Affinity Water

Your local supply, on tap

Affinity Water: New Appointments and Variations (NAV) New Connection and Bulk Supply Charges 2020/21

1. Introduction

1. This document is published by Affinity Water to provide information to existing and prospective NAVs about the charges we will make:

    - to make new connections for bulk supplies of water
    - for bulk water supplied

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 informed by Ofwat's *Charging Rules for New Connection Services (English Undertakers)*. In setting our charges in this way we intend that developers, NAVs and self-lay organisations can each have fair access to new connection services from us, to facilitate competitive choice in infrastructure provision.

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 in May 2018.

5. Ofwat's guidance applies to all new bulk supplies effective from the May 2018 publication date. Ofwat have also said that incumbent water companies will have to create and publish new bulk supply charges that will supersede existing agreements, and that this process should be done promptly, and in any case when an existing NAV requests the same. We updated our existing bulk supply charges with effect from 1st April 2019.

6. We will review and publish this document on 31st January each year.

2. Our Water Supply Area

7. Our water supply area comprises three discrete regions in the southeast of England. Our charges to make new connections for bulk supplies to NAVs are the same across the three regions, but charges for bulk water supplied may 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.

3. Pre-Development Enquiries

7. When a NAV requires a bulk supply, it must ask us to prepare a pre-development study, with benefits as follows:

    a) Provides the NAV with early visibility of our needs to reinforce our existing network ahead of the development and allows us to advise of any timing implication for the development

    b) Provides the NAV with a point of connection to our network which enables the NAV to carry out its design work which will deliver the levels of service for flow and pressure for the development

8. The pre-development fee covers our costs associated with reviewing the NAV's enquiry, carrying out a hydraulic study, assessing the point of connection into our existing

network, preparing a budget estimate of the costs of infrastructure / asset value of constructing the connection, water mains and communication pipes (as may be necessary) for the development and producing a report which the NAV can refer to in its application for connection.

9. The pre-development fee is payable at the time the NAV submits its enquiry. We will start work on the enquiry when we have received payment of the applicable pre-development enquiry fee.

Table 3 – Pre-development report charge		
Pre-development enquiry fee	**Unit**	**£ excluding VAT**
Pre-development enquiry	per application	393

4. Site Specific Charges

10. This section sets out our site-specific charges.

11. Site specific charges are concerned with the costs to us of providing site specific infrastructure, usually pipes and fittings that take water from our existing water mains to the point of connection to the NAV's infrastructure, typically at the NAV site boundary.

4a. Application Fees

12. When a NAV requests us to provide a bulk supply, it must pay us a mains application fee as set out in the table.

Table 4a – Application Fees		
Mains application fee	**Unit**	**£ excluding VAT**
Application fee for Mains (with an existing pre-development report)	per application	393
Re-application fee for Mains (with an existing pre development report)	per application	196

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 we charge is different depending on whether the NAV has previously purchased a pre-development study from us for its development. This recognises that

there are certain tasks (hydraulic study and producing a report) that we will have already carried out and be able to use in processing the NAV's application.

15. Where we have prepared a quotation for new water mains and the NAV subsequently changes the requirements by changing the design, entry point location, number of connection points or makes any other significant changes, we will charge a re-application fee equal to 50% of the application fees set out in the table, with a minimum charge £196.

16. The re-application fee is payable at the time that the NAV notifies us of the change in its requirements.

17. 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.

4b. Design Fees

18. To provide a quotation and/or estimated charge for the new connection for 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.

19. When a NAV requests us to provide a bulk supply, it must pay us a mains design fee set out in the table. Our charges are based on the number of bulk supply connection points required.

Table 4b – Design Fees

Item	Unit	£ excluding VAT		
		Design Fee	Minor Design Change	Major Design Change
Mains design fee	*per bulk supply connection*	944	236	755

20. The mains design fee is payable at the time the NAV makes an application for a connection.

21. 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.

22. The fee for minor changes is £236; minor changes include:

- A change to the site boundary
- A change to the size of the water main

23. The fee for major changes is £755; 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

24. Re-design fees are payable at the time the NAV notifies us of the change in its requirements.

4c. Administration Fees

25. 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 (which the NAV is responsible for).

26. The mains administration fee recovers our costs of planning, organising, project managing, inspecting and commissioning of the water main and works necessary to connect to our water main.

Table 4c – Administration Fees

Mains Administration Fee	Unit	£ excluding VAT
Mains Administration Fee (fixed element)	per application	577
Mains Administration Fee (variable element)	per linear metre of main lain	15

4d. Charges for Laying Mains

27. 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.

28. We will lay barrier pipe unless we have received the relevant history and details of previous land use, copies of geo-environmental surveys or reports and pre- or post-remediation site investigation reports (where applicable) for our water quality team to assess.

29. Our charges include costs for traffic management, street works permits, local authority costs and restrictions, road closures, bus stop and parking bay suspensions and other associated costs, based on historical experience and 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.

30. As mains laying work for the purposes of making a bulk supply 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.

Table 4d(i) – Mains Laying Fees						
Item	**Unit**	**£ excluding VAT**				
		Highway (Road)	**Paved surface (Footpath)**	**Unmade Ground (Verge)**	**No excavation / no reinstatement by AWL**	**Barrier Pipe Uplift**
Lay pipe (80-100mm)	Per linear metre	292	187	95	NA	15
Lay pipe (101-130mm)	Per linear metre	299	199	104	NA	21
Lay pipe (131-190mm)	Per linear metre	374	255	124	NA	26
Lay pipe (191-260mm)	Per linear metre	443	300	183	NA	31
Lay pipe (261-320mm)	Per linear metre	559	380	244	NA	36

31. The charges in the table below apply where it is reasonably practicable to install mains pipe more cost effectively using directional drilling.

Table 4d(ii) – Mains Laying by Directional Drilling				
Laying of water mains by directional drilling		**£ per metre excluding VAT**		
Item	**Unit**	**Paved surface (Footpath)**	**Unmade Ground (Verge)**	**Barrier Pipe Uplift**

Lay pipe (50-100mm)	Per linear metre	101	76	15
Lay pipe (101-130mm)	Per linear metre	116	85	21
Lay pipe (131-190mm)	Per linear metre	163	121	26
Lay pipe (191-260mm)	Per linear metre	269	210	31
Lay pipe (261-320mm)	Per linear metre	287	223	36

4e. Charges for Installing Accessories

32. 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.

Table 4e – Installation of Accessories				
		£ excluding VAT		
Item	**Unit**	**Highway (Road)**	**Paved surface (Footpath)**	**Unmade Ground (Verge)**
Fire hydrant or Wash Out (in line, 50-190mm pipe)	Per accessory	975	905	835
Fire hydrant or Wash Out (in line, 191-320mm pipe)	Per accessory	1,345	1,315	1,305
Fire hydrant or Wash Out (End type, 50-190mm pipe)	Per accessory	855	785	715
Fire hydrant or Wash Out (End type, 191-320mm pipe)	Per accessory	1030	990	985
Item	**Unit**	**Highway (Road)**	**Paved surface (Footpath)**	**Unmade Ground (Verge)**
Install in-line meters 80mm Network Mains	Per accessory	1,757	1,691	1,373
Install in-line meters 100mm Network Mains	Per accessory	1,911	1,849	1,477
Install in-line meters 150mm Network Mains	Per accessory	2,215	2,132	1,686
Install in-line meters 200mm Network Mains	Per accessory	2,546	2,478	2,160

Install in-line meters 250mm Network Mains	Per accessory	2,992	2,921	2,563

4f. Charges for Connecting Mains to Our System

33. 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.

Table 4f - Connecting Water Mains into Supply System (MDPE/HPPE & Barrier Pipe)		
	£ excluding VAT	
	Unit	**Unmade Ground (Verge)**
Under Pressure Connection/ Branch Connection (50-190mm diameter pipe)	Per connection	1,411
Under Pressure Connection/ Branch Connection (191-260mm diameter pipe)	Per connection	1,867
Under Pressure Connection/ Branch Connection (261-320mm diameter pipe)	Per connection	2,271

4g. Exceptional Circumstances

34. 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

35. 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 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.

36. 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 enough certainty and it is reasonable to do so.

    - Charges calculated based on actual costs we incur in respect of the other elements of work.

37. 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.

38. 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.

5. 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.

Table 5 – The Standard Water Infrastructure Charge		
		Excl VAT
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 (1)	**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) (2)	10.0
Bath (tap nominal size larger than 3/3 inch, 20mm (2)	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 units per house) (3 and 4)	3.0
Communal or commercial appliance (3)	10.0
Any other water fitting or outlet, including a tap but excluding	3.0

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
3. 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.

48. Building Regulations include the requirement for all new dwellings to achieve a water efficiency standard of 125 litres per person per day.

49. Building regulations Part G includes an optional requirement of 110 litres per person per day for new residential development, which should be implemented through local policy where there is clear evidence needed.

50. We operate in an area of serious water stress and support the inclusion of a water efficiency standard of 110 litres per person per day being included in planning policies.

51. To help promote the achievement of this objective, we will apply a discount to the infrastructure charge for new homes (including where those new homes are provided within a NAV development) where there is evidence of water efficient design to a standard of 110 litres or less per person per day. The discount will be £80 per infrastructure charge.

5a. Income Offset

52. An income offset payment may be made for all new connections (including those provided indirectly by a NAV) where an infrastructure charge is applicable. The income offset is now made against the infrastructure charge where prior to 1 April 2020 it was made against requisition charges. We will apply an income offset for each new connection for a supply of water to the premises.

53. An income offset payment will become due when the connection is made to the main and when the customer billing account set up is complete

Table 5 a – Income Offset Payment		
Item	**Unit**	**Excl. VAT**
Calculated Income Offset Value	Per connection	£435.88

6. Bulk Supply Charges

54. Our bulk supply charges are calculated by multiplying the volume of water supplied, determined from the meter reading (or estimated by us) by the relevant rate per cubic metre shown in the table below:

Table 6a – Bulk Supply Charges for Existing NAVs		
NAV	Unit	**£ Excl. VAT**
Independent Water Networks Ltd	£ per cubic metre	£0.8999

55. We also publish below indicative bulk supply charges which intend to inform prospective NAVs about the likely volumetric charge for water. These are indicative charges only and vary according to the charging region in which the prospective NAV is to be located.

Table 6b – Indicative Bulk Supply Charges for Prospective NAVs		
NAV	Unit	**£ Excl VAT**
NAV in Central area	£ per cubic metre	£0.8424
NAV in East area	£ per cubic metre	£1.4356
NAV in Southeast area	£ per cubic metre	£1.5277

56. 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 (if applicable)
Minus
Depreciation (if applicable)
Minus
Business Rates Deduction (if applicable)
Equals
Bulk Supply Charge

6a.Relevant Wholesale Tariff – The Starting Point

57. The relevant wholesale tariff is calculated by applying Affinity Water's wholesale charges to the aggregate customer base supplied by the NAV, across all its appointments that have bulk supplies provided by Affinity Water.

58. The fixed charge is the sum of all applicable fixed charges.

59. 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.

60. The table lists the Affinity Water's wholesale tariffs used for the purposes of calculation of the starting point. These are the same charges as published in our Wholesale Charges Scheme.

Table 6c – Wholesale Tariffs 2020/21 used for Relevant Starting Point

	Affinity Water Wholesale Tariff 2020/21
Household Fixed Charge (£/year)	15.24
Non-Household Fixed Charge 12-15mm Meter (£/year)	15.24
Non-Household Fixed Charge 19-21mm Meter (£/year)	24.72
Non-Household Fixed Charge 25mm Meter (£/year)	26.52
Non-Household Fixed Charge 30mm Meter (£/year)	29.52
Non-Household Fixed Charge 38-40mm Meter (£/year)	31.20
Non-Household Fixed Charge 50mm Meter (£/year)	38.04
Non-Household Fixed Charge 65mm Meter (£/year)	68.28
Non-Household Fixed Charge 75-80mm Meter (£/year)	97.92
Non-Household Fixed Charge 100mm Meter (£/year)	97.92
Non-Household Fixed Charge 150mm Meter (£/year)	97.92
Non-Household Fixed Charge 200mm Meter (£/year)	97.92
Non-Household Large User Fixed Charge (Over 50Ml) Central Area	14370.00
Non-Household Large User Fixed Charge (Over 100Ml) East Area	27759.96
Non-Household Large User Fixed Charge (50Ml - 100Ml) East area	15150.00
Non-Household Mid User Fixed Charge (25 - 50Ml) East Area	7820.04
Household Volumetric Charge Central Area	0.8998
Household Volumetric Charge East Area	1.5181
Household Volumetric Charge Southeast Area	1.6155
Non-Household Standard Volumetric Charge (0-3Ml) Central Area	0.9010
Non-Household Mid User Volumetric Charge (3-50Ml) Central Area	0.8396
Non-Household Large User Volumetric Charge (Over 50Ml) Central area	0.5522
Non-Household Standard Volumetric Charge (0-5Ml) East Area	1.5283
Non-Household Mid User Volumetric Charge (5-25Ml) East Area	1.3602
Non-Household Mid User Volumetric Charge (25-50Ml) East Area	1.0474
Non-Household Large User Volumetric Charge (50-100Ml) East area	0.9008
Non-Household Large User Volumetric Charge (Over 100Ml) East area	0.7747
Non-Household Standard Volumetric Charge (0-3Ml) Southeast Area	1.6254
Non-Household Mid User Volumetric Charge (3-50Ml) Southeast Area	1.5226
Non-Household Large User Volumetric Charge (Over 50Ml) Southeast Area	1.1403

6b. On-site Ongoing Costs

61. Our wholesale fixed charges per meter are set to reflect the (annualised) per customer 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%.

62. Our fixed charges for large customers over 25Ml/year, (e.g. large user fixed charge and mid user 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 against these charges. This is because these fixed charges serve the purpose of deterring customers from artificially increasing their water consumption to take them over the qualification threshold for large user tariffs, so preserves incentives towards careful water use.

63. We recover our remaining wholesale costs through volumetric charges. We set the discount to the standard tariff for site ongoing costs at 5.75%. This reflects the costs of providing, operating and maintaining 'on-site' small diameter local distribution mains, included within our published tariffs, but which are avoided by us in the case of new appointments and variations where 'on site' assets are the responsibility of NAVs. 5.75% is the same discount that we make to customers supplied on the mid-user tariff, which is set at a discount to the standard rate to reflect that as a class of customers, mid users do not make use of the small pipe diameter network.

64. There is no deduction on the volumetric rate available for on-site costs for mid-user and large user 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. In other words, the volumetric rate is already lower than standard to reflect the avoided use of local network assets by mid and large user customers.

6c. Weighted Average Cost of Capital

65. Where NAVs provided assets prior to 1 April 2020, we also deduct from the starting point, an adjustment for the regulatory return on capital. In accordance with Ofwat's guidance, we use the fully pre-tax weighted average cost of capital, 4.74% in force during the PR14 period to 31 March 2020. We use 4.24% for the period 1st April 2020 to 31 March 2025 reflecting the lower cost of capital set at PR19.

66. To calculate the deduction for cost of capital, we multiply the cost of capital % by the average regulatory capital value (in outturn prices) that would have been accrued to our Regulatory Capital Value had we undertaken the development rather than the NAV. This

will be our quotation/valuation of on-site works had we installed the assets after deduction of any site-specific charges that would have been charged to the developer, all multiplied by our slow money Pay-As-You-Go ratio.

67. The worked example below sets out a calculation to determine the value that would have accrued to our RCV for an example development.

Weighted Average Cost of Capital - Worked Example	£k
A. Value of site-specific work had Affinity Water provided the infrastructure	525
B. Site specific charges that Affinity Water would have charged the developer	225
C. Net cost of work (= A – B)	300
D. Slow money Pay-As-You-Go ratio	30%
E. Amount that would have accrued to Affinity Water's RCV had it carried out the work (= C x D)	90

6d. Depreciation

68. We also deduct from the starting point, an adjustment for depreciation. For these purposes we calculate depreciation as the draw-down rate times the average regulatory capital value (see below) that would have been accrued to our Regulatory Capital Value had we undertaken the development rather than the NAV.

69. The depreciation draw down rate should broadly reflect the useful lifetime of on-site assets. Whilst some on site assets, such as revenue meters have a short asset life, other assets such as boundary boxes, water mains and communication pipes have longer asset lives, in some cases in excess of 100 years. We have set a draw down rate of 1%, equivalent to an average depreciation asset life of 100 years to represent an assumed weighted average asset life for on-site assets.

70. The depreciation deduction will be our quotation of the value of on-site works had we installed the assets, after deduction of any site specific charges that would have been charged to the developer, multiplied by our slow money Pay-As-You-Go ratio, all multiplied by 1%.

71. The worked example below sets out the operation of this calculation

Depreciation - Worked Example	£k
F. Value of site-specific work had Affinity Water provided the infrastructure	525
G. Site specific charges that Affinity Water would have charged the developer	225
H. Net value of work (= F – G)	300

I. Slow money Pay-As-You-Go ratio	30%
J. Amount that would have accrued to Affinity Water's RCV had it carried out the work (= H x I)	90
K. Draw down rate	1.0%
L. Depreciation (= K x J)	0.9

6e. Regulatory Capital Value

72. To calculate the WACC adjustment, it is necessary to calculate and roll forwards a value for regulatory capital value. To roll forwards, we increase the value of the Regulatory Capital Value on which we make the WACC Adjustment for inflation each year, using the November to November RPI rate of inflation for charges up to charging year 2019/20 and the CPIH index for charges from 2020/21 onwards. This is because our price control that regulates our wholesale tariffs used in the starting point calculation are indexed using November inflation observations from the RPI index to 2019/20 and the CPIH index for 2020/21 onwards.

73. We reduce the value of the Regulatory Capital Value each year for depreciation charges. Depreciation charges are indexed each year for inflation, to maintain their real terms value, so represent current cost depreciation.

74. The table below sets out a worked example over the first five years of a development to expose how the calculation works. Beginning in year 2, the opening RCV is increased for inflation, assumed to be 2% per year in the example. It is reduced for depreciation. The depreciation charge is indexed to the same inflation rate as the opening RCV each year to maintain its value in real terms.

75. The WACC deduction is calculated by applying the WACC % to Average RCV. Average RCV is the sum of the opening and closing RCV values, all divided by two. The opening value for RCV is the closing value from the prior year. In the first year, the opening value is our quotation/valuation of on-site works had we installed the assets, after deduction of any site specific contributions that would have been charged by us to the developer, all multiplied by our slow money Pay-As-You-Go ratio.

	Year 1	Year 2	Year 3	Year 4	Year 5
Opening Regulatory Capital Value	1000.0	990.0	999.6	1009.2	1018.8
Inflation indexation (2% p.a)		19.8	20.0	20.2	20.4
Depreciation	-10.0	-10.2	-10.4	-10.6	-10.8
Closing Regulatory Capital Value	990.0	999.6	1009.2	1018.8	1028.3
Average RCV for the year	995.0	994.8	1004.4	1014.0	1023.5

WACC Deduction @ 4.74%	-47.2	-47.2	-47.6	-48.1	-48.5
Depreciation deduction	-10.0	-10.2	-10.4	-10.6	-10.8

6f. Business Rates

76. We also deduct from the starting point, an adjustment for business rates. This arises because most of the business rates we pay are based on the Valuation Office Agency's calculation of our operating profit. Therefore, there is a link between regulatory capital value and business rates. We make a deduction at the average rate of business rates £ per £ of RCV multiplied by the RCV accounted for by the NAVs developments.