface</li> <li>▪ Assurance and board statement</li> <li>▪ Operational strategy</li> <li>▪ Cost management and efficiency of spend</li> </ul>
<b>Feasibility Assessment and Concept Design</b>	<ul style="list-style-type: none"> <li>▪ Develop design sufficient for scoping</li> <li>▪ Develop design sufficient for PEIR</li> </ul>
<b>Option benefits development and appraisal</b>	<ul style="list-style-type: none"> <li>▪ Develop engineering design sufficient for ES/ EIA <ul style="list-style-type: none"> <li>○ Minworth pumping station and rising main</li> <li>○ Canal works – lock by-pass pumping stations, lock gravity by-passes, bank raising and modifications, weir control structures.</li> <li>○ Intake structure and pumping station, raw water storage, water treatment, clean water storage</li> <li>○ transfer pumping station and transfer pipeline to clean water holding tank in AfW distribution network.</li> </ul> </li> <li>▪ Supporting drawings/ plans and documents</li> <li>▪ Cost estimate breakdown (CAPEX, OPEX, NPV, OB)</li> <li>▪ Carbon assessment</li> <li>▪ Costed risk register</li> <li>▪ Wider benefits and options for financing</li> <li>▪ Detailed implementation and construction programme</li> <li>▪ Hydraulic modelling to confirm engineering solutions</li> <li>▪ Creation of a digital twin for the scheme</li> </ul>
<b>Environmental Assessment</b>	<ul style="list-style-type: none"> <li>▪ Continued environmental / ecological monitoring</li> <li>▪ Targeted ecological surveys for EIA</li> <li>▪ Baseline environmental surveys for EIA</li> </ul>
<b>Data Collection, Sampling, and Pilot Trials</b>	<ul style="list-style-type: none"> <li>▪ Detailed topographical survey</li> <li>▪ Detailed geotechnical and contaminated land survey</li> <li>▪ Water quality monitoring and lab analysis</li> <li>▪ Emerging substances monitoring and lab analysis</li> <li>▪ Drinking water safety plan update</li> </ul>
<b>Procurement Strategy</b>	<ul style="list-style-type: none"> <li>▪ Market engagement</li> </ul>

RAPID work category	Specified activities
	<ul style="list-style-type: none"> <li>▪ Strategic outline case - identify the needs case for the project and delivery routes (including to assess whether the project offers better value for money through DPC)</li> <li>▪ Funding - including full interface with engineering proposals and client requirements</li> </ul>
<b>Planning Strategy</b>	<ul style="list-style-type: none"> <li>▪ EIA scoping report</li> <li>▪ Respond to scoping opinion from planning inspectorate</li> <li>▪ Statement of Community Consultation (SoCC)</li> <li>▪ Non-statutory consultation</li> <li>▪ Commence Preparation of PEIR</li> <li>▪ Statutory consultation</li> <li>▪ Commence Preparation of EIA and Environmental Statement</li> <li>▪ Commence Preparation of DCO application</li> </ul>
<b>Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>▪ Initial consultation with technical stakeholders</li> <li>▪ Ongoing consultation with technical stakeholders</li> <li>▪ Response to Scoping Opinion – clarity sought on issues raised.</li> <li>▪ Statutory consultation</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>▪ Commercial and legal advice to project partners</li> <li>▪ Establish appropriate contracts between parties</li> </ul>
<b>Land</b>	<ul style="list-style-type: none"> <li>▪ Land referencing</li> <li>▪ Preparation for wayleave agreements</li> <li>▪ Preparation for land procurement and acquisition</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>▪ Engagement with project partners</li> </ul>

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Future submission and consent applications

## 4.1 Planning Permission

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The planning application stages under DCO are described below.

## 4.2 Pre-application and application preparation

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A scoping opinion will be sought early in Gate 3 from the Planning Inspectorate to establish the information required in the Environmental Statement (ES) to support the DCO submission. This will enable an Environmental Impact Assessment (EIA) to be carried out and for necessary baseline survey data to be gathered. The scoping opinion will provide an opportunity to identify and assess key environmental impacts and issues of concern, facilitated through consultation with, planners, statutory and non-statutory consultees, non-governmental organisations (NGOs) and the local community. The competent authority has six weeks from the submission date to produce the scoping opinion.

Consultation by the project team will be ongoing throughout the pre-application and application preparation process, to ensure potential impacts are avoided or reduced and to gain support for the proposed development. Promotion through the Local Plan reviews will assist in formalising clear insights on the local level of support for the proposed development.

Topographical, geotechnical and contaminated land surveys will be set underway early in Gate 3 to support environmental assessment work and engineering design.

Land referencing early in Gate 3 will establish all landowners likely to be affected by the proposed scheme.

In Gate 3 we will prepare and publish a Statement of Community Consultation (SoCC) for the scheme, in accordance with Section 47 of the Planning Act 2008. The purpose of this document will be to clearly explain how we intend to consult with local communities and all those who will be affected by the project.

It is envisaged that the consultation strategy will be devised through discussions with the local authorities and community representatives. The SoCC will also provide an overview of the range of engagement activity to undertaken informally and on a non-statutory basis during Gates 3 and 4. This is likely to include:

- Presentations and discussions with local communities and Parish councils, including public presentations and meetings
- Briefings and discussions with other key consultees, including representatives of the Local Authorities
- A project website containing information about the proposals, including scheme proposals and other draft application material, including contact details for people to comment on the proposals
- An extensive, but non-statutory, consultation at appropriate stages

Statutory public consultation will follow the Planning Inspectorates response to the PEIR.



## 4.3 DCO process

The DCO process starts when an application is formally accepted by the National Infrastructure Planning Unit and lasts approximately 16 months.

## 4.4 Environmental permitting

The DCO application will list all the other consents and licences to obtain in order to deliver the project. The DCO application will set out how and when these will be obtained.

Table 5: Environmental permitting

Nr	Consent Description	Commentary
1	Discharge treated effluent from Minworth to the canal	An environmental permit is required to discharge liquid effluent or wastewater to a canal
2	Abstraction licence (from the canal)	Taking water from a surface source (such as a canal) is called abstraction. An abstraction licence will need to be obtained from the Environment Agency
3	Flood risk activities (as a result of works and scheme operation on the canal)	An environmental permit is required for any work under, over or near a main river.
4	Liquid waste discharge from the Water Treatment works	An environmental permit is required for releasing polluting liquids to surface water bodies such as a canal, stream or river.
5	Solid waste	Disposal of sludge from the Water Treatment works
6	Various permits required as part of the scheme construction process	A number of permits will be obtained by the contractor engaged to implement the project

Key delivery risks and mitigation strategy

## 5.1 Introduction

### 5.1.1 Programme risk

There are number of programme risks within the DCO and construction phases of project implementation. There are several factors that can influence how long the pre-application stage takes. We will focus on key opportunities to compress the timescales, which are summarised below:

- Comprehensive early programme of engagement with regulators and statutory consultees (including relevant local planning authorities and statutory environmental bodies).
- Stakeholder relationships and resolving issues raised wherever possible is key to an effective and efficient pre-application process. Making funding available to stakeholders to support this (e.g. via a Planning Performance Agreement with the local planning authorities).

- Pre-scoping discussions with regulators for a good understanding of their expectations on the scope of the assessment and any concerns.
- A well-progressed design, environmental survey programme and early development of measures to be included in a Code of Construction Practice will enable a more refined Scoping Report to be produced.
- Early gathering of a comprehensive suite of baseline data to provide a robust basis to the assessment, to minimise the risk of the pre-application programme being elongated.
- Setting up efficient processes and governance structures to have regard to stakeholder feedback and make decisions on scheme changes well in advance of the end of each public consultation period. It is noted that the volume of consultation responses can also present a risk to the programme.
- Early engagement with a suitably qualified advisor for land referencing can minimise the risk of the land referencing process dictating or elongating the programme.

### 5.1.2 Data to support preparation of the Environmental Statement in Gate 3

The scheme will require an Environmental Impact Assessment and the submission of an Environmental Statement alongside the planning application. The Environmental Statement will need to set out the data required to identify and assess the main effects which the scheme is likely to have on the environment. The scoping report will provide information on the proposed coverage of the EIA, including any uncertainties that have been identified and proposed further surveys. In response to the scoping report the Planning Inspectorate will decide upon the scope of an assessment required and this will determine the duration of further surveys.

The scoping checklist developed from our Gate 2 environmental assessments identified the following additional environmental survey requirements. It is currently envisaged that all survey work can be completed within a 12 month period:

- Heritage assessment as part of EIA may identify requirements for archaeological investigations or site surveys of heritage features
- Site surveys required for the Landscape and Visual Impact Assessment as part of the EIA
- Walkover surveys of the pipeline route and overall scheme area, to determine requirements for targeted protected species surveys
- eFishing and eDNA surveys.
- Further field surveys to capture full range of INNS present along the transfer route and within hydraulically connected waterbodies.
- Biodiversity net gain (BNG) baseline surveys.
- Contaminated land risk assessment as part of EIA may identify requirements for land quality testing.
- Baseline noise surveys as required to inform the EIA.

In addition to the above a description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, architectural and archaeological heritage, landscape and the interrelationship between the above factors will be included.

WQ sampling and analysis will continue throughout Gate 3 in order to ensure that the scheme does not cause pollution, and that it maintains or improves the canal water quality,

and the water transferred along the canal is treated to provide a wholesome drinking water supply for AfW customers.

### 5.1.3 Project Risk

The risk scoring given in this section is completed based on the definitions given in Table 6.

Table 6: Risk matrix

		Probability of risk occurring				
		1	2	3	4	5
Impact of risk occurring	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5

A summary of the most important risks to the project is shown in **Error! Reference source not found.7**. This information is consistent with that shared previously with RAPID.

Table 7: Risk probability/ impact

Probability of a risk occurring			
Probability	Definition	Scale	Value
Very High	More likely to happen than not	> 50 % chance	5
High	Fairly likely to occur	20 – 50 % chance	4
Medium	Possible it may occur	10 – 20 % chance	3
Low	Low, but not impossible	5 – 10 % chance	2
Very low	Very low, but not impossible	1 – 5 % chance	1

Impact of a risk occurring			
Impact	Definition	Scale	Value
Very High	Could stop the project	Cannot deliver the project	5
High	Large impact on the project	Major shortfalls	4
Medium	Medium impact on the project	Some shortfalls	3
Low	Low impact on the project	A few shortfalls	2
Very low	Very low impact on the project	Few shortfalls of a limited nature	1

Table 8: Key risk and mitigation strategy

Ref	Short description	Category	Detailed description	Original risk score	Plan to manage	Mitigated risk score
1	Minworth discharge parameter uncertainty	Engineering	Uncertainty around the Minworth cost is driven by uncertainty in interpretation of the environmental regulations / policy for discharge into the canal.	25	We are working closely with the Environment Agency (EA) for understanding and resolution of this uncertainty. Through regional modelling it has been established that the GUC SRO is still being selected at higher treatment costs.	12
2	Pollution occurrence in canal	Engineering	Leading to financial / reputational / environmental consequences and being unable to utilise GUC transfer.	20	Integrated Design to prevent increased risk of pollution, early warning system required. Treatment process to be robust enough for all events. Storage facilities at treatment site.	6
3	Stakeholder engagement with NE	Stakeholder	Insufficient engagement from key stakeholder prior to submission of gate 2 paper, due to limited resource to support SRO development.	20	Work with National Appraisal Unit (NAU) to escalate for resolution and improved NE engagement for Gate 3 (early 2023).	12
4	Emerging contaminants and viruses	Environmental	Gate 2 solution guidance requires details of proposed mitigation for any emerging contaminants identified. There is currently a lack of technical guidance regarding appropriate level of concentration to feed treatment design.	20	The outcome of an emerging substances risk review has established the scope of additional monitoring and analysis, which has been set underway in September 2022.	5
5	Sediment mobilisation	Environmental	There is potential for increased flows in the GUC to cause mobilisation and transport of sediment from the base of the canal.	16	Investigations in gate 2 concluded that bed level sediment will not be mobilised. We will carry out further investigation in gate 3 into the chemical content of weak uppermost deposits and their potential for mobilisation.	8
6	INNS movement	Environmental	Potential for increased movement of INNS from outside current network and from within north section of canal due to increased flow.	15	We are monitoring to understand the current prevalence of INNS, carry out pathway-based risk assessment, the findings from this work will be used to propose ways of reducing the potential for INNS movement.	8

Ref	Short description	Category	Detailed description	Original risk score	Plan to manage	Mitigated risk score
7	Commercial agreement between solution owners	Commercial	Solution owners will need to agree commercial contracts to cover the supply of raw water from Minworth SRO and utilisation of the Trust's assets for water transfer.	15	Risk to be resolved in gate 3 via collaborative liaison between solution owners, to draft and agree appropriate contractual terms and conditions.	10
8	Regional Plan reconciliation / alignment	Planning	Risk that the Regional Plans will not align, and that a difference will exist in the selection of Strategic Resource Options across the Regional Plans. Companies need to see and understand how the Regional Plans are going to link together, and the process around this.	12	Active engagement at monthly water regional group to better understand the regional reconciliation process between draft publication in Nov 2022, and the final publication in 2023.	8
9	Public Inquiry into the WRMP24 (which may delay formal case of need)	Other	If the WRMP is not signed off in accordance with current assumed timelines due to a Public Inquiry, this may delay the delivery of the GUC SRO.	15	The outcome of a public inquiry is to be expected before a DCO application is made for the scheme. Gate three work will therefore continue to programme. In event of an inquiry AfW would seek approval of their case of need from the SoS to keep GUC SRO on programme.	5

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## Appendix A: Project Gantt Chart

(The programme shows our current thinking, the anticipated tasks and delivery timeframe. The programme is liable to change as scheme planning is further developed in Gate 3).

