

## Flexibility and Different Thinking: Communicating Design Intent Clearly

All UK water supply and treatment companies are required to invest in their assets regularly to modernise and increase efficiency and provide the best service to their customers. This requires planning in advance for a 5-year cycle and includes upgrades to infrastructure, renewed equipment and improvements in the treatment processes, since many treatment plants have been in use for more than 50 years, possibly longer.

The industry is used to this cyclic approach, but some water companies are questioning whether they make the best value and look to improving the definition and communication of what they need to do.

MAT Ltd were engaged by one such Company.

This is their story:

*“As a water company, we have to plan for improvements in our treatment plants, over a recurring 5 year cycle. Our proposals are put to OFWAT, and based on what we submit, the amount we can charge customers is fixed, so it’s important to ensure that we are investing in the right areas.*

*“We normally set up framework agreements, with contractors to develop our schemes, who are frequently appointed to work with us on our premises, because that way, we get to share information more easily. However we’re not always in control of those teams and it takes our manpower to manage them.*



*“We’ve found that at the beginning of the agreement period, there is a great deal of enthusiasm to provide best value, but our working relationship is at the early stages. Once we have all settled down, the feeling creeps in that these external teams are not necessarily bringing best practice. It’s difficult to get our own team engaged in these projects, and they sometimes see the framework team as outsiders, who don’t take into account the home-grown expertise.*



*“If we could capture the ideas from our own people up front, and in a way that reduces the amount of time the framework team have to spend designing and redesigning, and the errors that inevitably produces, then we will save time and cost. However by engaging someone else, it will add extra cost, and there is the risk that another consultant won’t take responsibility.*

*“MAT Limited and Peter Francis were just the sort of consultant who could help us out.”*

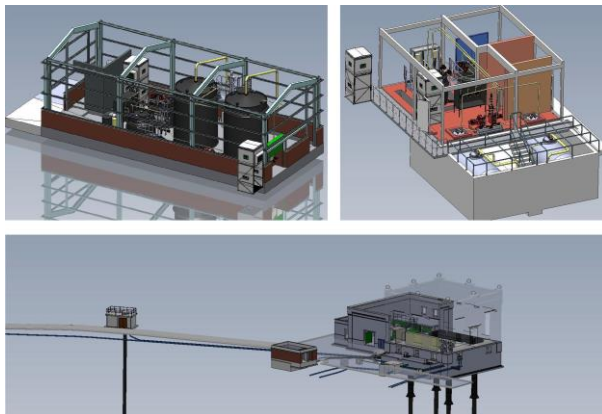
MATL had previously been engaged through one of the framework contractors which was selected to deliver the designs and construction of a number of the projects. At that stage the remit had been exclusively relating to the electrical and controls design and supervision. However, as one phase of the work reached a conclusion, the need for co-located team and its associated costs diminished and the team was withdrawn to become remote.

However MATL had developed very strong positive relationships with this client during the earlier phase, so the client decided to engage MATL directly to define the scope of the next phase of projects in much more detail – which is what we are expert in – to nail down the expectations on both sides and to communicate it very clearly.

We introduced the client to the use of 3D modelling even at this early stage of design, which we could justify as cost-effective, but had the effect of illustrating the proposals so clearly that review meetings became dynamic with clear goals and everybody engaged. Our package of specifications and outline designs were presented as a coherent set of documents and drawings that the framework contractors were



able to offer solid costs against to the client.



The success of this could be measured against the result that the designs were sufficiently detailed to enable to the contractors to proceed with minimal additional design work and only a few minor queries (in one case we only had a single question about one measurement), the software was written without any further design documentation being required, and one of our packages was used to benchmark prospective contractors for the next cycle of the AMP by the client.

By considering alternative approaches in how to communicate client intentions clearly to both the client organisation and potential suppliers or contractors, we reduce the risk and uncertainty in delivering capital projects and improvement and unlock opportunities to include the plan for future developments too.

Contact us for more information:



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