



Universal Metering Programme
Contract No: C-03691
ITT December 2020

Delivery

- 2) The Tenderer shall describe how they intend to complete the data collection, reporting and meter sign off process described in this Contract. Elements the Tenderer is required to cover shall;
- a. Clearly demonstrate how the meter installation will be signed off as well as explaining how performance will be monitored and supporting data will be recorded during the installation phase. All of which should be in line with best practice in the water/ utilities industry. Supporting information should be provided to give context to the answer.
- b. Clearly explain how the AMR reader's proof of supply can be guaranteed, whilst producing satisfactory water quality results achieved with the economic usage and disposal of water. All of which should be in line with best practice in the water/ utilities industry. Supporting information should be provided to give context to the answer.



Introduction

We know that Affinity Water, in order to achieve your C-MeX and PCC objectives, requires certainty of installation and data accuracy in the meter provision process.

We will help you to achieve these objectives via:

- Robust operational and data processing procedures
- Detailed customer journeys
- Comprehensive and joined-up systems
- Bringing knowledge and best practise from the water sector and our current metering frameworks.

Data collection, reporting and meter sign off process

We know that it is a critical for any metering programme to get the data collection right first time, to avoid any negative impact to the programme. From our extensive experience of completing large volume meter installation programmes for other clients, we have learnt that it is better to have our surveying teams complete all the external meter installations externally, both screw ins into existing meter boxes and fitting of new external boxes.

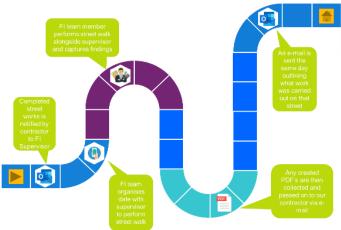
We will like to develop this approach with Affinity Water and share the proven benefits of using this method.

The work programme will then allow for the external dig teams to fit the new meter boundary boxes where required, replacing the existing OSV. This will be targeted on by postcode address on a street by street basis. The exchange of the OSV to boundary meter boxes will then be fully reinstated with all the key stages recorded, before the meter installations are planned.

Signing off meter installation

As per our other metering contracts where we undertake a vast amount of meter installations, we will have an efficient system in place to help formally close each meter installed. We fully understand the importance of ensuring each installation is signed off to the highest standards and to client and customer satisfaction. Using our proven processes and procedures, we have developed a work management system that will enable us to close out completed work installations electronically via mobile devices in the field, and by our Quality Assurance team.

We will create a contract-specific sign off/job closure processes and procedures which will include Affinity Water's requirements for each handover. This will be based on a sign-off journey (see diagram below).



Upon notification of works completion, each street will be walked by the front line supervisor and the works

assessed. System base check sheets will be compiled. The works will be signed off and will go to data validation or raised for field investigation/completion.

Supporting information

Please find the following attached which have been created and used successfully on our Thames Water metering contract:

- Appendix Delivery Q2A: TWL PMP Street Sign off Process
- Appendix Delivery Q2B: Job closure process flow chart.

To ensure adherence to standards at sign offs, we will:

- Maintain a high level of quality assurance by identifying any failures early. This will ensure we avoid defect charges and cost
- Our UMP project team will record findings and keep track of improvements required to complete the installations to the highest standards.
- Provide an exceptional customer journey and experience through our award-winning Every Customer Counts strategy – this will reduce potential complaints and ensure we gain positive feedback – driving C-MeX results
- Ensure each work location is clear and tidy before the handover/takeover process – we will leave every location in the condition it was in when we arrived
- Continuously monitor and maintain installations at each stage to ensure quality
- Ensure our people are trained and competent to the highest standards to complete the work required (tracked by our TrainWithUs team through a competency cloud management system) and provide continuous coaching and mentoring throughout the contract duration to ensure standards are maintained.
- Confirm any reportable issues with team performance standards and QA over the installation programme, so that these can be discussed one to one and actions implemented for continuous improvement.

Performance monitoring and recording of data during installation phase.

Morrison Utility Services has extensive experience through undertaking customer metering programmes for a number of clients, e.g. Thames Water, Yorkshire Water and Welsh Water. Therefore, we fully understand the importance of having robust performance monitoring processes in place in order to complete the meter installations we undertake every day to the highest standards.

Our work management system will enable us to monitor individual performance and record the key deliverable stages of the installation, with photographic evidence uploaded via mobile field device in accordance with the Employers Schedule 7 Asset Information Appendix 7A – Photo Requirements.

Our **Quality Assurance Data Validation and Auditing Team** will review the photos uploaded to the management system – any photos not compliant with our quality standards or meeting installation protocols will be flagged with the relevant teams' supervisor and gang team leader so they can ensure the issue is rectified and put an action plan in place to ensure the same issue is not repeated – e.g. additional training/coaching.





Our supervisors will also monitor the installation process and provide mentoring and coaching to ensure continuous improvement.

MUS has a unique **Intelligent Solutions Team (IST)** with the responsibility to ensure the company always has the best IT systems available. We will also develop bespoke systems to allow us to collect data from the field and process this into easy reports, which we will then share through collaborative portals with Affinity Water. An example of an app that we have recently developed is a system call TWM/Blicker – which allows our surveyors to take accurate photos throughout the installations.

Blicker is an intelligent meter readout assistant that digitises gas, electricity and water meter reads and serial numbers from photos. Benefits include:

- Forms are optimised to scan asset data
- Photos are checked and verified to confirm assets through the app, significantly reducing the numbers of data checkers required
- High level of data accuracy received
- Allows for audit traceability
- Data is uploaded into our work management system, which can validate and populate asset details from the serial number alone.

Another example of a solution we have implemented is our **Oracle Field Service** app, used to manage resource availability, manage customer appointments and inventory.

In addition, our 'Where's My Engineer?' app allows customers to track their engineer's location in relation to their planned appointment.

We will not stop there – our Project Team are committed to working with you and our IST to offer the best solutions from the market or develop our own solutions in order to meet/exceed the contract requirements.

Guaranteed proof of supply

Our highly skilled surveyors will complete an in depth survey of each property within the postcode. This will be completed by physical checks by asking the customer to turn on kitchen cold tap while listening on the OSV, to hear the water running. The customer will also be asked if the supply can be proven by quick isolation at the OSV. They will then turn off the OSV to identify if the customer's flow stops at the kitchen tap. If there is an existing meter, the supply can also be proven by looking at the meter dials whilst the customer briefly turns on an inside tap. The meter that spins when the customer turns tap on will be the meter to the property.

In cases where customers are not at the property at the time of the survey and the supply can easily be logically proven, i.e. OSV directly within the garden and front the boundary of the property and aligned, with over OSVs within the street within a similar location, this will result in a proven supply.

Our teams will also use scanning survey equipment to try to locate supplies with no OSV present. If the customer is home, we will ask them if we can connect to the ISV using a tracing wire and Genny to put a pulse through the supply, marking this in the footway. In these cases, a trial hole might be required to confirm buried supply location.

In the event a customer is not home and no existing water services records are available from Affinity Water's GIS

team, the surveyor will speak to the customer planning team to arrange an appointment when the customer is at home – to allow the above process to be followed.

When carrying out the internal survey, the surveyor will look out for an ISV. Possible locations are at the point of entry, under the sink, WC/downstairs bathrooms, airing cupboards or utility cupboards within a kitchen. Our teams will confirm that the internal meters can be fitted in a position where they can be easily read and accessed for inspection, testing and maintenance purposes.

The surveyor will also confirm and record 'unmeterable' properties where it is not feasible to fit a water meter. There are several instances where this would be the case:

- Shared OSV
- ISV in communal cupboard and surrounding area.
- Insufficient pipework to fit.
- Rising feed from under tiling
- No access to pipe work due to boxing/embedded pipes
- Multiple feeds to a single property.
- Communal hot water feeds.

In these cases, we would take appropriate photographic evidence, record customer comments and obtain any available drawings to support the 'unmeterable' classification.

Satisfactory water quality

We know how vital it is that water quality standards must be completely adhered to at all times. We will procure all materials and fittings through your framework suppliers, to ensure we comply with regulation 31 to meet the correct conformity standards.

All fittings with also be store in a safe hygienic location within our compounds, with regular WQ audits completed to maintain checks and controls over the programme.

All vehicles which will transport fittings will have a separate segregated area to store the fittings, and all fittings will be transported within their original packaging. Tools, fittings and any pipework used within meter applications will be cleaned prior to use within any installation, being sprayed with freshly made 1000ppm available free chlorine solution. All tools used for installations of potable water systems will be dedicated to these activities. All pipework will be flushed through to remove any residual chlorine.

Any discharge and disposal of the potable water during the installations will be kept to a minimum level, with pipe freezing and other techniques considered as ways to prevent wasting water, helping reduce environmental impacts within your community.

Supporting information

Please find the following attached:

- Appendix Delivery Q2C:
 Metering Installation Handbook
 – created specifically for this
 Affinity Water UMP and
 includes sections on proving
 supply and water quality.
- Appendix Delivery Q2D: Example Method Statement for external survey, screw in, exchange meter and prove supply.



