

Self Lay Developer Pack

Mains





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Contact Information

Your Liaison Engineer:

Contact Number:

Development Experience Helpdesk - 0345 357 2428

Monday to Thursday 8:30am - 5:00pm Friday 8:30am - 4:30pm

24-hour Emergency Service Operates outside of these hours – 0345 357 2407

(Calls may be monitored or recorded for training purposes)

DX Email – <u>dx@affinitywater.co.uk</u>
Affinity Water Website – <u>www.affinitywater.co.uk</u>
DX Customer Portal – <u>https://affinitywater.custhelp.com/</u>

<u>Developer Experience, Affinity Water, Tamblin Way, Hatfield, Hertfordshire,</u>
AL10 9EZ



Prestart Checklist

Date Pre-start Held:	
Offsite works are being carried out by:	SLP: Affinity Water:
Offsite Traffic Management Required:	
Mains Material: PE: Barrier:	
Private Road? If yes, please add owner's details be	elow:
Possible Collaboration details?	
Water needed on site by:	······
Has NJUG been discussed and understood? Yes:	No:
Has the test and Chlorination process been discuss	ed and understood?
Positioning of Boundary boxes been agreed? Pleas	se specify
Disconnections and TBS:	
Are any amendments required on the design? Min	or Change: Major Change:
Will there be any hazards on site? Substations, Oil p	pipelines, high pressure gas mains
Etc?	
Service call off and REQ05 timescales been discuss	sed and understood? Yes: No:
Defects and Damage of apparatus discussed and	understood? Yes: No:
Any other comments/ Issues to be noted:	
Signed by	
Developer:	Contact no:
SLP:	Contact no:
Liaison Engineer:	Contact no:



NJUG / Line and Levels understanding and acknowledgement with Affinity Water

I agree that I am responsible for providing the correct line and level before any main $\$ laying is started on site.

I also understand that should a change to line or level from the original agreement be required, I first need to gain approval from the relevant <u>Affinity Water Liaison</u>

<u>Engineer</u> responsible for the scheme. A site meeting, online meeting and documentation might be required, and then reviewed before a final assessment is made.

All Mains must be laid in accordance with Affinity Water trench specification document, in accordance with NJUG requirements and in public ground, i.e., footway or carriage way.

All Boundary boxes for meters must be placed in the public footway or carriage way. They must not be placed in private land.

I am aware that I will be subject to additional costs if the above process is not followed and/or line and level is changed once main laying has commenced.

If there is reasonable evidence the NJUG guidelines are not followed Affinity Waters stakeholder may request that trial holes for investigations and/or the mains and services are excavated and installed again at the <u>developer's time and costs</u>. The site mains might be <u>disconnected</u> from the Affinity Network at this time

<u>Please confirm you have read and fully understand the NJUG and Affinity Water Guidelines:</u>

Developer / Groundworker	Scheme Name & DS Number:				
Name:					
Company Position:	Electricity Depth EHV 750mm—1200mm / HV 600mm—750mm/LV 450mm—600mm.				
Sign:	Cable TV/Communications Depth 250mm—350mm Broundary Oas Depth 600mm, Water Depth 750mm—900mm,				
Date:	Telecommunications Depth-				
Self Lay Provider					
Name:	Note: This diagram is not to scale.				
Company Position:	450 295 276 270 260 430				
Sign:	Emoder I				
Date:	450 295 296 270 260 430				



Designs

In order for us to provide you with a cost advice and / or fixed charge for your development, we will need to prepare a design.

Table 8.3: Design Fees								
	Item	Unit	£ excluding VAT					
Ref			Design Fee	Minor Design Change	Major Design Change			
8.3.1	0-49 properties	per scheme	851	0	426			
8.3.2	50-99 properties	per scheme	1,080	0	540			
8.3.3	100+ Properties	per scheme	1,293	0	647			
8.3.4	Review design prepared by developer or SLP. The first submitted design will be reviewed free of charge. Should we require any changes to be made at this point, we will also complete the first review of the amended design free of charge.	per scheme	Free of Charge for the first design submission and first amended design if required.					

Re-designs

We understand that your requirements may change after we issue a design and cost advice to you. If we have prepared the design(s) for your development and you inform us of a change in your requirements for the development, we may need to issue you with a revised design and there may be a charge for this, depending on whether it is a minor change or major change. This is defined here:

Minor Design Change:

- A change to site boundary: or
- A change to the size of the water main; or
- Adding, removing or changing the location of the communication pipes

Major Design Change:

- A change to the route or layout of the water mains on site; or
- A change to the point of connection of new water mains to the existing network; or
- A change to the overall water demand of the site; or
- Changing the phasing plan

Useful Information:

Charging Arrangements for New Connection Services 2022/23: New-Connection-Charging-Arrangements-22-23.pdf (affinitywater.co.uk)



CDM (Construction Design and Management)

Construction Design & Management (CDM) Regulations 2015

Under the CDM Regulations 2015 the developer has responsibilities for the new mains construction on site, which includes:

- The selection and appointment of a competent CDM co-ordinator
- The selection and appointment of a competent principle contractor
- The provision of a suitable construction phase plan prior to commencement
- The provision of suitable welfare facilities

Please see the links below for more information:

CDM Regulations 2015:

https://www.hse.gov.uk/construction/cdm/2015/index.htm

Affinity Water Design Construction Specification:

https://www.affinitywater.co.uk/docs/developer/2021/DCS-V4.0-Affinity-Water.pdf



Source Of Water

Once your Water Adoption Agreement has been signed by all parties, Non-contestable fees have been paid and your scheme is ready to go into construction, We will arrange a Pre-Start Meeting to discuss the installation of your source of water.

If Affinity Water are to provide the Source of Water, once you submit notification that your site is ready we will hand over to our contractors to plan in, they have 28 days to deliver the Source of Water once an instruction has been received. (If a road closure is required, then please allow 3 months). Once the Source of Water is installed and all samples have been signed off by our Water Quality team, this supply can then be used for your on site mains commissioning.

If the Self Lay Provider has been given permission from Affinity Water to carry out the Source of water, Advance notice of intended connection dates must be provided, thus allowing us to carry out any contingency works required. You may be asked to have contingency fittings on site whilst the source of water is being completed in case of emergencies.

Inline Connections - It is the responsibility of the SLP to carry out all the inline (back to back) connections for the site, including from the Source of water into site, once the commissioning documents and the CRMC form have been signed off by your Liaison Engineer. Inline connections, Service connections, Mains connection and UPT's etc.



Turnover - Once onsite mains have gone live, it is the responsibility of the Site/SLP to keep these mains turned over via services, Ring mains and Temporary Building Supplies. We will **NOT** accept flushing programs due to the environmental/existing customer impact this will have to the Affinity Water Area. We will not allow extensive amount of mains to go live if we are not confident with the turnover proposals. In these cases, connections will not be allowed to go ahead until a time where the turnover on a main will be enough to keep the quality of the water in these mains to a high standard. Water Quality and the safety of our customers is of the upmost importance to us at Affinity Water.

Test and Chlorination Process

For each section of mains and bulk supply or supply that's 63mm and over that is laid and commissioned the SLP will need to submit the below:



- Pressure Test Certificate (1 minute loading time minimum
- Chlorination / Swabbing Report
- As-laid
- UKAS accredited sample results showing all 7
 parameters (Below) within the 14-day expiry period
 (Mains) and 30 days for Service
- CRMC form (blank version attached)
- Onsite results (below)

They will need to submit this information and give our WQ team **2 working days** to check the samples then sign and return the CRMC once passed. We would recommend that your commissioning teams have a turbidity meter onsite when they are taking the samples to make sure they can get the reading under **1NTU** before they take the samples to save wasted time/money. In addition, they will also need Chlorine meters to take the onsite readings.

- Mains samples have a validity of 14 days from the date the sample was taken.
- Service & Bulk supply samples have a validity period of 30 days from the date the sample was taken.
- All samples and submission documents need to have a source of water sample included with the same testing parameters followed for comparison purposes.
- All mains should be pressure tested to a maximum of 10bar following the IGN-4-01-03
 guidance and tests need to be checked and signed off by a qualified independent person. This
 cannot be the same person who carried out the physical test.
- All mains should be swabbed as many times as necessary until the swap expelled is clean.
- When chlorinating a new section of main please refer to our NW033 guidance.



If samples are not submitted for sign off within the validity period, you will need to reflush and sample these mains and in some cases re-commission.

Samples must be analysed for the following parameters:

<u>LABORATORY</u> <u>ON-SITE BY SAMPLER/CHLORINATOR</u>

Total Coliforms Odour

E. Coli Taste

2 Day Plate Count 37 deg C Free Chlorine

3 Day Plate Count 22 deg C Total Chlorine

Turbidity Appearance

pН

Electrical Conductivity

On site tests should be conducted by a competent person using calibrated equipment, and on-site results should be recorded on the laboratory issued test certificate or the disinfection certificate issued by the commissioning agent. All samples should have commenced lab analysis within 24 hours of the sample being taken from our network.

Laboratory tests must be carried out by a UKAS Accredited laboratory to a UKAS Accredited method. Results must be presented on a laboratory issued test certificate.

Post Connection Samples

Once the commissioning samples have been assessed and passed by our Water Quality Team, the piece through/final connection will need to be completed within the 14-day sample validity period. The post connection samples can then be taken from each available washout/fire hydrant on the new main and we require the full testing parameters listed above. No service connection on the new section of mains can be carried out until the post connection samples have passed. Affinity Water can carry these out for you if booked in advance but please be advised our teams are subject to emergencies and we cannot guarantee a sample date. We would recommend that you take your own post connection/depress samples to enable you to be in full control of your programme dates.





Site Walk Off

Throughout the development Affinity Water will visit site to check and confirm everything is correct as per the drawings, we will check the depths and asset positions are correct to the construction drawings and not altered without consent from Affinity Water. The final walk off will be upon completion of the site. We will then look for the following to be correct:

- All valves easily located, uncovered and accessible with the correct frame and covers labelled SV. Post and plated if access/ position is difficult.
- All Washouts/ Fire Hydrants clearly marked up (may need marker posts), accessible, useable and at the correct depth with correct covers (WO/FH).
- All boundary boxes correctly located, accessible and level/centred. These must be WRAS approved.
- Bulk stop taps for flat blocks are accessible and rising mains accessible with FB2 key access.
- •Internal meter cupboard access with FB2 key, all meters clearly labelled with correct door numbers. These to include stop tap and NRV on the supply for each individual flat.
- We will check for any visible damage or leaks on the pipework any damage found will be noted for the developer to rectify before signing off.



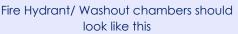






Sluice Valve chambers should look like this -Valve central and chamber clear









This is not acceptable for a boundary box.





Sluice Valves need to be clear and accessible





Fire Hydrants/ Washouts need to be clear and level







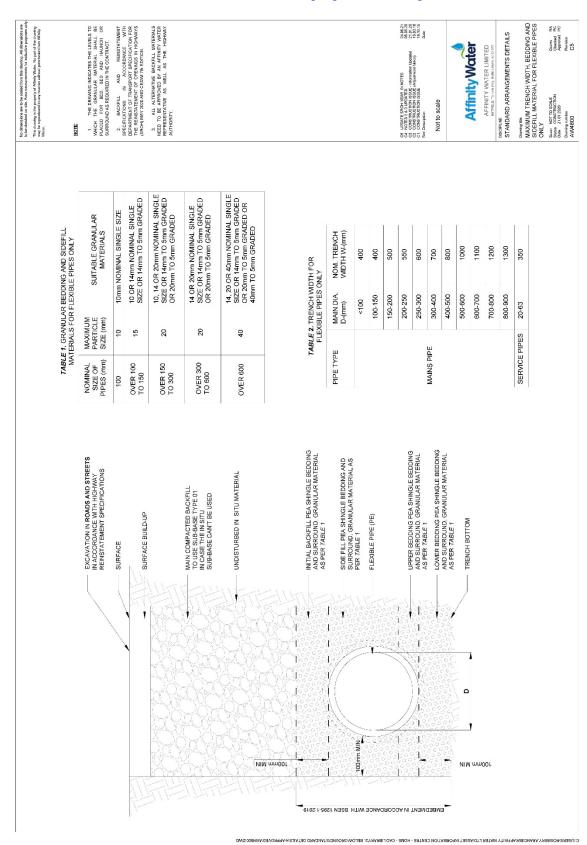
Vesting Certificate and Adoption

Any mains laid and connection to our network will have a vesting certificate issued within 5 days. Each leg connected to our network has vesting certificate.

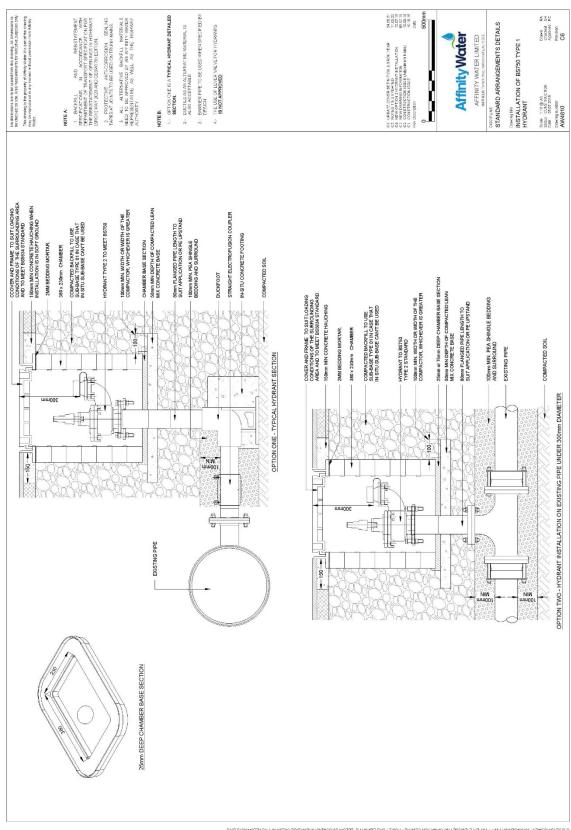
The development is fully walked off, once reinstatement is completed. These mains are then adopted by Affinity Water.

Once the works are completed, a final vesting certificate is issued to you. This is a certificate to show Affinity Water's adoption of the self laid mains. It states that any defects found on such self laid mains, will be liable for repair by the developer within 12 months of the sign off.

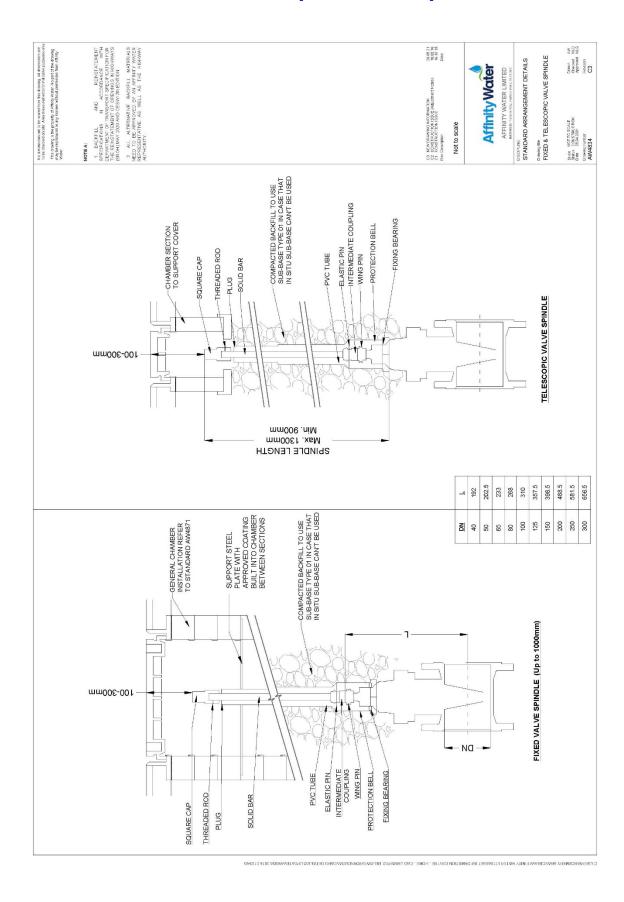
AW4800 - Maximum Trench width, Bedding and Sidefill Material for Flexible pipes only



AW4810 - Installation of BS750 Type Hydrant / **Washout**

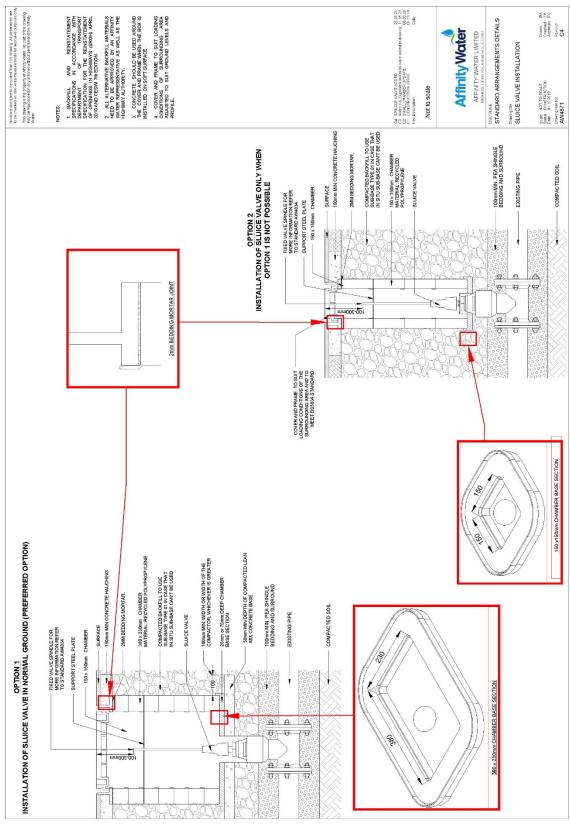


AW4834 - Fixed & Telescopic Valve Spindle





AW4871 - Sluice Valve Installation



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