



Affinity Water Limited
Developer Services

**Policy and Company-Specific Requirements for
Water Mains and Service Pipes Constructed by
Self-Lay Organisations**

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1 Introduction

1.1 General

Affinity Water Limited (AWL) allows developers to choose whether they wish to install new water infrastructure for their developments by electing a Self Lay Organisation (SLO) to design and install the works, or formally requisition the Water Company to undertake the work. If a developer chooses to adopt a self-lay approach then the developer will enter into a self lay agreement with AWL under Section 51A of the Water Industry Act 1991 (as amended by the Water Act 2003). If the developer or SLO installs the water infrastructure, provided that the works are constructed in accordance with the terms and conditions of the agreement then AWL shall permit connection of the new infrastructure to their existing water supply network and adopt the new infrastructure (known as vesting). AWL will calculate and make any relevant asset payment to the developer for any mains that it adopts.

AWL is committed to high standards of construction, health, safety, welfare and environmental protection associated with all its activities. Within our area of supply the quality of water and the integrity of the water network remains our responsibility. Only competent organisations will be allowed to carry out this work. Those persons and organisations deemed as competent are defined later in Section 3.5.

This document covers:

- All Affinity Water regions;
- our specific policy for mains and services constructed by SLOs
- additional company-specific requirements for self-lay

This document supersedes any previous self-lay policy implemented by AWL.

Additional copies of this document and further information on self-lay are available through our website at:

<https://www.affinitywater.co.uk/self-lay-information.aspx>

1.2 Context for Affinity Water Limited Policy for Self Lay

AWL has structured its policy for self-lay to reflect the requirements of both the Water Industry Act and the Competitions act and also incorporates the principles outlined by the economic regulator for water, Ofwat. Additional guidance relating to self-lay is also available from the Ofwat website.

This document is also to be read in conjunction with the Self Laying of Water Mains and Services, a Code of Practice for England and Wales (2nd edition), published by the WRc and the Self Lay Code of Practice (2nd edition) National Addendum for Safe Control of Routine Mains Connections. Copies of which can be ordered from:

<http://www.webookshop.com>

Additionally, the following documentation, published by WaterUK has also been considered in the preparation of this policy:

- Water Industry Guidance Note – Guidance on the Allocation and Calculation of Costs for Self Lay Water Mains (IGN 4-05-01 2014: Issue 1.0)
- Best Practice for the Production of Quotations/ Estimates for the Provision of Water Mains on New Developments

1.3 General Principles for Self-Lay

The WRc Code of Practice sets out technical guidance for the design and construction of water mains, together with the specification of products aligned with the 'Civil Engineering Specification for the Water Industry (CESWI) 7th Edition. Further information can be found on the WRc website (<http://selflay.wrcplc.co.uk>). Technology and standards within the water industry are constantly changing and developing, therefore formal amendments to the text can also be found on the WRc website in the '*Corrected Specifications*' section. We strongly recommend that Self Lay Organisations (SLOs) regularly consult this section to ensure their installations are compliant.

2 Contact Details

All requests from developers & Self Lay Organisations (SLOs) should be made using the formal application form for self-lay and sent to the Developer Service Team at the address shown below:

Developer Services
Affinity Water Limited
Tamblin Way
Hatfield
Hertfordshire
AL10 9EZ

Tel: **0345 357 2428** (Developer Services Helpdesk)
Email: ds@affinitywater.co.uk
Website: <https://www.affinitywater.co.uk/get-connected.aspx>

Office Hours: Mon – Thurs 08:30 to 17:00 Fri 08:30 to 16:30

3 Self Lay Policy

3.1 Definitions

For the purposes of this policy document and company-specific requirements the following terms/ abbreviations have the following meaning:

CDM	Construction (Design and Management) Regulations 2007
DWI	Drinking Water Inspectorate, responsible for assessing and enforcing the quality of drinking water in England and Wales. Reference should be made to their regulations at: www.dwi.gov.uk/regs/regulations.shtml
Ofwat Financial Guidance	Guidance and principles outlined in Ofwat document ' <i>Guidance on financial arrangements for self-lay and requisitioning agreements – version 2.0</i> '.
Ofwat Self-Lay Guidance	Guidance and principles outlined in Ofwat document ' <i>Competition in providing new water mains and service pipes: Guidance to companies – version 3</i> '.
SLO	Competent Self-Lay Organisation or developer wishing to design and/or construct new mains and/or service pipes for a new development
AWL	Affinity Water Limited
WRc Code of Practice	The generally adopted WRc ' <i>Code of Practice for the Self-Laying of Water Mains and Services – England and Wales</i> ' (2nd Edition, published in May 2009 by WRc plc)
WIA91	The Water Industry Act 1991 (and as amended by the Water Act 2003)

3.2 Available Information for Self-Lay

AWL is committed to providing clear guidance and information for competent developers / SLOs wishing to undertake the construction of water mains and service pipes. Written guidance and advice is available for download from our company website at:

<https://www.affinitywater.co.uk/self-lay-information.aspx>

3.3 Code of Practice

Unless explicitly covered in the company-specific requirements or operational standards and processes, AWL will adopt standards and requirements identical to those covered in both the WRc Code of Practice for self lay and the National Addendum for Safe Control of Routine Mains Connections.

3.4 Amendments to the Policy or Company-Specific Requirements

The company policy and company-specific requirements for self lay described in this document are subject to change. AWL reserves the right to publish amendments to this document without prior notice to the SLO. It is the responsibility of the SLO to ensure they are in possession of and working in accordance with the latest version of this document by checking our website at:

<https://www.affinitywater.co.uk/self-lay-information.aspx>

3.5 Competence of the SLO and AWL Assessment

It is reasonable for AWL to expect SLOs to be competent in the basic elements of design, selection and procurement of materials, construction, commissioning and the principles of water supply hygiene. Lloyds Register operates the Water Industry Registration Scheme (WIRS), and performs technical assessment of the service providers who elect to be assessed for contestable works associated with the installation of water infrastructure and these assessments are categorised as follows:

- Design
- Project management
- Construction of Mains and/or Services
- Construction of Routine Mains Connections (Please note for this scope Construction of Mains and Services accreditation must be held)
- Service Connections only

SLO's are only permitted to undertake work in the categories for which they have accreditation and AWL will offer a contestable charge to undertake either Design or Project Management (or both) to enable the SLO to progress these aspects with the Water Provider should they indicate on the application form that the SLO is not accredited to undertake these activities.

AWL does not operate its own system of accreditation for SLOs, but fully supports the Water Industry Registration Scheme. All SLOs must be registered with WIRS before carrying out any work in the AWL area of supply. For a list of accredited SLOs or to apply for accreditation please

refer to the Lloyds Register website www.lr.org/wirs. In addition to accreditation, it is mandatory for operatives to undergo Affinity Water Valve Operations training before operating any valves on the Affinity Water live network.

AWL reserves the right to conduct reasonable additional checks for SLO competence before entering into a Self-Lay Agreement with a SLO.

3.6 Scope of SLO Works Permitted by the Company

AWL will permit SLO's to undertake all work providing they are suitably qualified and that they comply with the general Affinity Water Policies for such work. AWL will offer contestable costs for certain aspects of the work such as Design, Project Management, Mains connections and the provision of specified meters and will consider pricing any other works upon request from the SLO.

3.7 Access to Details or Plans of the AWL Water Network

Customers of AWL are able to access plans of water mains and apparatus at their convenience via the company website:

<https://www.affinitywater.co.uk/mapping.aspx>

You will need to register as a user to be able to access the service, which can also be done through the above address. This service is free of charge and you will be able to print A4 size plans of the area you require. Larger plans are available (A3 to A0) upon request; please contact:

Ops Admin Support,
Affinity Water Limited,
Tamblin Way,
Hatfield,
Hertfordshire
AL10 9EZ.

Business Users of this service are required to have an Ordnance Survey Licence in place prior to obtaining this information. In accordance with its general policies, AWL may levy a charge for the provision of the mapping service.

If you require plans of wastewater apparatus in the AWL area, it will fall within the remit of one of the following providers depending on the location of your proposed development site:

Thames Water – Telephone 0845 850 2777
Anglian Water – Telephone 01480 323 889

These providers may also charge a fee for this service over which AWL has no control.

3.8 Initial Enquiries and Requests for: Network Capacity Checks and Point of Entry to Site

The SLO should consult with AWL at the earliest opportunity and this is possible either informally for general advice or by making an Initial Enquiry if a formal response is required. These checks can include a network capacity check and identification of a point of entry to site accordingly. The

charge for undertaking the network capacity check will be included in the total cost of the scheme when it progresses to a formal S41 or S51 Mains application.

We will provide the best response we can to an Initial Enquiry and this will largely depend on the level of detail provided with the request. The form sets out the information we recommend is provided to enable us to make a reasonable assessment. We will assume the best information available has been provided.

3.9 Application for Self-Lay

Applications for self lay schemes can either be made at the outset with a Section 51 application or by subsequently submitting a self lay notification to convert a requisition to Self Lay. The relevant forms are to be completed by either the Self Lay Organisation or the Developer and are available on request or from the company website.

AWL will review the information provided and notify the applicant if there is any further information required. Once accepted, AWL will review the SLO's design (if provided) or will commence the design on the SLO's behalf as a contestable activity. AWL does not charge a fee for vetting the SLO's design. A contestable charge will be deducted from the asset payment for any design that has been undertaken by AWL. This includes for the design and survey of the off site work and where a requisitioned scheme is subsequently converted to Self Lay after the design has been completed.

Where the application is made on behalf of a developer by an SLO, the developer must countersign the application and confirm their authorisation for the SLO to act for them and for the release of sensitive information including asset values. Similarly the Developer will need to confirm whether the asset payment is to be made to the SLO or not.

3.10 Restriction on Operation and Maintenance of Apparatus on the Live Network

It is mandatory for all personnel operating valves on the live network to have undergone Affinity Water Valve Operations training. The operation of any apparatus on the live network must be in accordance with Affinity Water's general operational policies (as set out on the training course) and only take place once appropriate notifications have been submitted and approvals granted. Affinity Water Valve Operation training is available upon request and at the prevailing cost charged to Affinity Water sub-contractors. Affinity Water runs these courses on a regular basis for its employees and sub-contractors and details of the next course are available on request. Affinity Water will offer a contestable charge for the attendance of trained Affinity Water Valve Operators upon request.

Once a new main has been made connected to the live network and therefore adopted by AWL, only Affinity Water Valve Operation trained personnel may operate apparatus on this main and only in accordance with general operational policies of AWL (as set out on the training course).

3.11 Financing Arrangements for Self-Lay

All security charges made are aligned with the mechanism used by AWL to calculate retention under the AWL Framework Contract for Developer Services or will be objectively justified in cases

where AWL is exposed to financial risk (for example undertaking reinforcement works prior to the construction of the new properties).

AWL will provide an estimate of the Asset Payment, based on the total cost of providing the new main less the anticipated revenue (known as the discounted offset amount). At the same time, AWL will provide a breakdown of contestable charges for the SLO to select as required. All contestable charges incurred by AWL will be deducted from the Asset Payment prior to payment.

The Asset Payment will be calculated in accordance with Section 51C of WIA91, and in the same way that the cost of work would have been calculated if the water mains had been requisitioned, please refer to the AWL worked example of this calculation on our web site. The estimated cost of work to be carried out will take account of ground conditions, public highway conditions, and environmental considerations. The SLO will be presented with a breakdown of the estimated cost of works which has been used to calculate the asset payment.

The following is a guide to the activities included in the total cost of the scheme and therefore included in the Asset Payment. The total cost will include all reasonable costs incurred in delivering a scheme and therefore this list is not exhaustive:

- Project Management (including stakeholder engagement within Affinity Water for any contestable work, provision of easements, etc);
- Design (including Onsite & Offsite work, Diversions, Abandonment, a Network Study (where required), the Survey for offsite work and the final connection, Material Selection, CDM and the BoQ for the scheme);
- Construction (including laying new mains and diversions, correct abandonment of mains, commissioning of new mains and diversions and connection of new mains and diversions to the live network and including test and chlorination, post connection sampling and valve operations);
- Vesting (including the provision of all relevant information prior to vesting);

AWL costs are estimated on an 'at cost' basis and do not include risk. Therefore, all costs are re-measurable upon completion to capture any reasonable changes during the course of constructing the works. This applies to all costs, including, for example, the Self Lay element and the contestable charges.

The SLO will also be required to pay costs associated with reinforcement of the existing network and, where service connections are made, the SLO or Developer will be required to pay any Infrastructure Charges that become due. It should be noted that service connections do not qualify for inclusion in the asset payment.

3.12 Self-Lay Agreement

The SLO, Developer, AWL and any other associated third parties will enter into a written legal agreement (Self-Lay Agreement) regarding the scheme and the works to be undertaken. This formalises the relationship between the parties. Any works undertaken by the SLO prior to the Self Lay Agreement (SLA) being in place are at the SLO and Developer's risk.

Where the development is staged or has multiple phases AWL may request separate applications and Self Lay Agreements for each phase. This will be determined in the same way as for section 41 Requisitions.

A copy of the model self-lay agreement with AWL amendments is available for reference on our web site.

3.13 Security

The company may notify that a security will be required prior to the commencement of certain activities that expose AWL to financial risk. Similarly, notification will be given of any proposed deduction from the asset value for the defects period. Any deduction for the defects period will be equivalent to the retention that would have been held back from AWL's framework contractor for Developer Services work, had they undertaken the work.

Security lodged with AWL for the purposes described above can be in the form of an advanced monetary deposit with the company, or in the form of a performance bond. An example of a typical performance bond is available from the company website or from the AWL project manager on request.

3.14 Liability for Latent Defects

The SLO is responsible for any defective works as set out in the SLA. The normal conditions are a period of 24 months for general works and 36 months for works associated with deep excavations. The Defects Liability Period for mains will commence on the date shown on the Certificate of Vesting and on the date of installation of services as notified post installation.

Following cessation of the Defects Liability Period any residual security will be released to the SLO or Developer as appropriate.

4 Company-Specific Requirements

4.1 General Requirements

The following section covers the company-specific requirements with which SLOs will be expected to comply if they are to construct mains infrastructure for adoption by AWL. In addition the SLO will be required to comply with provisions set out in the AWL document “Operational Standards and Preferences”, which must be read in conjunction with this addendum.

The company has comprehensive procedures to protect the quality of the water and the integrity of the network. Where we have made reference to a specific procedure for water quality, these will be provided to the SLO before works commence on site.

AWL standard detail drawings are available on request.

All service connections are to be made under pressure and ducted across roads.

4.2 Materials for construction of water mains and services.

The approved AWL materials list is set out as an appendix to the AWL document “Operating Standards and Preferences” and referenced in the Self Lay Agreement. The SLO may seek approval for alternative materials should they so wish. AWL will approve or otherwise alternative materials within 7 days of receipt of a request. Only approved materials are to be used in the construction of the new mains and associated fittings, boxes etc.

4.3 Disinfection Requirements

Guidance on AWL Disinfection procedures are contained in document “NW033 VWL Network Disinfection – Procedure” which is available upon request.

Pre-disinfection: Following a satisfactory pressure test the main should be swabbed and flushed (3 times the volume of the main) using potable water.

Disinfection: Disinfect with free chlorine levels of greater than 50mg/l with a contact time of greater than 30 minutes. The chlorine used must comply with DWI Regulation 31.

Post-disinfection: The chlorinated water in the main should be discharged (de-chlorinated) and the main flushed with potable water until chlorine residual at the inlet and outlet are the same. The water in the main should then be allowed to stand for a minimum of a further 24 hours before water samples are taken from it.

Water Samples: Water samples are to be undertaken post disinfection and post connection. These are to be undertaken in accordance with NW033. The SLO is to provide Method Statements for approval, for all disinfection and sampling work. AWL will approve, or otherwise, Method Statements within 7 days of receipt. AWL may choose to supervise disinfection and sampling work at its own cost.

4.4 Pressure testing, swabbing, disinfection and sampling.

Before any new pipework with a nominal diameter of 50mm or above is brought into service, it must be pressure tested, swabbed, flushed, disinfected and water quality samples must achieve satisfactory passes. The pressure test, disinfection records and sampling results should be sent to AWL prior to the final connection of the new main.

4.5 Connecting to existing Network

Final connection to the network is achieved through firstly installing the branch connection (unless there is a wash-out already in place) and a return visit to undertake a final piece through. All connection work to the network is contestable; however it must be undertaken in accordance with the AWL general operational policies. The final connection to the network should not be made until satisfactory pressure test and water sample results are confirmed by AWL.

Branch connections to the network can be undertaken by either the SLO or AWL in accordance with the AWL general operational policies. Should the SLO choose to undertake the connection then they will need to liaise with the AWL project manager to ensure all risk assessments and operational sign-offs are in place prior to planning the connection. Similarly, the SLO will also need to liaise with the AWL project manager and AWL Operations team where operational support is required for the connection. Where Affinity Water is requested to undertake the final connection (as a contestable activity) the AWL project manager will ensure the risk assessments, operational sign-offs and operational staff are in place to undertake the work.

Final connection piece throughs are contestable activities and are to be undertaken in accordance with the WRc Code of Practice. AWL will provide a contestable charge for routine connections upon request. Final connections are to be undertaken within 14 days of a satisfactory sample date. Further flushing and testing may be required if the 14 day deadline is exceeded and the extent of re-commissioning will need to be agreed with the AWL project manager.

The operation of all valves on the Affinity Water network is only to be undertaken by Affinity Water Valve Operations trained personnel. This includes the operation of the sluice valve on the branch connection. Training courses are run on a regular basis and the SLO should request further information from the project manager should they wish to have their personnel trained. The cost of the training is the SLO's responsibility (which is the same for all AWL sub-contractors).

4.6 Service connections

In advance of connection, the SLO must provide:

- Payment for building water costs in advance
- All relevant payments for charges associated with the properties being connected
- A WIAPS certificate to confirm that the installed pipework and fittings comply with the water regulations. This certificate will be signed by a plumber with WIAPS accreditation who has inspected the customer side pipework.

The SLO is to notify AWL of the full postal address of the property and meter details within five working days of making the service connection on the relevant form. The form is available to download from our company website at:

<https://www.affinitywater.co.uk/self-lay-information.aspx>

The SLO should submit the connections programme and notification form at least 5 working days in advance of the work being carried out for our consent.

A contestable charge for meters is offered. This is on a collection basis from our stores. Meters can be booked for collection through the AWL project manager. All other materials must be provided by the SLO.

4.7 Water mains

The SLO is to provide a regularly updated (at least weekly) programme of works including key activities regarding the laying of the water mains and making service connections. AWL will use the programme to plan site visits and witnessing of certain activities. In particular the programme should identify:

- Pre-construction meeting;
- Commencement of Mains laying on site;
- When mains laying will be taking place;
- When branch connections are planned to take place (as agreed with AWL if these are being undertaken by AWL);
- When hydraulic testing of the new mains will be taking place;
- When piece throughs will be taking place;

The programme of work is subject to the usual notifications and requests being made under separate cover and is not a substitute for these. Consents from AWL will also be notified separately

When undertaking work in the highway the party undertaking the work is to liaise with the relevant Highways Authority and other utilities and apply for any street works licences under their own name.

Appendix 1: Supplementary Information Available from AWL

The following documents are available from the AWL website (<https://www.affinitywater.co.uk>) for download in pdf format. It is the responsibility of the SLO to ensure that they are in possession of the latest revisions of all these documents, prior to the Self-Lay Agreement being in place. Use of superseded or unapproved versions of these documents may lead to a delay in the scheme progressing.

1. AWL Operational Standards and Preferences
2. National Model Self Lay Agreement with AWL Amendments
3. AWL Model Performance Bond
4. AWL Statutory Calculation Worked Example
5. AWL-Enq01SL* – SLO Initial Enquiry for Self Lay
6. AWL-App01SL – SLO Notification Form for Self Lay
7. AWL-App02SL* – SLO Application form for Self Lay
8. AWL-Req01SL – SLO Notification of Mains Laying Commencement
9. AWL-Req02SL – SLO Notification of Service Connections
10. AWL-Req03SL – SLO Request for Water Sampling for Bacteriological Testing
11. AWL-Req04SL – SLO Request for Meter Supply or Fitting
12. AWL-Req05SL – Completed Meter Installation Form
13. AM307 – Design of Distribution Mains and Services

*forms being drafted

Appendix 2: Estimated Asset Payment and Contestable Charges

The following is to be sent to the Developer or SLO to set out the basis of the estimated asset payment:

NC Number:												
Section 42 Model												
Total Scheme Costs:												
Total Number of Properties:												
Average Income per property (calculated from individual property type)												
Borrowing interest rate												
Inflation Rate												
Number of applicable years												
Annuity Factor												
Annual Capital Repayment												
Year*	1	2	3	4	5	6	7	8	9	10	11	12
Total No. Occupied Properties												

*Year 1 starts on the date the main is commissioned

Offers	Total	Security
Relevant Deficit		
Discounted Aggregate Deficit Sum		
Commercial Commuted Sum	Not offered	Not offered
Estimated Asset Value		

Contestable Charges			
Description	Unit Cost	Qty	Cost
Branch Connections to Existing Network			
Associated Infrastructure Costs (Off site Mains)			
On-site Mains			
Design			
Project Management			
Meters (for collection)			
Operational Support			
Grand Total			

Water Mains Diversions

Description	Cost
Grand Total	

Network Reinforcements

Description	Cost
Grand Total	