## Charging for New Appointments and Variations 2018/19

### **Affinity Water Limited**

### INTRODUCTION

- 1. This document is published by Affinity Water to provide information to existing and prospective **NAVs** about the charges **we** will make in respect of:
  - site specific water mains and other infrastructure work required to connect into our water system to facilitate the provision of a bulk supply of water by us to the NAV; and
  - bulk water supplied by **us** to the **NAV**.
- 2. It applies to bulk water supplies from **us** to a **NAV**. It does not apply to bulk supplies between **us** and other incumbent water undertakers.
- 3. **Our** charges for new connections for bulk supplies to **NAVs** are set in accordance with Ofwat's New Connection Charges rules.
- 4. **Our** charges for bulk water supply are set in line with Ofwat's guidance as set out in *'Bulk charges for NAVs: final guidance'* published on 8 May 2018.
- 5. **We** will review and publish this document on 1<sup>st</sup> April each year.

## OUR WATER SUPPLY AREA

6. **Our** water supply area is defined in **our instrument of appointment** and comprises three discrete regions in the southeast of England shown on the map below.



7. **Our** charges in respect of **site specific water mains** and other infrastructure required to connect into **our** water system to facilitate a bulk supply are the same across the three regions, but charges for bulk water supplied differ according to the region in which the supply is made. This is because **our** bulk water supply charges have as their starting point, **our** published wholesale charges which differ across the three regions.

## DEFINITIONS

Term	Meaning		
1991 Act	The Water Industry Act 1991 (as amended).		
communication pipe	Any part of a <b>service pipe</b> which an		
	undertaker could be, or has been, required		
	to lay under section 46 of the <b>1991 Act.</b>		
development	Premises on which there are buildings, or		
	on which there will be buildings when		
	proposals made by any person for the		

	erection of any buildings are carried out,
	and which require connection with, and/or
	modification of, existing water infrastructure.
income offset	A sum of money offset against the charges
	that would otherwise be applied for the
	provision of a water main in recognition of
	revenue likely to be received by <b>us</b> in future
	years for the provision of supplies of water
	to premises connected to the new water
	main and income offsetting shall be
	construed accordingly.
instrument of appointment	The written instrument (as varied from time
	to time) appointing Affinity Water as the
	water undertaker for the areas described
	and subject to the conditions set out in the
	instrument, under what is now section 6 of
	the <b>1991 Act.</b>
NAV	A water company that (either directly or
	indirectly) has replaced, or will replace, one
	or more incumbent water companies in
	relation to specific sites and for whom
	Ofwat does not currently set individual price
	controls that obtains a bulk supply of water
	from <b>us</b> .
network reinforcement	Work other than <b>site specific</b> work, to
	provide or modify such other water mains
	and such tanks, service reservoirs and
	pumping stations as is necessary in
	consequence of the site specific
	installation or connection of water mains
	and <b>service pipes</b> pursuant to a duty
	imposed on <b>us</b> by the <b>1991 Act.</b> It also
	includes the additional capacity in any
	earlier water main that falls to be used in
	consequence of the provision of connection
	of a new main.

service pipe	So much of a pipe which is, or is to be,
	connected with a water main for supplying
	water from that main to any premises as:
	(a) Is or is to be subject to water
	pressure from that main; or
	(b) Would be so subject but for the
	closing of some valve, and
	includes part of any <b>service pipe</b> .
site specific	Work on, or the provision of, water
	structures or facilities located on a
	development as well as work to provide
	and connect a requested water main or
	communication pipe on, to or in the
	immediate vicinity of, the <b>development</b> and
	"site specific work" shall be construed
	accordingly. It does not refer to costs or
	work required as part of <b>network</b>
	reinforcement as defined above.
undertaker	A water undertaker
undertaker	A water undertaker.
water main	Any pipe, not being a pipe for the time
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> ,
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier)
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water supply licensee, as distinct from for the
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water supply licensee, as distinct from for the purpose of providing a supply to particular
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water supply licensee, as distinct from for the purpose of providing a supply to particular customers. This definition includes tunnels
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water supply licensee, as distinct from for the purpose of providing a supply to particular customers. This definition includes tunnels or conduits which serve as a pipe and any
water main	Any pipe, not being a pipe for the time being vested in a person other than <b>us</b> , which is used or to be used by the <b>undertaker</b> (or a licensed water supplier) for the purpose of making a general supply of water available to customers or potential customers of the <b>undertaker</b> or water supply licensee, as distinct from for the purpose of providing a supply to particular customers. This definition includes tunnels or conduits which serve as a pipe and any accessories for the pipe.

#### SITE SPECIFIC CHARGES

- 8. This section sets out our charges in respect of site specific water mains and other site specific infrastructure required to connect into our water supply system to facilitate the provision of a bulk supply of water by us and details of our income offset.
- 9. Site specific charges relate to work to take water from **our** existing **water mains** to the point of connection to the **NAV**'s infrastructure, typically at the **NAV** site boundary.
- 10. It is **our** expectation that **site specific** charges will be included in any bulk supply agreement **we** enter into with a **NAV**.

### **APPLICATION FEES**

11. When a **NAV** requests **us** to carry out **site specific work** to facilitate a bulk supply, it must pay **us** a mains application fee as set out in the table.

Mains application fee	Unit	£ excluding
		VAT
Application fee for Mains (with an existing pre-development	per	375
report)	application	
Application fee for Mains (no pre-development report)	per	750
	application	

- 12. The application fee is different depending on whether or not a **NAV** has previously submitted a pre-development enquiry to **us**. This recognises that there are certain tasks (hydraulic study and producing a report) which **we** have already carried out and will be able to use in processing the application from the **NAV**.
- 13. The application fee covers the costs we incur to review and acknowledge the NAV's request, checking to ensure we have all the relevant information, preparing a quotation and/or estimated charges for the works and issuing a response. The application does not cover the cost of design work (see below).
- 14. The application fee is payable at the time the **NAV** makes the request. **We** will start work on the request when **we** have received the application fee.

## **DESIGN FEES**

- 13. To provide a quotation and/or estimated charge for the site specific water main and other infrastructure to facilitate a bulk supply, we will need to prepare a design of the infrastructure needed to take water from our existing mains to the point of connection to the NAV's infrastructure. If we need to make a visit to the site to carry out a survey, this is included in the mains design fee.
- 14. When a **NAV** requests **us** to provide a bulk supply, it must pay **us** a mains design fee set out in the table.

Mains design fee	Unit	£ excluding
		VAT
0-50 properties	per scheme	750
51-100 properties	per scheme	900
101-200 properties	per scheme	1,050
Increment for each additional 100	per increment of 100	150
properties above 200	properties	

- 15. The mains design fee is payable at the time the **NAV** requests a connection.
- 16. Where **we** have prepared a design, but the **NAV** subsequently changes the requirements, **we** will need to prepare and issue a new design. There will be a charge for re-design, and the amount will depend on whether the change is a minor or major change.
- 17. **Our** charge for minor change is 25% of the mains design fee. **Our** charge for a major change is 80% of the mains design fee.
- 18. Minor changes are:
  - A change to the site boundary
  - A change to the size of the water main

19. Major changes are:

• A change to the point of connection of the new water mains

- A change to the overall water demand of the site
- Splitting the scheme into phases or changing the phasing plan
- 20. Re-design fees are payable at the time the **NAV** notifies **us** of the change in its requirements.

### **ADMINISTRATION FEES**

21. When a **NAV** requests **us** to provide a bulk supply, it must pay **us** a mains administration fee, comprised of a fixed and variable element as in the table. The variable element relates to the length of mains required to take water from **our** existing main to the point of connection to the **NAV**'s infrastructure. It does not include the length of mains beyond the point of connection that the **NAV** is responsible for.

Mains Administration Fee	Unit	£ excluding VAT
Mains Administration Fee (fixed element)	per scheme	550
Mains Administration Fee (variable element)	Per linear metre	36

## CHARGES FOR LAYING MAINS

22. **Our** charges for laying mains between **our** existing water network and the point of connection to the **NAV**'s infrastructure depend upon:

• the diameter and length of mains required

- the number and arrangement of fittings required to meet **our** design standards
- the type of ground in which the water main is laid
- whether the soil is, or may be contaminated
- whether exceptional traffic management is required to enable the work to be undertaken safely or where other exceptional circumstances apply.
- 23. We will lay MDPE or HPPE pipes in ground where the **NAV** provides **us** with a soil report form a suitably qualified organisation which confirms that the ground where **our water mains** are to be laid is not likely to cause a risk of contamination of water in **our water main**. Otherwise **we** will lay barrier pipe.

- 24. **Our** charges include costs for traffic management based on historical data and estimates of future requirements within those rates where works are to be carried out in the highway. **We** have not included amounts for exceptional traffic management.
- 25. As mains laying work for the purposes of making a bulk supply is typically noncontestable work in the highway, carried out under **our** statutory mains laying powers, there are no charges corresponding to a no excavation / no reinstatement option

		£ excluding VAT				
		Highway	Paved	Unmade	No	Barrier
		(Road)	surface	Ground	excavation /	Pipe
			(Footpath)	(Verge)	no	Uplift
					reinstatement	
					by AWL	
	Per					
100mm)	linear	295	200	95	NA	15
	metre					
	Per					
130mm)	linear	300	200	105	NA	20
	metre					
	Per					
190mm)	linear	375	255	125	NA	25
roomin	metre					
Lav nine (191-	Per					
260mm)	linear	445	300	185	NA	30
2001111)	metre					
Lav nine (261-	Per					
320mm)	linear	560	380	245	NA	35
	metre					

# CHARGES FOR INSTALLING ACCESSORIES FOR WATER MAINS

26. The next tables set out **our** charges for installing the accessories, such as valves, fire hydrants and meters. The rates are applicable to MDPE, HPPE and barrier pipes. As this is typically non-contestable work in the highway, carried out under **our** statutory mains laying powers, there are no charges corresponding to a no excavation / no reinstatement option.

		Highway	Paved	Unmade
		(Road)	surface	Ground
			(Footpath)	(Verge)
Air Valve (100-190mm pipe,	Per	1 200	1 0 1 0	850
single 25mm air valve)	accessory	1,200	1,010	000
Air Valve (191-320mm pipe,	Per	2 020	1 925	1 885
single/double 80mm air valve)	accessory	2,020	1,020	1,000
Sluice Valve (50-190mm pipe)	Per	695	695	695
· · · · · ·	accessory			
Sluice Valve (191-320mm	Per	960	960	960
pipe)	accessory			
Non-return Valve (50-130mm	Per	720	720	720
pipe)	accessory			
Non-return Valve (131-190mm	Per	885	885	885
pipe)	accessory			
Non-return valve (191-260mm	Per	1,400	1,400	1,400
	accessory			
Non-return valve (261-320mm	Per	2,015	2,015	2,015
DIDE	accessory			
P-P-)	,	Highway	Bayed	Unmado
		Highway (Road)	Paved	Unmade
		Highway (Road)	Paved surface (Footpath)	Unmade Ground (Verge)
Fire hydrant or Wash Out (in	Per	Highway (Road)	Paved surface (Footpath)	Unmade Ground (Verge)
Fire hydrant or Wash Out (in line, 50-190mm pipe)	Per	Highway (Road) 975	Paved surface (Footpath) 905	Unmade Ground (Verge) 835
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in	Per accessory Per	Highway (Road) 975	Paved surface (Footpath) 905	Unmade Ground (Verge) 835
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe)	Per accessory Per accessory	Highway (Road) 975 1,345	Paved surface (Footpath) 905 1,315	Unmade Ground (Verge) 835 1,305
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End	Per accessory Per accessory Per	Highway (Road) 975 1,345	Paved surface (Footpath) 905 1,315	Unmade Ground (Verge) 835 1,305
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe)	Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855	Paved surface (Footpath) 905 1,315 785	Unmade Ground (Verge) 835 1,305 715
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End	Per accessory Per accessory Per accessory Per	Highway (Road) 975 1,345 855	Paved surface (Footpath) 905 1,315 785	Unmade Ground (Verge) 835 1,305 715
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe)	Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030	Paved   surface   (Footpath)   905   1,315   785   990	Unmade Ground (Verge) 835 1,305 715 985
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End	Per accessory Per accessory Per accessory Per accessory Per	Highway (Road) 975 1,345 855 1030 425	Paved surface (Footpath) 905 1,315 785 990	Unmade Ground (Verge) 835 1,305 715 985 425
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End type 50-190mm pipe)	Per accessory Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030 425	Paved   surface   (Footpath)   905   1,315   785   990   425	Unmade   Ground   (Verge)   835   1,305   715   985   425
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End type 50-190mm pipe) Temporary Fire Hydrant (End	Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030 425 665	Paved surface (Footpath) 905 1,315 785 990 425 665	Unmade Ground (Verge) 835 1,305 715 985 425 665
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End type 50-190mm pipe) Temporary Fire Hydrant (End type 191-320mm pipe)	Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030 425 665	Paved   surface   (Footpath)   905   1,315   785   990   425   665	Unmade Ground (Verge) 835 1,305 715 985 425 665
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End type 191-320mm pipe) Temporary Fire Hydrant (End type 191-320mm pipe)	Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030 425 665	Paved   surface   (Footpath)   905   1,315   785   990   425   665	Unmade Ground (Verge) 835 1,305 715 985 425 665
Fire hydrant or Wash Out (in line, 50-190mm pipe) Fire hydrant or Wash Out (in line, 191-320mm pipe) Fire hydrant or Wash Out (End type, 50-190mm pipe) Fire hydrant or Wash Out (End type, 191-320mm pipe) Temporary Fire Hydrant (End type 50-190mm pipe) Temporary Fire Hydrant (End type 191-320mm pipe) Temporary Fire Hydrant Removal and piece through	Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory Per accessory	Highway (Road) 975 1,345 855 1030 425 665 2,280	Paved   surface   (Footpath)   905   1,315   785   990   425   665   1,665	Unmade Ground (Verge) 8335 1,305 715 985 425 665 1,185

Temporary Fire Hydrant	Per			
Removal and piece through	accessory	2,885	2,230	1,710
(End type, 191-320mm pipe)				
		Highway	Paved	Unmade
		(Road)	surface	Ground
			(Footpath)	(Verge)
Install in-line meters 80mm	Per	1 595	1 535	1 230
Network Mains	accessory	1,595	1,000	1,230
Install in-line meters 100mm	Per	1 740	1 680	1 340
Network Mains	accessory	1,740	1,000	1,040
Install in-line meters 150mm	Per	2,010	1 035	1 530
Network Mains	accessory	2,010	1,900	1,550
Install in-line meters 200mm	Per	2 310	2 250	1 960
Network Mains	accessory	2,010	2,230	1,300
Install in-line meters 250mm	Per	2 720	2 650	2 325
Network Mains	accessory	2,720	2,000	2,320

# CHARGES FOR CONNECTING WATER MAINS INTO SUPPLY SYSTEM

27. The table below sets out **our** charges for connecting the mains **we** have constructed between **our** existing water network and the point of connection to the **NAV**'s infrastructure, to **our** existing water supply system.

		Highway (Road)	Paved surface (Footpat h)	Unmade Ground (Verge)
Under Pressure Connection/ Branch Connection (50- 190mm diameter pipe)	Per connection	1,430	1,380	1,280
Under Pressure Connection/ Branch Connection (191- 260mm diameter pipe)	Per connection	1,845	1,795	1,695
Under Pressure Connection/ Branch Connection (261- 320mm diameter pipe)	Per connection	2,210	2,160	2,060

## **EXCEPTIONAL CIRCUMSTANCES**

- 28. Where exceptional circumstances apply, the **site specific** charges set out in the tables do not apply for:
  - Laying mains
  - Accessories for water mains
  - Connecting water mains to the supply system

29. Exceptional circumstances mean:

- The technical complexity of the work is high, or the type of work required is bespoke or carried out infrequently
- Third parties can legitimately recover their costs from **us** and there is not a reasonable level of certainty of those costs in advance of new connection for bulk supply work being undertaken
- Third parties have rights to protect their assets or interests in a way that affects the construction method or timing (including protected undertakings) and the third parties' requirements are unknown upfront
- The work is to be carried out on or close to land with particular environmental, historical or archaeological characteristics. These characteristics mean that specific measures are required during construction or reinstatement. The details of these measures may not be fully defined in advance of construction; or
- There is a need for exceptional traffic management being traffic management other than signing, lighting and guarding, automatic temporary traffic control (inclusive of 2-way, 3 way and 4-way traffic control and bus stop and parking suspensions.

30. Where exceptional circumstances apply **our site specific** charges will comprise:

• The fixed charges set out in the tables for the elements of work where there is sufficient certainty and it is reasonable to do so.

- Charges calculated based on actual costs **we** incur in respect of the other elements of work.
- 31. Wherever possible **we** will provide advice setting out **our** estimated charges for exceptional elements of work and for the non-exceptional elements of work, the applicable fixed charges set out in the schedules.
- 32. There may be occasions where providing an estimate is not possible or where the estimate does not meet the degree of confidence the **NAV** requires. In such cases **we** will work with the **NAV** cooperatively to decide how best to proceed.

### **INCOME OFFSETS**

- 32. For new connections work carried out for bulk supplies to NAVs where bulk supply agreements are struck between 1st April 2018 and 31st March 2020 we will apply a 90% income offset against site specific charges, other than application fees, mains administration fees, mains design fees and third party costs.
- 33. We do not provide income offset against connection charges.
- 34. In many cases, application of this **income offset** arrangement will result in **us** making a payment to the **NAV**. This payment is calculated in the same way as, and will be equal in value to the asset payment that would be made in the case of self laid infrastructure.
- 35. It will be necessary for the **NAV** to provide information to **us** about the infrastructure it is responsible for. **We** cannot complete **income offset** calculations without this information.
- 36. The table below shows a worked example of how the **income offset** arrangement would apply.

Income offset Payment for NAV	Charges not	Charges
	qualifying	qualifying for
	for income	income offset
	offset	
Application fee	750	
Design fee	750	
Mains administration fee	910	
Site specific charges applicable for mains laying,		5,000
accessories and connecting water mains for the mains		
needed to bring water from <b>our</b> existing mains to the		
point of connection to the <b>NAV</b> 's infrastructure		
Site specific charges that would have been applicable		15,000
for mains laying, accessories and connecting water		
mains had we provided the infrastructure that is instead		
provided by the <b>NAV</b>		
Income offset amount, equal to 90% of qualifying		18,000
charges		
Charges recoverable from <b>NAV</b>	2,410	5,000
Income offset amount		18,000
Charges payable by <b>us</b> , to <b>NAV</b>		10,590

- 37. If we have made an income offset payment to a NAV in the period 2018-2020, against site specific charges, we will not make further income offset payments against any infrastructure charges payable after 2020 on the same development. This prevents a NAV receiving the income offset twice, which could otherwise occur if mains were constructed prior to 2020, but properties did not become occupied until after 2020.
- 38. Between 1<sup>st</sup> April 2018 and 31<sup>st</sup> March 2020, **we** will make **income offset** payments that are due by including them in the terms of bulk supply agreements. They will be separately identifiable items within the agreement. **We** will not make the payments through adjustments to bulk supply tariffs, or otherwise aggregate them with any other charges that may be due. The payment will become due according to the timings agreed in the bulk supply agreement.

#### **INFRASTRUCTURE CHARGES**

- 39. Infrastructure charges recover contributions towards network reinforcement costs that we incur when additional demands are placed on our network by new connections. Infrastructure charges do not relate to the costs of reinforcing, upgrading or otherwise developing existing infrastructure to address pre-existing deficiencies in capability or capacity.
- 40. Infrastructure charges are payable for the connection (whether directly or indirectly) of any premises (not previously connected to a supply of water, provided by **us** or another water **undertaker**) using water for domestic purposes, to **our** existing network or mains. This will include cases where a site is being developed, or redeveloped by means of conversion or extension of an existing building or buildings, resulting in a significant increase in demand. The infrastructure charge is additional to any charges for **site specific** works, for example providing a **water main** to take water from **our** existing mains to the **NAV** site boundary.
- 41. We will recover infrastructure charges from the NAV. The infrastructure charges will be calculated in the same way as infrastructure charges payable by other new connection customers. Typically, for NAV developments the standard water infrastructure charge will apply.

		Excl
		VAT
		2018/19
Standard Water Infrastructure Charge	Per connection	£375

- 42. Different rules for infrastructure charges can apply in cases where there are properties with common billing agreements, premises with supply pipes greater than 25mm diameter and non-household premises.
- 43. In the case of houses subject to common billing agreements, the infrastructure charge for each house will be the standard infrastructure charge multiplied by the relevant multiplier (see below) for that house.

44. In the case of premises other than houses to which water is provided by a supply pipe above the standard size (25mm), the infrastructure charge for the premises will be the standard water infrastructure charge multiplied by the relevant multiplier for those premises

Water fitting <sup>(1)</sup>	Loading Units
WC flushing cistern	2.0
Wash basin in a house	1.5
Wash basin elsewhere	3.0
Bath (tap nominal size ¾ inch, 20mm) <sup>(2)</sup>	10.0
Bath (tap nominal size larger than 3/3 inch, 20mm <sup>(2)</sup>	22.0
Shower	3.0
Sink (tap nominal size 1.2 inch, 15mm)	3.0
Sink (tap nominal size larger than ½ inch 15mm)	5.0
Spray tap	0.5
Bidet	1.5
Domestic appliance (subject to a minimum of 6 loading	3.0
units per house) <sup>(3 and 4)</sup>	
Communal or commercial appliance <sup>(3)</sup>	10.0
Any other water fitting or outlet, including a tap but	3.0
excluding urinal or water softener)	

1. Reference to any fitting includes reference to any plumbing, outlet, dedicated space or planning or other provision for that fitting

- 2. Including a whirlpool or jacuzzi
- Domestic appliance means an appliance (including a dishwasher, a washing machine and waste disposal unit) in a house and communal or commercial appliance means and appliance (including a dishwasher, a washing machine and waste disposal unit) elsewhere than in a house (including communal facilities)
- 4. In calculating the relevant multiplier, a minimum of 6 loading units in respect of each house will be included for domestic appliances (whether or not the house has any such appliances) except, in the case of any house, where neither a washing machine nor a dishwasher can be provided (and there is no plumbing, outlet, dedicated space or planning or other provision for either appliance) in the house

- 45. To calculate the relevant multiplier for houses subject to a common billing agreement
  - a) Determine the aggregate loading units
  - b) Divide this number by 24
  - c) Divide the result by the number of houses subject to the common billing agreement
- 46. To calculate the relevant multiplier for premises other than houses to which water is provided by a supply pipe above the standard size (25mm)
  - a) Calculate the aggregate loading units
  - b) Divide this number by 24
- 47. Infrastructure charges are payable at the time when the physical connection to a **water main** is made.

## WATER SUPPLY CHARGES

48. We set our bulk supply tariffs to NAVs according to the following formula:

Relevant wholesale tariff – the	• 'starting point'
---------------------------------	--------------------

Minus

On-site ongoing costs

Minus

WACC on on-site assets

Equals

**Bulk Supply Charge** 

## **RELEVANT WHOLESALE TARIFF – THE STARTING POINT**

- 49. The relevant wholesale tariff is calculated by applying Affinity Water's wholesale charges to the aggregate customer base supplied by the **NAV** across all of its appointments that have bulk supplies provided by Affinity Water.
- 50. The fixed charge is the sum of all applicable fixed charges.
- 51. The volumetric charge is the weighted average volumetric charge taken by dividing the volumetric revenue that would be due across all units supplied, divided by the total volume.
- 52. The table lists the Affinity Water's wholesale tariffs for 2018/19 for the purposes of calculation of the starting point. These are the same charges as published in **our** Wholesale Charges Scheme. Appendix A provides a worked example of the derivation of the relevant wholesale tariff.

	Affinity Water
	Wholesale Tariff
	2018/19
Household Fixed Charge (£/year)	16.32
Non-Household Fixed Charge 12-15mm Meter (£/year)	17.40
Non-Household Fixed Charge 19-21mm Meter (£/year)	26.40
Non-Household Fixed Charge 25mm Meter (£/year)	28.44
Non-Household Fixed Charge 30mm Meter (£/year)	31.56
Non-Household Fixed Charge 38-40mm Meter (£/year)	33.48
Non-Household Fixed Charge 50mm Meter (£/year)	40.68
Non-Household Fixed Charge 65mm Meter (£/year)	73.08
Non-Household Fixed Charge 75-80mm Meter (£/year)	104.76
Non-Household Fixed Charge 100mm Meter (£/year)	104.76
Non-Household Fixed Charge 150mm Meter (£/year)	104.76
Non-Household Fixed Charge 200mm Meter (£/year)	104.76
Non-Household Large User Fixed Charge (Over 50MI) Central Area	15945.00
Non-Household Large User Fixed Charge (Over 100MI) East Area	29107.48
Non-Household Large User Fixed Charge (50MI - 100MI) East area	15877.48
Non-Household Mid User Fixed Charge (25 - 50MI) East Area	8412.48
Household Volumetric Charge Central Area	0.9540

Household Volumetric Charge East Area	1.6258
Household Volumetric Charge Southeast Area	1.7301
Non-Household Standard Volumetric Charge (0-3MI) Central Area	0.9650
Non-Household Mid User Volumetric Charge (3-50MI) Central Area	0.9102
Non-Household Large User Volumetric Charge (Over 50MI) Central area	0.5913
Non-Household Standard Volumetric Charge (0-5MI) East Area	1.6367
Non-Household Mid User Volumetric Charge (5-25MI) East Area	1.4583
Non-Household Mid User Volumetric Charge (25-50MI) East Area	1.1218
Non-Household Large User Volumetric Charge (50-100MI) East area	0.9725
Non-Household Large User Volumetric Charge (Over 100MI) East	
area	0.8402
Non-Household Standard Volumetric Charge (0-3Ml) Southeast Area	1.7408
Non-Household Mid User Volumetric Charge (3-50Ml) Southeast Area	1.6407
Non-Household Large User Volumetric Charge (Over 50MI) Southeast Area	1.2212

# **ON SITE ONGOING COSTS**

- 49. Our wholesale fixed charges per meter are set to reflect the per customers costs of providing and maintaining the customers' meter and local connection. In NAV developments, the NAV is typically responsible for providing and maintaining customer meters and local connections at customers' properties. As a result, the deduction for on-site ongoing costs for the fixed element of wholesale charges is 100%.
- 50. **Our** fixed charges are included in the starting point if the **NAV** has any customers supplied on these tariffs. **We** do not offer any deduction for on-site ongoing costs agaisnt these charges.
- 51. **We** recover **our** remaining wholesale costs through volumetric charges. **We** set the discount to the standard tariff for site ongoing costs at 5.75%.
- 52. There is no deduction on the volumetric rate available for on-site costs for mid-user and large use tariffs, e.g. for supplies greater than 3,000m3/year, or greater than 5,000m3/year in the East region. This is because these tariffs are already set at a

discount to the standard rate to reflect the differential use of network assets by mid and large customers. The volumetric rate is already lower than standard to reflect the avoided use of local network assets by mid and large user customers.

## WEIGHTED AVERAGE COST OF CAPITAL

- 53. **We** also deduct from the starting point, an adjustment for the regulatory return on capital on the on-site assets owned by the **NAV**.
- 54. **Our** approach is to derive the MEAV of the **NAV**'s on site assets (GMEAV of assets less accumulated depreciation charges) as a proportion of Affinity Water's Net MEAV of network plus assets. **We** multiply this by the average regulatory capital value (in outturn prices) attributable to network plus assets to obtain a valuation of RCV corresponding to the value of the **NAV**'s on site assets.
- 55. Multiplying the RCV valuation corresponding to the **NAV**'s assets by the WACC yields a total value of the cost of capital element, which can be divided by the expected volume supplied by the **NAV** to produce a £/m3 discount.
- 56. Affinity Water does not know the MEAV of the **NAV**'s on site assets, nor will it know what contributions were received by the **NAV** from developers, nor the depreciation charges made by a **NAV**. Therefore, it will need to obtain this information from the **NAV** to be able to price the WACC deduction.
- 57. The worked example below sets out the operation of this calculation

Weighted Average Cost of Capital Worked Example	£k
A. Net MEAV of On-site assets owned by the <b>NAV</b> (net of	525
accumulated depreciation) – (information provided by <b>NAV</b> )	
B. Net MEAV of Affinity Water Network Plus Assets	9,010,000
C. Average Regulatory Capital Value allocated to network plus	1,010,150
D. Calculation = A/B * C	58.860
E. Return on Capital = D x WACC (3.7%)	2.178
F. Total volume supplied (m3/year) (information provided by	105,000
NAV)	
Deduction to volume rate for return on capital on on-site assets = E/F	£0.0207/m3

APPENDIX A - Worked Example of Starting Point and Derivation of Bulk S	Supply Char	ge					
	A Charge	B Mfinity Water Wholesale Tariff	ບ .	D Deduction for on-site ongoing	E Deduction for WACC	F Revenue	
	multiplier	2018/19	=A X B	costs			
FIXED CHARGES PET INCENTION CHARGE Household fixed charge (£/vear)	5.000	16.32	81.600.00	-81.600.00		0.00	
Non-Household Fixed Charge 12-15mm Meter (£/year)		17.40				0.00	
Non-Household Fixed Charge 19-21mm Meter (£/year)	•	26.40				0.00	
Non-Household Fixed Charge 25mm Meter (£/year)	-	28.44		-		0.00	
Non-Household Fixed Charge 30mm Meter (£/year)		31.56	'			0.00	
Non-Household Fixed Charge 38-40mm Meter (£/year)		33.48	-			0.00	
Non-Household Fixed Charge 50mm Meter (£/year)	2	40.68	81.36	-81.36		0.00	
Non-Household Fixed Charge 65mm Meter (£/year)		73.08				0.00	
Non-Household Fixed Charge 75-80mm Meter (£1year)		104.76	1			0.00	
Non-Household Fixed Charge TUUMM Meter (£/year)	· (	104.76	- 000	- 55		0.00	
Non-Household Fixed Charge 150mm Neter (±/year)	7	104.76	20.602	ZG:60Z-		0.00	
Non-Household Fixed Charge 200mm Meter (±/year)		104.76	-			0.00	
UI HEK FIXED CHAKGES	•	4E04E 00	45.045.00			15 045 00	
Non-Household Large User Fixed Charge (Over 50MI) Central Area	-	15945.00	15,945.00			15,945.00	
Non-Household Large User Fixed Charge (Over 100MI) East Area		29107.48	45 077 40			0.00	
Non-Household Large User Fixed Charge (50M - 100Ml) East area	-	84.778GL	19,8//.48			15,877.48	
INDR-FROUSERIOID MID USER FIXED CHARGE (20 - DUMI) EAST AFED	•	0412.40				00.0	
Total number of fixed charges	5 006						
Total revenue from fixed charges	2000		113 713 36	-81 890 88	0.00	31 822 48	
				0000000	0000		
		Starting P	Doint (Fixed		Bulk Sun	Iv (Fixed	
		Charges)			Charges)		
	×	8	o	٥	ш	ш	
	Charge /	Affinity Water Wholesale Tariff		Deduction for on-site ongiing	Deduction for WACC	Revenue	
	multiplier	2018/19	=A X B	costs			
VOLUMETRIC CHARGES per m3 supplied	000000	0.0140	000 000 000	40.450.50	705 75	000 047 7F	
Household Volumetric Charge Central Area	300,000	0.9540	286,200.00	-16,456.50	6//G6/-	208,947.75	
Household Volumetric Charge East Alea Household Volumetric Charge Southeast Area	131 250	1.0230	777 075 63	-10,010.09 13 056 85	-230.41	213 670 63	
Non-Household Standard Volumetric Charge (0-3MI) Central Area		0 9650	-		E-040-	0.00	
Non-Household Mid Liser Volumetric Charge (2-50MI) Central Area	5 000	0.9102	4 551 00	000	-13.26	4.537.74	
Non-Household Large Liser Volumetric Charge (Over 50MI) Central area	75 000	0.5913	44 347 50	000	-198.94	44 148 56	
Non-Household Standard Volumetric Charge (0-5MI) East Area	-	1.6367	-	2255		0.00	
Non-Household Mid User Volumetric Charae (5-25MI) East Area		1.4583				0.00	
Non-Household Mid User Volumetric Charge (25-50MI) East Area		1.1218				0.00	
Non-Household Large User Volumetric Charge (50-100MI) East area	75,000	0.9725	72,937.50	0.00	-198.94	72,738.56	
Non-Household Large User Volumetric Charge (Over 100MI) East area		0.8402				0.00	
Non-Household Standard Volumetric Charge (0-3MI) Southeast Area		1.7408				0.00	
Non-Household Mid User Volumetric Charge (3-50MI) Southeast Area	5,000	1.6407	8,203.50	0.00	-13.26	8,190.24	
Non-Household Large User Volumetric Charge (Over 50MI) Southeast Area		1.2212				0.00	
			00 210 000	10 000 01	00001	000000	
Total Volumetric Revenue	703 750		820,217.03	-40,030.24	-1,800.70	184,320.08	
	NC/'SU/						
Volumetric Charge = Total Volumetric Revenue divided by Total Volume			1.1740	-0.0569	-0.0027	1.1145	
			ľ				
	ż	Starting Poir	nt (Volumetric		Bulk Supply Volu	metric	
A Not MENV of On alta accets accord by the NNV / act of accetation figures and	ŁK	Clarges			Cnarge		
A Net MEAV of On-site assets owned by the NAV (net of contributions and accumulated depreciation) – information provided by NAV	450			]			
B. Net MEAV of Affinity Water Network Plus Assets	9,010,000						
C. Average Regulatory Capital Value allocated to network plus	1,010,150						
Calculation = A/B * C	50.451						
D. Return on Capital = C x WACC	1.8667						
E. Total volume supplied (m3/year) (information provided by NaV)	703,750						
Deduction to volume rate for return on capital on on-site assets = $\nu$ / $\Box$	U.UUZ1			_		_	_