

### Format

The Tender is to be written in English, using Arial font, no smaller than 11 point in size. Diagrams may be used and are to be labelled. All attachments submitted by the Tenderer are to be provided in either MS Word or PDF format (unless otherwise stated).

### General

The SWS business plan details our vision, values and promises, for more information please refer to our website:

[https://www.southernwater.co.uk/media/8235/6579\\_ofwat\\_company\\_turnaround\\_plan.pdf](https://www.southernwater.co.uk/media/8235/6579_ofwat_company_turnaround_plan.pdf)

The SWS response to Ofwat's Determination can be reviewed on the below link. Please ensure you have read this and fully understand prior to responding to the PQQ and if successful, ITT questions.

<https://www.ofwat.gov.uk/wp-content/uploads/2019/12/PR19-final-determinations-Southern-Water-final-determination.pdf>

Lot 1 Water works and services: £294m; comprising (a) £210m + (b) (£84m x across 3 additional years)

Lot 2 Wastewater works and services: £406m; comprising (a) £290m + (b) (£116m x across 3 additional years)

The scope of the framework is anticipated to be as follows:

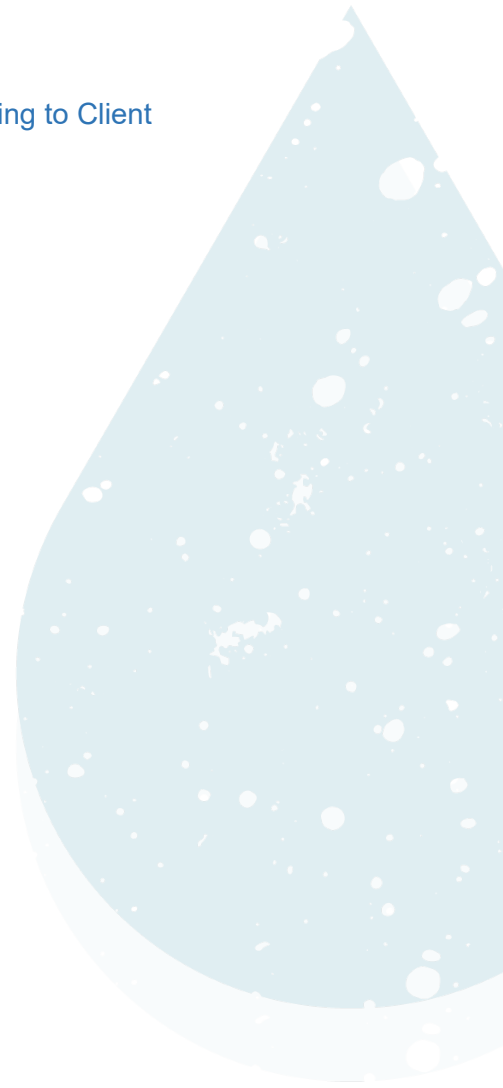
- Services across Southern Water's geographical region including Isle Of Wight (IOW).
- This is intended to be used for routine asset replacement works which require limited design, and can be readily packaged and allocated by the Client. The Client has a new framework for providers for Non-Infrastructure works, starting in Q1 2023, but within this Framework procurement is the provision for further providers of for Infrastructure works the 'Infrastructure Framework'.
- Identify and develop options in accordance with the Client's technical and engineering standards for all aspects of Water and Wastewater systems.
- Achieve the required asset performance or customer outcomes by identifying:
  - low build or no-build solutions.
  - sustainable including low carbon, catchment, and nature-based solutions.
  - lowest Totex or Best Value solutions across an agreed Tranche or Programme of works.
  - how the solution(s) deliver benefit as measured the Client's Balanced Scorecard, and at an aggregate catchment or system level.

The Contractor shall provide construction management services and expertise including:

- Create, manage and optimise its allocated programmes, including developing programme, tranche and project execution plans as required by the Client.
- Supporting the Client with Pre-construction Enabling Activities.
- Undertaking Construction Enabling Activities (e.g. site surveys, site preparation, streetworks management, including communicating with the customer).
- Preparing all aspects of work delivery planning, including identification of the most cost-efficient civils, mechanical and electrical, and environmental construction resource to deliver the works, for review and acceptance by the Client.
- Work with the client to regularly optimise the specification and procurement of the Client's Standard Asset List, including use of centralised or buying club solutions
- Managing and undertaking construction delivery to the time, cost, quality and risk parameters agreed with the Client,

## SWS PQQ - Capital Infrastructure (LCDR) Framework

- Managing and undertaking commissioning and handover according to Client Engineering Standards.



### Question

Case Study 1 (a separate response for each Lot is required)

Please provide case study no 1 comprising no more than 4 x A4 sides - including any diagrams or pictures and in Arial 11 point font), detailing your experience of a similar scope and scale to the Lot you are responding to and include:

- How the scope is of relevance to Southern Water;
- The scale (value and volume), complexity and scope of the work delivered;
- How the client's requirements, benefits and any value adds were achieved;
- The approach taken to achieve successful delivery;
- How you ensured your client's customers' needs were met through your delivery approach;
- Client contact details (name, organisation, telephone and email address) to verify case study.

4 page Arial font 11

Writer – Tony Fern

## Lot 1 – Case study 1 – Caledonia Water Alliance (CWA)

### Introduction

Caledonia Water Alliance (CWA) is an Alliance between Morrison Water Services (MWS) and AECOM, working on behalf of Scottish Water. CWA is Scottish Water's water infrastructure alliance partner, responsible for delivering around £480 million of investment over six years. The 6-year framework agreement runs from April 2015 to March 2021, with an option to extend a further 6 years.

This contract includes programme management, together with the design and construction of works associated with the water network across the whole of Scotland. This includes major programmes of work consisting of high-value construction projects.

### Relevance of scope to Southern Water

The scope of work covered by the Alliance includes delivery of low complex and low-cost solutions in line with revised budget constraints. Work includes new assets, renewals, modifications, maintenance and refurbishment of water networks and pumping stations.

Examples of projects completed for Scottish Water on CWA that are similar to those we expect to deliver as part of Lot 1 of the Capital Infrastructure (LCDR) Framework include:

- Our Cowsrieve project – installation of 3 km of 415-mm and 450-mm PE pipe line between Cowsrieve and Newfield SRs in Aberdeenshire.
- Agile delivery of mains replacement and rehabilitation projects across Scottish Waters entire footprint, such as our RCI Newfield PS to Broadmuir TM DMA project to resolve frequent problems with bursts on the existing main. The nature of these ongoing projects is diverse and range from single-site mains replacement through to larger replacement programmes.

### Scale, complexity and scope of work delivered

Our ongoing CWA contract involves delivering projects of varying complexity and value with a diverse range of work scopes. Many of our schemes are low-complex projects and come to us via a 'conveyor belt' process for small value repeatable works. These schemes have been designed by the client and are handed over to us when ready for implementation.

Our agile approach to delivery, our close collaboration with Scottish Water and our tailored operating processes has enabled us to significantly reduce the time required to take projects from the Plan and Prepare Stage through to the Delivery Stage. Through this reduction from 15 months to an impressive 3 months (average) – we are not only saving Scottish Water substantial costs and programme time, but also increasing customer satisfaction and safeguarding Scottish Water's reputation. Examples of low-complexity projects undertaken as part of CWA include those described below.

Project	Description
Cowsrieve, Aberdeenshire Value: £5 million	Phase 1 – installation of 3 km of 415-mm and 450-mm PE pipe line between Cowsrieve and Newfield SRs, three pumps at Newfield PS and a temporary tie in (outlet to inlet) with commissioning and associated works.  Phase 2 – decommissioning / commissioning temporary to permanent break-pressure tank at Cowsrieve SR, a booster PS at Hatton, and telemetry upgrades at Forehill High PS.
Tullich, Oban Value: £4.86 million	Phase 1 – installation of 1 km of 315-mm PE pipe, through residential areas with temporary tie ins, cross connections and a 150-m length sacrificial section.



	Phase 2 – installation of 1 km of 315-mm PE pipe with permanent tie ins and decommissioning of the Phase 1 temporary tie ins. Involved two 150-m twin-directional drill / HDDs beneath Oban main line railway and a significant trunk road (A816) open cut crossing.
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### How the client's requirements, benefits and any value adds were achieved

One of CWA's objectives is to ensure the best whole life cost is achieved on projects, with careful consideration of the needs of key stakeholders. We have challenged traditional ways of working to deliver a faster paced, end-to-end approach to water networks, which in some cases has halved the standard duration for work of this type. By the end of the first year of the contract, CWA had replaced over 100 km of water infrastructure and designed and prepared for delivery of a further £120 million of infrastructure investment. This collaborative and flexible approach has led to additional work streams being added to the programme.

On each project delivered as part of CWA, we have collaborated closely with all relevant stakeholders to meet project requirements, leave a positive legacy in the communities we impact, and help Scottish Water achieve its social and environmental commitments.

On our CWA contract there are a number of examples reinforcing this commitment, e.g., Amlaird Community garden, Stand Play Park, Milngavie in Bloom, Achmelvich Community Centre refurb, and Winter Wonder Garden.

We offer those schools close to our projects an assembly to highlight health and safety risks around our construction sites and continue to engage and communicate with local communities about how water affects them and their environment/society.

Our Wildlife Wonder Garden Project stemmed from an idea within the site team to develop a community payback initiative linked to work being undertaken by CWA on the nearby Ayrshire Resilience project. CWA staff volunteered time to help transform an area of scrub land at Darnley's Corselet Road within the Dams to Darnley Country Park, into a safe, recreational/educational space. The area includes a specially created low-maintenance wildlife garden featuring raised flowerbeds, bird boxes, bug boxes, open grassland and recreational area. Three local primary schools were actively involved with this initiative, and each adopted a raised flowerbed to maintain as part of the school's outdoor learning.

We are committed to attracting new talent and recruiting more diverse talent into our business that reflects the local community, and have been working hard with Scottish Water to drive change through our ongoing commitment to inclusive attraction, recruitment, and development of the CWA workforce our range of initiatives include:

- STEM Careers in Water - Our STEM Ambassadors provide us with an opportunity to engage with secondary schools where employer led careers support.
- Apprenticeships / Graduates: We aim to recruit 100+ apprentices and graduates per annum using standard attraction methods and CareerMap – a website for 16–24-year-olds looking for a pathway into apprenticeships, university and graduate courses.
- Job Centre Plus (JCP) – we have partnered with JCP on a number of employment initiatives, e.g. work trials - to facilitate employment for those that need it most.
- Employing Ex-offenders – we have been successfully recruiting offenders directly from prison for over 18 years and have provided permanent employment to 120+ offenders.
- Disability Confident Scheme – we are committed to helping disabled people gain employment with us and have joined the scheme to help recruit and retain them.
- Careers Transition Partnership (CTP) – we are a Gold Award holder for the Defence Employer Recognition Scheme and exhibit at 10 CTP events per annum. Ex-forces



account for 5% of our total hires and we advertise vacancies across the Career Transition Partnership.

### Our approach taken to achieve successful delivery

#### Skilled and experienced delivery team

Working with our design partner AECOM, we utilise our large, highly skilled workforce in Scotland, drawing on experts and additional resources available from our combined resource pool. To ensure a competent workforce, we define team structures and specific roles to deliver the varying types of work required for each project. Each role is then fed into a Competence Matrix to identify competence and training requirements. Senior managers then identify key staff from within the wider business who best met the competences and then interview them for the Team Leader positions.

Team leaders then build up their respective delivery teams based on discussions with the client and detailed identification of requirements. Whilst many of the required skills are already available within our workforce, a key task is to identify any gaps in knowledge or competence and implement appropriate training. An example of this was a requirement for all staff acting as project managers to complete Association of Project Management (APM) training before taking charge of any project.

We continuously appraise and manage supply chain partners and suppliers throughout the framework, ensuring they continue to meet our strict health and safety, quality, financial and corporate social responsibility requirements.

#### Delivering to plan

Our process for ensuring we do not deviate from plan begins with the Lead Design Engineer (LDE) ensuring that all disciplines feeding into the project design, agree estimated times for them to complete their work. We then roll this up into the overall project time and cost calculations that are fed back, via the Project Manager (PM) to CWA's project management office and commercial functions – who in turn, report back to the client.

We establish a project risk register at the start of each project to highlight known areas of concern and appropriate risk allocations of time or cost made against these items. The risks are then managed throughout the project delivery and, wherever possible, designed out before the construction stage.

During the delivery of the project, each discipline is responsible for monitoring their own costs and time input against the overall programme, assisted by regular 'programme meetings' at which Senior Project Managers request updates from the respective PMs and justification for any deviance.

The discipline leads feedback any anticipated delays or cost over-runs via the LDE to the PMs, who are responsible for preparing early warning and compensation event notifications for any changes to the agreed scope / programme / cost. We utilise the following programme management tools to ensure that programmes remain on time, on budget and are delivered to a high standard:

- Primavera P6 for all projects, where all cost and programme data are held – one version of the truth.
- Earned value analysis on a weekly basis to track progress / value for money.
- Cost loaded programme for agreement of budgets / target costs.
- Standardised cost reporting format, driven by the monthly reporting calendar.

We work closely with the Scottish Water to resolve issues such as land access and have provided solutions to mitigate critical delays, e.g., diversion around a golf course, where we proposed a route that was more cost-effective and time efficient.





Our senior project managers attend regular Programme Meetings with Scottish Water and Alliance members to discuss and plan for upcoming projects, discuss general progress and KPIs, and any emerging high-level risks to programme – cost or schedule.

At project level, our project managers attend scheduled and, where necessary, ad hoc Project Review Meetings with the client to discuss any new risks identified concerning schedule, progress or H&S, risk mitigation measures, actual versus planned progress, and any general issues that need to be addressed. Any corrective actions necessary are then agreed and implemented to ensure each project progresses as planned until complete.

### Lessons learned

Each project within CWA has its own lessons to be learned from. LDEs and construction managers attend a fortnightly meeting where they discuss any issues encountered and exchange ideas to resolve problems and prevent recurrence. This includes feedback to Scottish Water on issues such as incompatible specifications or new technologies that may alleviate existing problems but which they have not yet considered or approved. This meeting is also attended by a senior management representative who is able to both assist with technical experience and take actions for feedback to Scottish Water or the Joint Venture Management Board if the problems identified are internal to CWA.

### How we ensured our client's customers' needs were met

Before starting any project, we develop a Customer & Community Engagement Plan (CEP) to consider the specific requirements for each customer segment and for key stakeholders impacted by the work, including 'priority services' customers, third parties, local stakeholders, businesses and schools.

We update the CEP throughout the project lifecycle to define and refine our engagement approach including:

- Community engagement to capture local issues: this considers local community events, the impact of road closures, historic flooding, etc.
- Segmentation of customers to identify 'Priority Services' customers and businesses.
- Surveys and investigations and liaison with third parties and landowners to agree access arrangements and land entry.
- Face-to-face visits before works start with directly affected customers: door knocking, visits to businesses/local traders plus, if appropriate, media publicity.
- Proactive communication with key stakeholders such as highways authorities, councils, locally elected representatives, Environment Agency and trade bodies.
- Multi-channel communications during works, e.g., early written notices, personal visits, letters (prior warning), cards, proactive outbound SMS text messaging, virtual customer forum and detailed courtesy board signage.
- Use of social media listening platform to flag feeds relating to works/for proactive use.

Where water supplies are disrupted by damage or temporary stoppages, our operatives deliver bottled water to customers to meet their immediate needs.

### Client contact details for CWA

<b>Name and organisation</b>	Paul Sexton, Alliance Manager, Scottish Water, Buchanan Gate Business Park, Stepps, Glasgow, G33 6FB
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