

SVE4.22

Water Supply Enhancements Shelton WTW

Draft Determination representations

28 August 2024

WONDERFUL ON TAP



1. Summary of our representation

Our business plan submission included £43.6m to upgrade Shelton works as part of our water resource management plan. The draft determination included an allowance of £102.8m on the basis of enhancement model, "[Water – supply; enhancement expenditure model](#)". In all cases where Ofwat has assessed our costs as efficient and as a result set the DD allowance higher than our plan, we have retained our plan cost as this is our view of the necessary costs to deliver the outcomes for customers and we do not wish to artificially elevate costs for customers. In this specific case we have accelerated activity through the transition programme in order to ensure timely delivery of the benefits. As a result of this additional work, we have identified a number of reasons why the scope and therefore cost has increased by £25.5m compared to our PR24 business plan. This submission seeks to provide detail to justify the increase. Noting the costs are still within the range stated in our business plan submission, as detailed in our Meeting Future Water Needs enhancement case which indicated a range from £43.6m to £69.9m.

Table 1 below summarises the costs at each stage of the price review process include forecast FD position.

Table 1: Updated Shelton water treatment works expansion costs

Original business plan (£m)	DD (£m)	Representation (£m)	Expected FD value (£m)
£43.6m	£102.8m	£69.9m	£102.8m

2. Need for investment and cost increase breakdown

In our Meeting Future Water Needs enhancement case, we provided the evidence for the investment need for the Shelton water treatment works (WTW) expansion scheme. Within the draft determination supply enhancement expenditure model, Ofwat has agreed with our need for investment by allowing a provision of costs for this WTW expansion scheme.

As part of the original business plan submission, and for our Water Resource Management Plan (WRMP), we costed this supply scheme and benchmarked it against similar schemes. Our mature and commercially focused cost estimating approach was used to generate the costs and we used a combination of historic outturn costs (from STUCA – Severn Trent’s unit cost database) and bottom-up estimates for non-standard items. 87% of the costs within our original business plan submission for the scheme were derived using STUCA.

Since the business plan submission, we have been progressing this scheme through our capital design and delivery teams utilising transition expenditure. Our internal gated process to progress a scheme through detailed design and then to delivery has identified costs for which further scope and therefore enhancement expenditure would be required.

We have applied the same robustness and rigour to cost efficiency on these new costs as we did on the original elements of the scheme (as detailed in our Meeting Future Water Needs enhancement case).

In Table 2 we list the additional activities and associated costs. These are new activities identified through additional feasibility that were not part of the scheme scope at the time of the original submission, but were flagged as risks in the cost range specified.

Table 2: Cost increase breakdown of activities (post frontier shift)

Additional cost element	Breakdown of activities	Costs (£m)
Land	Additional land purchase	£7m
	Reconfiguration of existing site	£3m
River intake	New river intake pumping station	£2m
	New rising main	£1m
	Water quality monitoring and treatment	£2m
Treated water reservoir	Upsizing of new treated water reservoir	£10m
Ammonia risk management	Enhancement of chlorination assets	£0.5m
TOTAL		£25.5m

2.1 Detailed breakdown of additional activities

In Table 3 we expand on the details of each activity to provide Ofwat with a more comprehensive view of the cost increases.

Table 3: Detailed breakdown of the additional scheme activities

Activity	Activity details
Additional land purchase	Following further scheme detailed design, it has become apparent that we will need to purchase additional land from Shropshire County Council to the north of the existing WTW for the new treated water reservoir that has been identified as necessary. Further land purchase is also going to be necessary for the Side Stream that is going to be needed.
Reconfiguration of existing site	To accommodate the identified side stream, we are now going to need to reconfigure the Shelton site. Space at the site is limited (as evidenced by the additional land purchase requirement) and we now know we will need to demolish and rebuild (in a different location) a number of existing buildings to accommodate the expansion.
New river intake pumping station	Our original costing utilised the existing river intake, however we now believe a new river intake pumping station will be required.
New rising main	To ensure we can transfer the water from the new river intake pumping station we have identified is needed, we will now also need to construct a new rising main.
Water quality monitoring and treatment	As we have identified a new river intake is required, we must undertake water quality monitoring and treatment to ensure we can obtain an additional abstraction licence for this intake.
Upsizing of new treated water reservoir	It has been identified that the new treated water reservoir needs to be larger in size to provide sufficient storage for the additional side stream flows.
Enhancement of chlorination assets	We need to enhance and upgrade our existing chlorination equipment so that we can treat the increased flows at the works from the expansion.

2.2 Cost efficiency

We have used the same method and source data to cost the additional activity. On the basis that Ofwat's model (for the same scheme complexity and 18Ml/d output) set its view of efficient cost at £102.815, our updated costs remain to be well below this benchmark and therefore are offering good value to customers.

3. Customer protection

Ofwat has defined a PCD (PCDW11a) for all of our supply schemes combined. The Shelton WTW expansion scheme contributes to the Water Available for Use (WAFU) MI/d outcome. We agree with the PCD, apart from one minor clarification point which is detailed in our PCD representations document.

Customers are protected from non-delivery of this scheme through both the non-delivery and time-incentive PCD rates applied to this supply scheme.