

A REVIEW AND COMPARISON OF THE WATER AND SEWERAGE SECTORS CHARGING ARRANGEMENTS



INTRODUCTION

One of the most prominent and disturbing aspects of the Water and Sewerage Sector reforms, as revealed in our earlier Independent Report, *“Why the Water and Sewerage Sectors Reforms Will Cost House Builders Significantly More”*, was how Water & Sewerage Company charges varied so considerably – see Appendix 1 of the August 2020 Report, a PDF version of which can be viewed by accessing the following link - <https://t-d-s.com/tds-industry-news/>

Having always recognised the need for a more informative, evidence-based analysis, this follow-on Report crystallises the outcome of a deeper, and more detailed forensic analysis of costs and charges. This latest Report, part of a series of related future reports under consideration, exposes the inequity, inconsistency, and variability in Water & Sewerage Company charges confronting House Builders and Developers. It further exposes, in more precise evidential terms, the impact the new Water and Sewerage Sector charging regime has on House Builder costs to the extent that project viability could be seriously threatened. Ultimately, this has the potential to undermine the Government’s housing objectives.

As a more detailed analysis, which has only been possible as a result of the simultaneous disclosure of each Company’s New Charging Arrangements on 1st February 2018, and which came into effect from 1st April 2018, yields a series of quite startling and concerning outcomes. The requirement for increased cost transparency, as set down in the statutory guidance issued by Defra to Ofwat, has provided the long-awaited means to undertake such an in depth analysis.

The primary question to be asked is for how long, prior to 1st April 2018, has the House Building Sector been a victim of such unaudited, inconsistent, and inequitable charges?

SERVICE PIPE CONNECTION CHARGES

Taking just one of several examples from the charging evidence provided in this latest follow-on Report, i.e. the provision of a simple 25mm water service connection undertaken by Water Companies, the change (increase) in cost is staggering – it must therefore be of considerable concern to all House Builders – see below:-

- **In 2018/19 the average cost, across all water companies, for a company to undertake just the physical 25mm service connection to a new home (excluding groundworks costs) was £322/dwelling**
- **By 2020/21, and in just 2 years, this average cost has increased to £505/dwelling – an increase of 54% against an underlying level of inflation (pre-Covid-19) of around 1.5%**

This is just one example of several increases in charges directly attributable to how Companies have been told by Ofwat to re-cast their costs and charges. There is now even more compelling evidence to suggest Companies have been cross-subsidising Developer Services costs and charges – a practice that should not be allowed under Ofwat’s Charging Rules. If cross-subsidy principles have been allowed to be applied, then Company costs and charges can hardly be considered cost reflective. Cost increases aside, the range in charges between Companies for identical services, defies not just logic but a sound, reasoned explanation by the Regulator, Ofwat.

NEW CHARGING RULES FROM 1ST APRIL 2020

Another concerning aspect of this variability and inconsistency in charging relates to what Companies charge for on-site water mains (this can be seen on pages 2 and 10 in this Report). Last year Ofwat asked each Company to provide typical costs based on set criteria for developments of 50 and 200 dwellings.

- **For the 50-dwelling example the result range in costs was £5,983 to £81,300 or £120 to £1,626 per plot**
- **For the 200-dwelling example the range in costs was £45,034 to £274,300 or £225 to £1,372 per plot**

As much as this is remarkable in its diversity of costs between the Companies, the repercussion(s) for House Builders is even more perplexing – as explained below.

From 1st April 2020, in direct opposition to the wishes of the Housing Building Sector, Ofwat sought to introduce an ‘averaging out’ of asset payments/income offsets on a per plot basis. These payments are derived from each Company’s cost to lay water mains on a development. The long-established principle of assessing costs/contributions relative to the unique/specific requirements of each development, taking note of (a) housing numbers, (b) the road and housing layout and (c) associated water main infrastructure, has been overturned by Ofwat in favour of an average cost per plot. To make matters worse these payments are now at the Water Company’s discretion with some Companies having now refrained from making any contribution.

To quote Northumbrian Water:-

- *“This will result in a significant increase the charges Developers pay us in relation to new water mains and requisitioned sewers from 1st April 2020 compared to the last two years.”*

Many other Companies have expressed the same sentiment about charges for House Builders, albeit in private, to the authors of respective Reports.

OFWAT’S CONSULTATION MAY 2020

Although Ofwat have, in May 2020, accepted that there is an issue with Company costs and charges, it has taken some two years before a further consultation has been considered. Significantly, Ofwat’s May 2020 consultation includes the following opening statement – ironically, one repeated many times over by respective authors of this report in the years leading up to the April 2018 reforms:

- *“We explained in our May 2020 consultation on new connection services that we are concerned that the differences in levels of new connection charges are so marked that they are unlikely to be a function of cost alone.”*

Unfortunately, the consequences of what has taken place to date and what will transpire over the next 18 months will result House Builders being the financial losers. Moreover, it will be not be until 1st April 2022/3, some five years after Companies first introduced their revised Charging Arrangements that the reality of fair, reasonable, and transparent charging will hopefully prevail.

SEWER REQUISITIONING

A further 'Sector' reform that brings bad news for House Builders is the fundamental changes that have been introduced regarding off-site sewer requisitions. These changes defy any logical rationale. Moreover, the fair and equitable relationship between developer contributions and the Sewerage Companies acceptance of their statutory S94 obligations have effectively been overturned. Likewise, any recognition of the commercial benefit to Sewerage Companies arising from the entrepreneurial investment by House Builders that creates income generating assets, (in perpetuity) for the Sewerage Undertaker, and at no cost to the Sewerage Company.

For House Builders to go from paying 20% to 50% of the total cost of a requisitioned sewer, a principle reflected in legislation for over 47 years, i.e., since the Water Act 1973, to now having to fund 100% of the cost, has never been fully explained by Ofwat.

Moreover, in attempting to undertake a comparison of costs for requisitioned infrastructure, this is difficult to evaluate due to the uniqueness of each scheme. That said, there is a considerable element of doubt regarding the justification for certain sewer requisitions prior to April 2018, especially where the sewer requisition process was used for providing network reinforcement and/or asset betterment that favoured the Incumbent Sewerage Company.

Furthermore, these issues were further compounded by certain Sewerage Companies denying House Builders the right to connect to the public sewerage system under S106 WIA 1991, whilst using commercial expediency duress to force the House Builder to requisition off-site infrastructure that provided betterment for the Sewerage Company. These remain fertile grounds for House Builders to consider the formal determination process to recover inequitable and at times substantial payments made to Sewerage Companies that were never justified.

- For any development requiring an off-site sewer requisition, the cost thereof will have escalated considerably from 1st April 2020

CONCLUSION

The irony in all of this is that it has been obvious since the Gray and Cave Reviews of nearly a decade ago, that Water and Sewerage Company charges were a major issue for House Builders. The Water Act 2014 was heralded as providing a new dawn, yet House Builders are in a considerably worst position now than they have ever been in the past.

The underlying expectation of House Builders, and the Developer Community in general, was that the legislation introduced by virtue of the Water Act 2014 would make a positive and lasting difference. In presenting their statutory guidance to Ofwat, Defra shared not just a vision for improved and evidenced-based cost transparency but an expectation that at least cost neutrality would prevail. The evidence presented in both reports crystallises a completely opposite outcome and raises numerous questions about the role Ofwat and possibly Defra has played in allowing such inexplicable diversity in costs to prevail whilst leaving the Developer Community to bear such significant increases in cost.



SUMMARIES

The summaries that follow rely on evidence and data abstracted from the two extended schedules supporting this review. Wherever possible, all charges have been compared on a strict 'like for like' basis.

Abridged Summary of the Charging Arrangements 1st April 2020 - 31st March 2021

- The income offset/asset payment contribution for a developer's on-site and off-site water main infrastructure ranges from **£0 to £800 per dwelling**. In payment terms and across all Companies, these range from **a net credit of £660 to a net payment of £204 per dwelling**
- The income offset/asset payment contribution for a developer in respect of on-site and off-site sewerage infrastructure ranges from **£0 to £225 per dwelling**, however, any such offset credits /payments also remain discretionary. In total payment terms, and across all Companies, this will result in a range of **net developer payments from £170 to £616 per dwelling**
- For a Company to excavate and connect a simple 25mm service from a dwelling to a water main, the range in charges varies from **£290 to £893 per dwelling**
- For a Company to undertake just the physical service connection (excluding any groundworks costs), the charges range from **£116 to £893 per dwelling**
- For a Sewerage Company to lay a 150mm diameter sewer pipe at a depth of 2.5m, in unmade ground, the range in Sewerage Company charges varies from **£321 to £641 per lin m**. (The common practice of dual pipe, single trench arrangements have not been costed by any Company)
- In the worked example(s) for 50 and 200 dwellings detailed in Ofwat's Information Notice 19/05, the cost of installing the water mains on each size of development can be summarised as follows:
 - Out of 19 Companies there are 10 that do not appear to have complied with the requirements of Ofwat's Information Notice 19/05
 - In the 50-dwelling example, the range in Water Companies costs to install the water mains varies from **£5,983 to £81,300**
 - In the 200-dwelling example, the range of Water Companies costs to install the water mains varies from **£45,034 to £274,300**
- For the Companies that stated a Water Income Offset on 1st April 2018 and have adjusted the Income Offset due to the changes from 1st April 2020, there is a reduction of charges from **£13 to £415 per dwelling**. Across the Companies the changes to Water Infrastructure Charges from 1st April 2020 results in a **reduction of £200 per dwelling to an increase of £56 per dwelling**

Abridged Summary of the Charging Arrangements - 1st April 2019 - 31st March 2020

- Total charges for a 25mm service connection across only seven Companies is as follows:
 - 1st connection range of charges **£214 to £663 per dwelling**
 - Other connection charges from **£214 to £568 per subsequent dwelling**

Abridged Summary of the Charging Arrangements 1st April 2018 - 31st March 2019

- Income Offsets/Asset Payment contributions from Companies to developers/SLPs:
 - Determined as a percentage of the Companies construction cost for the off-site and on-site water mains and ranges from **15% to 91% per scheme**
 - As a stated, contribution per dwelling this ranges from **£415 to £839 per plot**
- A worked example on design, management and administration charges required by Water Companies for a 100-dwelling development where the water main costs are estimated at £50,000, the range of charges varied from £325 to £7,500
- Comparison of Companies water main costs to lay a specific size of pipe per meter yield the following variations:
 - **63mm - £29 - £55**
 - **90mm - £30 to £80**
 - **125mm - £32 to £90**
 - **180mm - £37 to £120**
- A 25mm service pipe connection in unmade ground:
 - Excavate and connect - **£363 to £651 per plot**
 - Connect only - **£146 to £498 per plot**
 - Near side connection, excavate and connect - **£285 to £762**
 - Near side connection, excavate and connect only - **£220 to £762**
 - Far side connection, excavate and connect - **£341 to £749**
 - Far side connection, connect only - **£258 to £846**
- Water infrastructure Charges ranged from **£98 per plot to £566 per plot**, where the pre-1st April 2018 Water Infrastructure Charge was £365 per plot
- Sewerage Infrastructure Charge ranges from **£190 to £765 per plot**, where the pre-1st April 2018 Water Infrastructure Charge was £365 per plot

COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2020 - 2021

WASC's Comparison of Water Income Offsets, Water Infrastructure Charges and Net Contributions per plot

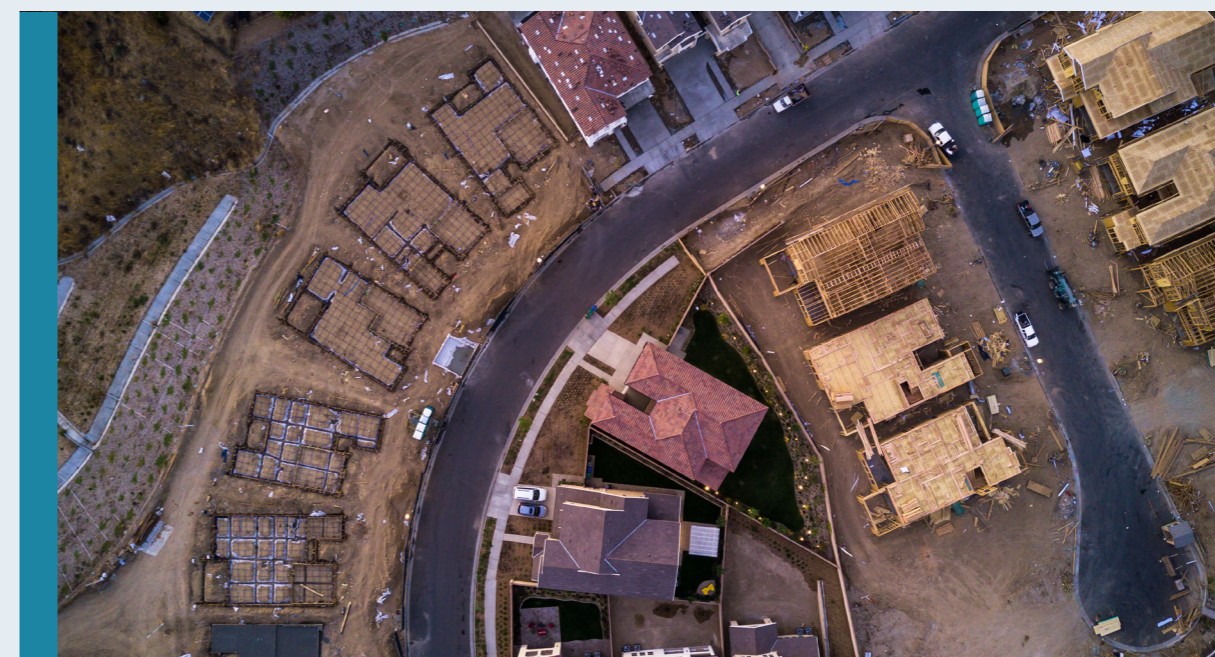
Company	Income Offset Contribution from April 2020	Water Infrastructure Charge	Possible Credit/Payment Terms
United Utilities	£751.00	£302.00	£449 Credit to the developer
Northumbrian	£0.00	£135.00	£135 Payment
Yorkshire	£0.00	£70.00	£70 Payment
Severn Trent	£479.12	£395.00	£84.12 Credit to the developer
Thames (House)	£800.00	£140.00	£660 Credit to the developer
Anglian	£400.00	£340.00	£60 Credit to the developer
South West	£439.00	£91.00	£348 Credit to the developer
Southern	£335.00	£0.00	£335 Credit to the developer
Wessex	£73.60	£160.00	£86.40 Payment

WOC's Comparison of Water Income Offsets, Water Infrastructure Charges and Net Contributions per plot

Company	Income Offset Contribution from April 2020	Water Infrastructure Charge	Possible Credit/Payment Terms
Essex & Suffolk	£0.00	£135.00	£135 Payment
Hartlepool	£400.00	£232.00	£168 Credit to the developer
Bournemouth	£439.00	£91.00	£348 Credit to the developer
Affinity	£436.00	£375.00	£61 Credit to the developer
South East	£513.00	£521.00	£8 Payment
Portsmouth	£467.00	£322.00	£145 Credit to the developer
South Staffs	£599.00	£381.00	£218 Credit to the developer
Cambridge	£599.00	£381.00	£218 Credit to the developer
Bristol	£706.00	£256.00	£450 Credit to the developer
SES	£165.00	£369.00	£204 Payment

WASC's Comparison of Sewerage Income Offsets, Sewerage Infrastructure Charges and Net Contribution per plot

Company	Income Offset Contribution from April 2020	Water Infrastructure Charge	Credit/Payment Terms
United Utilities	£0.00	£279.00	£279 Payment
Northumbrian	£0.00	£235.00	£235 Payment
Yorkshire (Foul Only)	Not Stated	Not Stated	£50 Payment
Yorkshire (Foul & Surface Only)	Not Stated	Not Stated	£190 Payment
Severn Trent	£90.00	£291.59	£201.59 Payment
Thames	£40.00	£210.00	£170 Payment
Anglian	£0.00	£570.00	£570 Payment
South West	£67.00	£683.00	£616 Payment
Southern	£225.00	£790.00	£565 Payment
Wessex (Foul & Surface)	£80.32	£251.00	£170.68 Payment



COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2020 - 2021 (CONTINUED)

Comparison of WaSC's 25mm Unsurfaced Service Connection which includes 2m of Pipework & Meter Installation

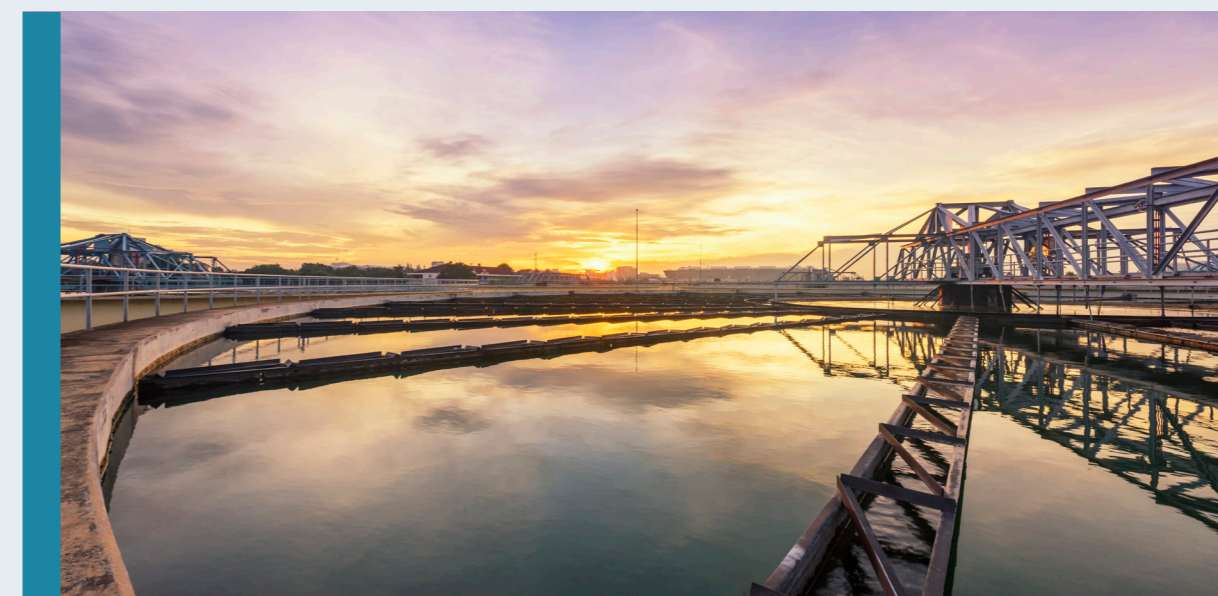
Company	Excavated Connection	Connect Only
United Utilities	£545.00	£404.00
Northumbrian	£393.00	£297.00
Yorkshire	£893.00	£893.00
Severn Trent	£649.00	£327.45
Thames	£500.00	£300.00
Anglian	£483.00	£483.00
South West	Not Stated	£166.00
Southern Water	£290.00 (SS)	£230.00 (SS)
	£348.00 (LS)	£263.00 (LS)
Wessex	£719.00	£164.00

Comparison of WoSC's 25mm Unsurfaced Service Connection which includes 2m of Pipework & Meter Installation

Company	Excavated Connection	Connect Only
Essex & Suffolk	£472.00	£243.00
Hartlepool	£483.00	£483.00
Bournemouth	Not Stated	£166.00
Affinity	£556.00	£341.00
South East	£471.00	£471.00
Portsmouth	£359.00	£220.00
South Staffs	£340.00	£340.00
Cambridge	£340.00	£340.00
Bristol	£452.00	£116.00
SES	£341.00	£341.00

Comparison of WaSC's Charges to Construct 150mm Sewer Pipe at a depth of 2.5mm in Unmade Ground

Company	Income Offset Contribution from April 2020
United Utilities	£485.00
Northumbrian	£347.00
Yorkshire	Not Stated
Severn Trent	Not Stated
Thames	£630.00
Anglian	£483.00
South West	£321.00
Southern Water	£367.00
Wessex	£641.00



COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2020 - 2021 (CONTINUED)

Like for Like Comparison of the WaSC's & WoC's Water Mains Costs for a 50 and 200 plot Development in their Charging Arrangements

Company	50 Plot		200 Plot		2020 Income Offset Allowance
	Construction Cost for the on-site main	Cost per plot of the Construction Water	Construction Cost for the on-site main	Cost per plot of the Construction Water Main	
United Utilities	£48,940.00	£978.80	£164,240.00	£821.20	£751.00
Northumbrian	£14,100.00	£282.00	£47,700.00	£238.50	£0.00
Yorkshire	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	Not Sated
Severn Trent	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£479.12
Thames	£81,300.00	£1,626.00	£274,300.00	£1,371.50	£800.00
Anglian	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£400.00
Southern	£32,084.00	£641.68	£114,012.00	£570.06	£335.00
South West	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£439.00
Wessex	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£73.60
Essex & Suffolk	£14,100.00	£282.00	£47,700.00	£238.50	£0.00
Hartlepool	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£400.00
Bournemouth	Not in the Charging Arrangements	N/A	Not in the Charging Arrangements	N/A	£439.00
Affinity	£29,810.00	£596.20	£100,910.00	£504.55	£435.88
South East	£18,142.00	£362.84	£71,512.00	£357.56	£513.00
Portsmouth	£27,560.00	£551.20	£90,570.00	£452.85	£467.00
South Staffs	No Details	N/A	No Details	N/A	£599.00
Cambridge	No Details	N/A	No Details	N/A	£599.00
Bristol	£5,983.00	£119.26	£45,034.00	£225.17	£706.00
SES	£28,380.00	£567.26	£89,171.00	£445.86	£165.00

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WaSC's Comparison of Water Income Offset, Water Infrastructure Charges and Net Contributions per plot

Company	Income Offset Contribution from April 2018	Income Offset Contribution from April 2020	Difference between Income Offset		Water Infrastructure Charge April 2020	April 2020 Water Infrastructure Charge	Difference between IC's	
United Utilities	£839.00	£751.00	£88.00	▼	£356.00	£302.00	£54.00	▼
Northumbrian	£415.00	£0.00	£415.00	▼	£185.00	£135.00	£50.00	▼
Yorkshire	£0.00	£0.00	£0.00	—	£0.00	£0.00	£0.00	—
Severn Trent	91% Scheme Cost	£479.12	Cannot be Calculated		£424.00	£395.00	£25.00	▼
Thames (Houses)	Dads Calc	£800.00	Cannot be Calculated		£140.00	£140.00	£0.00	—
Anglian	88% Scheme Cost	£400.00	Cannot be Calculated		£458.50	£340.00	£118.50	▼
South West	£620.00	£439.00	£181.00	▼	£98.00	£91.00	£7.00	▼
Southern	Details Not Disclosed	£335.00	Cannot be Calculated		£200.00	£0.00	£200.00	▼
Wessex	15% Scheme Cost	£73.60	Cannot be Calculated		£150.00	£160.00	£5.00	▲

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WoC's Comparison of Water Income Offset, Water Infrastructure Charges and Net Contributions per plot

Company	Income Offset Contribution from April 2018	Income Offset Contribution from April 2020	Difference between Income Offset		Water Infrastructure Charge April 2020	April 2020 Water Infrastructure Charge	Difference between IC's	
Essex & Suffolk	£480.00	£0.00	£480.00	▼	£240.00	£135.00	£105.00	▼
Bournemouth	£620.00	£439.00	£181.00	▼	£98.00	£91.00	£9.00	▼
Affinity	90% Scheme Cost	£436.00	Cannot be Calculated	—	£375.00	£375.00	£0.00	—
South East	Details Not Disclosed	£513.00	Cannot be Calculated		£566.00	£521.00	£45.00	▼
Portsmouth	70% to 100%	£467.00	Cannot be Calculated		£329.00	£322.00	£7.00	▼
South Staffs	£612.00	£599.00	£13.00	▼	£325.00	£381.00	£56.00	▲
Cambridge	£612.00	£599.00	£13.00	▼	£325.00	£381.00	£56.00	▲
Bristol	85% Scheme Cost	£760.00	Cannot be Calculated		£351.00	£256.00	£95.00	▼

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COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2019 - 2020

Comparison of Developer 25mm Service Connection Total Charges - 2019 - 2020 for Seven Companies

	Affinity Water	South East Water	Southern Water	Severn Trent	Thames	South West	Anglian
1st Application	£157.00	£47.86	£72.14	£0.00	£0.00	£11.00	£0.00
Subsequent Application	£31.00	£47.86	£43.75	£0.00	£0.00	£11.00	£0.00
Meter Cost	£45.00	£0.00	£0.00	£27.84	£0.00	£0.00	£0.00
1st Admin Cost	£126.00	£35.43	£33.22	£0.00	£0.00	£30.00	£0.00
Subsequent Admin Cost	£105.00	£21.95	£20.54	£0.00	£0.00	£30.00	£0.00
Water Regs Inspection 1st - 11th	£0.00	£82.00	£82.00	£0.00	£0.00	£22.00	£0.00
Water Regs Inspection 2st - 10th	£0.00	£0.27	£5.69	£0.00	£0.00	£22.00	£0.00
Water Company Clean 25mm Connection no Dig	£325.00	£498.00	£258.00 (Far Side)	£261.00	£270.00	£151.00	£453.00
Total Cost 1st Connection to a Developer	£653.00	£663.29	£445.36	£288.84	£270.00	£214.00	£453.00
Total Cost Other Connection to a Developer	£506.00	£568.08	£327.98	£288.84	£270.00	£214.00	£453.00

Note: 1st Connection Range of Charges - £214.00 to £663.29
Other Connection Range of Charges - £214.00 to £568.08

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COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2018 - 2019

Water Main Requisition Charges - WaSC's

WaSC	DADS	Income Offset Percentage	Income Offset Plot Allowance	Comment
Thames Water	Yes			
South West			£620	
Wessex		15%		
Yorkshire				Factored into the IC
United Utilities			£839	
Northumbrian			£415	
Anglian		88%		
Southern				Need to discuss with Southern Water
Severn Trent		91%		

Water Main Requisition Charges - WoC's

WoCs	DADS	Income Offset Percentage	Income Offset Plot Allowance	Comment
Affinity		90%		
Bristol		85%		
Essex & Suffolk			£480	
Portsmouth		70%		
South East	Yes			
Cambridge			£612	
South Staffs			£612	
Bournemouth			£620	
Sutton East		5%		

Comparison of a Requisition Design/Management/Admin Charge for a 100 property development with a water mains cost of £50,000

WaSC	
Anglian Water	£5,000.00
Northumbrian Water	£777.00
Severn Trent Water	£1,739.82
South East Water	£1,950.00
Southern Water	£1,770.00
Thames Water	£7,500.00
United Utilities	£371.00
Wessex Water	£341.00
Yorkshire Water	£1,223.29

WoC's	
Essex & Suffolk	£777.00
Bournemouth Water	£1,950.00
Affinity Water	£750.00
South East Water	£596.93
Portsmouth Water	£540.00
South Staffs	£???.??
Cambridge Water	£???.??
Bristol	£900.00
Sutton & East	£325.00

*Range of Charges are £325 to £7,500



COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2018 - 2019 (CONTINUED)

Comparison of the Water Main Per Lin Meter - Lay Only

Company	Paper Sizes per Linear Meter				Comment
	63	90	125	180	
Anglian	£29	£30	£32	£37	
Northumbrian	£38	£40	£40	£52	
Essex & Suffolk	£41	£44	£48	£67	
Severn Trent					No Details
South West					No Details
Southern	£55	£55	£59	£70	
Thames	N/S	£80	£90	£120	
United Utilities	£35	£47	£47	£102	
Wessex					No Details
Yorkshire	£40	£40	£40	£49	
Bournemouth					No Details
Affinity	N/S	£55	£60	£80	
South East	£37	£37	£41	£46	
Portsmouth					No Lay Only Charge
South Staffs					No Details
Cambridge					No Details
Bristol	£46	£46	£53	£94	
Sutton & East					No Details

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Charge Comparisons for a 25mm Service Pipe connection in unmade ground (not contaminated)

Company	Charge per Plot	
	Excavated & Connect	Connect Only
Anglian	£438	£438
South West	Not Stated	£146
Bournemouth	Not Stated	£146
Thames	£410	£240
United Utilities	£396	£396
Wessex	£651	£180
Affinity	£505	£310
South east	£627	£498
Portsmouth	£363	£210
South Staffs	£385	£385
Bristol	Not Stated	£270

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Charge Comparisons for a 25mm Service Pipe connection in unmade ground (not contaminated)

Company	Near Side		Far Side	
	Excavated & Connect	Connect Only	Excavated & Connect	Connect Only
Northumbrian		£243.00		£355.00
Essex & Suffolk		£220.00		£846.00
Severn Trent	£517.00	£261.00	£749.00	£308.00
Southern	£285.00	£225.00	£341.00	£258.00
Yorkshire	£762.42	£762.42	Quote Needed	Quote Needed
Sutton & East	£371.25	£371.25	Quote Needed	Quote Needed

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COMPARISONS FOR WASC'S AND WOC'S CHARGING ARRANGEMENTS 2018 - 2019 (CONTINUED)

Infrastructure Charges - WaSC's

WaSC	Water IC £365	Sewerage IC £365	Total	CSR "V" OIC (£731) per Plot	
Thames	£140	£210	£350	£381	▼
South West	£98	£736	£834	£103	▲
Wessex	£155	£190	£345	£386	▼
Yorkshire	£75	£175	£250	£481	▼
United Utilities	£366	£423	£789	£58	▲
Northumbrian	£185	£355	£520	£211	▼
Anglian	£459	£471	£930	£199	▲
Southern	£200	£765	£965	£234	▲
Severn Trent	£424	£229	£653	£78	▼

(The numbers/text in red are based on the best possible calculation as a result of the difficulty that exists in accurately determining Yorkshire Water Costs and Charges).

Infrastructure Charges - WoC's

WoC	Water IC £365	Sewerage IC £365	Total	CSR "V" OIC (£731) per Plot	
Affinity	£361	TH - £210	£571	£160	▼
		ANG - £471	£832	£101	▲
Bristol	£351	WES - £190	£541	£190	▼
Essex & Suffolk	£240	AUG - £471	£711	£20	▼
Portsmouth	£329	SOUTH - £765	£1,094	£363	▲
South East	£566	SOUTH - £765	£1,331	£600	▲
Cambridge	£325	ANY - £471	£796	£65	▲
South Staffs	£325	SEV - £229	£554	£177	▼
Bournemouth	£98	WES - £190	£288	£443	▼
Sutton & East	£350	TH - £210	£560	£171	▼
		SOUTH - £765	£1,115	£384	▲



MASTER SCHEDULE(S) OF WASC'S AND WOC'S COMPARISONS 2018 - 2019 AND 2020 - 2021

Cost/Charge Heading	Northumbrian Water	East & Suffolk Water	Yorkshire Water	United Utilities	Severn Trent	Anglian Water	Thames Water	Southern Water	Wessex Water	Bristol Water	South West Water/ Bournemouth Water (Water Only)	South Staffs & Camb	South East Water	Sutton & East Surrey	Portsmouth Water	Affinity Water	South Staffs Water
Consultation Response Date	30/09/17 & 10/1/18	30/09/17 & 10/1/18	Not Clear	10/05/2017	29/09/2017	30/11/2017	01/09/17 & Jan '18	No date to reply	No HBF Engagement	07/12/2017	No HBF Engagement	31/10/2017	No HBF Engagement	No HBF Engagement	No HBF Engagement	No HBF Engagement	No HBF Engagement
Fixed Charges	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes		Yes	Not clear	Yes	Yes	
Zonal Charging	No	No	No	No	No	Yes	No	No	Longer term possibility	No	No	No	No	No	No	No	
Standard Water Connection (25mm/32mm)/dwelling																	
Uncontaminated Land																	
Building Water/Dwelling	N/P	N/P	N/P	£25.00/dw	£80.33/dw	Total cost? £845.50	N/P	N/P	£80.00	N/P	N/P	N/P	N/P	N/P	Yes - £586 to £1630/ connex	N/P	
Unit Charge for Disconnection (Separate Exc.)	£99.00 to £449.00	£99.00 to £449.00	£314.01 to £2143.27	N/P	N/P	N/P	Variable but not quoted	£409.00	£0.00	£651.00	N/P	N/P	N/P	N/P	N/P	£115.00 to £630.00	
Standard Connection - no Excavation	£243.00	£220.00	N/P	N/P	Up to 5m -£261.00	N/P	£240.00	£225.00	N/P	N/P	£720.00	N/P	N/P	N/P	25mm - £210.00	Inc 1.0m of pipe £310.00	
Short Sided (unsurfaced)	£299.00	£579.00	25mm - £762.42	£396 (25) & £659 (32)	£517.00	Up to 5m - £813.50	£410.00	Inc 3m of pipe - £285.00	Inc 2m of pipe £464.00	£454.00	Inc 5m of pipe - £146.00	N/P	Inc 2m of pipe - £498.00	N/P	25mm - £363.00	Inc 1.0m of pipe £505.00	
Long Sided (unsurfaced)	N/P	N/P	N/P	N/P	N/P	Up to 18m - £1094.50	N/P	£341.00	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	
Short Sided (surfaced)	£376.00	£697.00	25mm - £763.17	£563 (25) & £768 (32)	£826.00	same as u/s	£950.00	N/P	N/P	£870.00	N/P	N/P	Road - £1156.33	N/P	25mm - £544.00	Inc 1.0m of pipe £960.00	
Long Sided (surfaced)	N/P	N/P	N/P	N/P	N/P	same as surfaced	N/P	N/P	N/P	£1572.00	N/P	N/P	N/P	N/P	N/P	Inc 1.0m of pipe £310.04	
EO Cost Pipe > 2.0m	Only over 10.0m	Only over 10.0m	£28.86 (u/s) & £46.98 (s)	£53/m (u/s) & £86/m (s)	Up to 12m (£47 to £368)	Over 18m - £30.19 to £109.31	£80/m (u/s) & £210/m (s)	£9.00 to £29.00/m	£53/m to £183/m	£117.00/m	N/P	N/P	£0.54/m to £94.49/m	N/P	£11.00/m to £236.00/m	£30.00/m to £265.00/m	
Contaminated Land																	
Short Sided (unsurfaced)	N/P	N/P	N/P	N/P	N/P	N/P	£600.00	EO Cost - £119.00	N/P	Not clear - £454.00+	N/P	N/P	£631.13	N/P	25mm - £378.00	N/P	
Long-sided (unsurfaced)	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	
Short-sided (surfaced)	N/P	N/P	N/P	N/P	N/P	N/P	£1,140.00	N/P	N/P	£932.00	N/P	N/P	Road - £1483.00	N/P	25mm - £559.00	N/P	
Long-sided (surfaced)	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	
EO Cost Pipe > 2.0m	N/P	N/P	N/P	£53/£86/m	N/P	N/P	£100/m & £230/m	£9.00 to £29.00/m	N/P	?	N/P	N/P	£4/m to £123/m	N/P	£19.00/m to £243.00/m	N/P	
EO Cost for Barrier Pipe	Ave £64.00	Ave £68.00	£12.83/m	£60/£90/m	£38 to £146/conn	N/P	£90/m (u/s) & £220/m (s)	£15.00/m	£13.00/m	£121.00/m	N/P	N/P	£3.46/m to £33.51/m	N/P	£15.00/m	N/P	
Summary of water connection costs																	
New Water Infrastructure Charge (1)	£185.00	£240.00	£187.50	£356.00	£423.93	£458.50	£140.00	£200.00	£155.00	£351.00	£98.00	£325.00	£566.00	£350.00	£329.00	£375.00	
Network Reinforcement Charge (2)	inc in (1)	inc in (1)	£0.00	inc in (1)	inc in (1)	Inc in the above £88.50	Inc in (1)	inc in (1)	Inc in (1)	Inc in (1)	inc in (1)	inc in (1)	inc in (1)	inc in (1)	inc in (1)	inc in (1)	
Total of (1) & (2)	£185.00	£240.00	£187.50	£356.00	£423.93	£458.50	£140.00	£200.00	£155.00	£351.00	£98.00	£325.00	£566.00	£350.00	£329.00	£375.00	
Income Offset Given	£415	£480	No	£839.00/dw	Yes - 91%	Yes - 88% of total scheme cost	Yes - (DADs approach)	Yes - as part of the requisition	Yes - 15%	Yes 15%/85%	Yes (£620/dw) - requisitions only	Yes	Yes	Yes	Yes < £100k - 70%	Yes - 90%	
Asset Payment to SLP	£415	£480	No	Yes - £839.00/dw	Yes - 20% of GAV	Yes - 88% of total scheme cost	Yes minus NC costs	Yes - minus NC costs	Yes	Yes - as above	Yes - minus NC costs	Yes - £612/dw - IC	Yes	Yes	Yes - As above	Yes	
Relevant Deficit Approach over 12 years available	No	No	No	No	No	No	Yes	Yes	No	No	No	Std Req cost £167/dw	Yes	Not clear	Yes >£100k - DADs	No	
Cost of Connection to Main (Barrier Pipe Excluded)	< 125mm dia £1875.00	< 125mm dia £1875.00	??		N/P	Not clear	Yes but no clarity on cost	£3285 (63 mm) to £30293 (335mm)	£6,000.00	Not clear	£6048 (100mm) to £8604 >100mm)	N/P	Not clear	Not clear	£1534.00 to £2898.00	£1080.00 to £2210.00	
Current Infrastructure Charge 2017/18	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	£365.48	£365.45	£365.45	£365.45	£365.45	£365.45	£361.00	
Increase/(Decrease)	-£180.45	-£125.45	-£177.95	-£9.45	£58.48	£93.05	-£225.45	-£165.45	-£210.45	-£14.48	-£267.45	-£40.45	£200.55	-£15.45	-£36.45	£14.00	
Discount on IC for reduced water consumption	Yes (105l/hd/day)	Yes (105l/hd/day)	No	Yes (Up to 90%) £36.00	Yes* - (up to 100%)	Yes (up to 100% @100l/hd/day)	No	Yes (up to 100% @110l/hd/day)	No	No	No	Yes - 10% @100 l/hd/d	No	Yes - up 30% @80l/hd/d	Yes - up to 50% @100/ hd/d	No	
IC Credit on sites that have had a prior use	Yes	Yes	N/P	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Possible but not clear	Yes	
Additional Charges, e.g EO on-site mains costs	No	No	N/P	No	No	Not clear	No	Yes	Yes	Differing rates apply	Yes but requires clarification		Not clear	Not clear	Not Clear	Not Clear	
Sewerage Infrastructure																	
Connection Charge (S107)	£411.00 to £25,564.00	N/A	£522.92	£758 to £2648.00	N/P	£16,461.50	£8500 to £11500	Not Clear and/or not Provided	Not Clear	N/A	Bespoke fee	N/A	N/A	N/A	N/A	N/A	N/A
New Sewerage Infrastructure Charge (3)	£335.00	N/A	£365.84	£423.00	£229.44	£471.00	£210.00	£550 <20 ; £765 > 20	£190.00	N/A	£736.00	N/A	N/A	N/A	N/A	N/A	N/A
Network Reinforcement Charge (4)	inc in (3)	inc in (3)	£0.00	inc in (3)	inc in (3)	Inc in the above 101	inc in (3)	inc in (3)	Inc in (3)	N/A	inc in (3)	N/A	N/A	N/A	N/A	N/A	N/A
Total of (3) & (4)	£335.00	N/A	£365.84	£423.00	£229.44	£471.00	£210.00	£765.00	£190.00	N/A	£736.00	N/A	N/A	N/A	N/A	N/A	N/A
Income Offset Given	Only for requisitions	N/A	No	Yes??	Only for requisitions	Only for requisitions (79%)	Only for requisitions	Only for requisitions	Only for requisitions	Only for 598 - capped at 15%	N/A	Only for requisitions - site must also have DPP - Income offset capped at £251.90	N/A	N/A	N/A	N/A	N/A
Asset payment as part of S104	No	N/A	No	No	No	No	No	No	Yes - 15%	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A
Current Infrastructure Charge 2017/18	£365.45	N/A	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	£365.45	N/A	£365.45	N/A	N/A	N/A	N/A	N/A	N/A
Increase/(Decrease)	-£30.45	£0.00	£0.39	£57.55	-£136.01	£105.55	-£155.45	£399.55	-£175.45	N/A	£370.55	N/A	N/A	N/A	N/A	N/A	N/A
Discount on IC for reduced/no SW discharge to sewer	Yes (85% - £276.25)	N/A	No	Yes (up to 90%) £42.00	Yes - (up to 100%)	Yes	No	No	Yes - up to 90%	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A
IC Credit on sites that have had a prior use	Yes	N/A	N/P	Yes	Not clear	Yes - Dwellings only	Yes	Not clear	Yes	N/A	Implied - further clarification req'd	N/A	N/A	N/A	N/A	N/A	N/A
Total Increase/Decrease	-£210.90	-£125.45	-£177.56	£48.10	-£77.53	£198.60	-£380.90	£234.10	-£385.90	-£14.48	£103.10		£200.55	-£15.45	-£36.45	£14.00	

Final Review 05/02/17 Final Review 05/02/18 Final Review 05/02/18 Final Review 05/02/18 AMR Cost - £76.00 Final Review 05/02/18 Final Review 06/02/18 Internal meter £230.50 Final Review 06/02/18 No AMR cost Final Review 02/02/18 Final Review 04/02/18 Final Review 28/02/18 Final Review 03/02/18 Final Review 03/02/18 Separate doc. for IC Final Review 03/02/18 Separate doc. for connexion charge calc. Final Review 03/03/18 Final Review 03/03/18

Key/Notes: N/P - Not provided, NC - Non-contestable costs, N/A - Not applicable, No WaSC/WoC has provided any clear indication of metering costs and/or what metering options (at reduced cost) are available. Limited amount of information provided when it comes to S185 Diversions.

Yorkshire Water have made it difficult to interpret how Infrastructure Charge are to be calculated - variable rate could apply. STW have not stated their charging arrangements what discounts will be given for sustainable water use/SuDS drainage. Anglian Water approach to IC credits contrary to Ofwat's Charging Rules.

MASTER SCHEDULE(S) OF WASC'S AND WOC'S COMPARISONS 2018 - 2019 AND 2020 - 2021

Charge	Northumbrian Water (111)	Yorkshire Water (119)	United Utilities (93)	Severn Trent (62)	Anglian Water (73)	Thames Water (63) (Version 2)	Southern Water (48)	Wessex Water (60)	South West Water (60)
Water									
Water Connection App Fee	£115	£122	£34	£95		£50	£110	£0	£96
25mm Service Connection inc Meter [unsurfaced]	£297(PE) & £359 (BP)	£893?	£454	≤5m - £649	≤5m - £483	Up to 1m - £500	≤3m - £290 - £348	£719	Exc Excav £166
25mm Service Connection inc Meter [surfaced]	Not Stated	?	£637	≤5m - £1036	≤5m - £483	Up to 1m - £1250	≤3m - £737		?
E/O Cost over 2.0m (Polyethylene) - U/S	£9/m	£29/m	£61/m	Not Stated	£32	£100/m	£29/m	£164/Connex	?
E/O Cost over 2.0m (Barrier Pipe) - U/S	£11/m	?	£68/m	£109/Conn	?	£110/m	£122/m	Not Stated	?
Building Water/Dwelling	Inc Sewage disposal £32	£43	£27.50	£84	?	Not Stated	Not Stated	£82	?
Water Infrastructure Network Reinf Capex (5yrs)	Not Stated	Not Stated	£40.7M	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Total New Connections (5yrs)	Not Stated	Not Stated	139,223	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Infrastructure Charge/Connection	£135	£70	£302	£395	£340	£140	£0	£160	£91
Legacy Water Infrastructure Charge	Not Applied	Not Applied	£302	£401	Not Applied	Not Applied	£397	Not Applied	£396
I/C for Dwelling Water Use of 110l/p/d	£0 @ 105l/p/d	Yes - Variable	£30	100%	£0	£0	-£230	£0	£0
Water I/C Credits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Offset per Dwelling	£0	£0	£751 W/O	£479	£400 W/O	£200	£335	£74	£439
Asset Payment to SLP	£0	£0	£0	£0	£0	£0	£0	£0	£0
Sewerage									
S107 Sewer Connection by WaSC		Variable			£17,388	<5m depth - £16,000	Not Stated	Not Stated	Variable
S104 Inspection Fee	2.50%	2.50%	2.50%	2.50%	2.5%?	2.50%	2.50%	2.50%?	Variable
S104 Surety	10%	10%	10%	10%	10%	10%	10%	10%?	10%
S104 Surety [Pumping Stations]	15%	10%	15%	10%	10%	10%	10%	10%?	10%
Pumping Station Telemetry	Not Stated	Not Stated	£6,755	£5,430	Not Stated	Not Stated	Not Stated	Adoption only - £1842	£3320 or £5314
Sewerage Infrastructure Network Reinf. Capex (5 yrs)	Not Stated	Not Stated	£29.6M	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Total New Connections (5yrs)	Not Stated	Not Stated	136,439	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Infrastructure Charge/Dwelling	£235	£190	£279	£292	£570	£210	£790	£250	£683
Legacy Sewerage Infrastructure Charge	Not Applied	Not Applied	£279	£401	Not Applied	Not Applied	£397	Not Applied	£396
Income Offset per Dwelling	£0		£0	£90	£0	£40	£225	£80	£67
Sewerage I/C Credits	Yes	Yes	Not Defined	Yes	Yes	Yes	Yes	Yes	Yes
Discounts on I/C's for SuDS	Yes - £185 if no SW to sewer	Max - £145	£28	75 - 100%	£0	£0	£0	Yes - IC reduced to £126 & further reduction to £25 if no SW to sewer	£0
150mm pipe @2.5m in Unmade Ground - Const Cost	£347	Not Stated	£485	Not Stated	£483	£630	£367	£641	£321
Water Only Companies	Bristol Water (51)	Bournemouth Water/SWW	South Staffs & Cambs (54)	South East Water (78)	Essex & Suffolk	Portsmouth Water (37)	Affinity Water (56)	SES Water (33)	Hartlepool Water
Water Connection App Fee	£0	See South West Water	£90	Variable	£115	£65?	£157	£212	See Anglian Water
25mm Service Connection inc Meter [unsurfaced]	£452	"	£301	£472	£243	£359	≤1m - £556?	£341	"
25mm Service Connection inc Meter [surfaced]	?	"	£837	£645	Not Stated	£435?	≤1m - £1058?	£625	"
E/O Cost over 2.0m (Polyethylene) - U/S	£103/m	"	£156/m	£29/m	£9/m	Not Stated	Not Stated	£61/m	"
E/O Cost over 2.0m (Barrier Pipe) - U/S	£124/m	"	£159/m	£38/m?	£11/m	Not Stated	Not Stated	£65/m	"
Building Water/Dwelling	?	"	Not stated	Not Stated	Not Stated	£152?	Not Stated	Not Stated	"
Water Infrastructure Network Reinf Capex (5yrs)	Not Stated	"	Not stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	"
Total New Connections (5yrs)	Not Stated	"	Not stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	"
Infrastructure Charge/Connection	£256	"	£381	£521	£140	£322	£375	£369	"
Legacy Water Infrastructure Charge	Not Applied	"	Not Applied	£400	Not Applied	Not Applied	Not Applied	Not Applied	"
I/C for Dwelling Water Use of 110l/p/d	No	"	Yes - £229 - If 100l/p/d	??	£0 @ 105l/p/d	£161 if ≤100l/p/d	£295	105l/p/d - £314; 80l/p/d - £258	"
Water I/C Credits	Yes	"	Yes	Yes	Yes	No	Yes	Yes	"
Income Offset per dwelling	£706	"	£599	£513	£0	£467	£420	£165	"
Asset Payment to SLP	£0	See South West Water	£0	£0	£0	£0	£0	£0	See Anglian Water

Notes: 1. Those figures accompanied by a question mark have been difficult to accurately ascertain as within the main body of the related charging arrangement text there is a lack of clarity and consistency. 2. Every effort has been taken to ensure cost/charge comparisons are based on a strict like for like basis. 3. When compared to the pre-April 2018 charging arrangement/costs there has been significant change in the 'balance' favouring the commercial interest of all Water & Sewerage Companies - especially when it comes to much reduced income offset. 4. Only United Utilities have disclosed the intended in-consequence infrastructure over the next 5 years, likewise, the anticipated number of 'connections'. It is also difficult to find this information in the Ofwat final determination for each Company. Therefore, UU excepted, it is impossible to reconcile whether the total number of housing-related connections align with yearly/cumulative Local Plan housing numbers. 5. The first observation is the significant variation and lack of consistency when determining costs under each cost heading. 6. South Staffs factor a 3% water leakage allowance into their network capacity assessment and reflect this in their eventual infrastructure specification/cost.

7. Wessex Water will not accept attenuation ponds for adoption under S104 - this is contrary to the guidance issued but Water UK on behalf of Ofwat as part of the Adoption Codes. Wessex have also introduced a further charge hearing, namely, network enhancement. 8. Wessex Water have introduced caveats retained the right to restrict development and the timing thereof through the planning process. 9. Southern Water have introduced caveats relating to the point of connection that will result in developers incurring significant additional off-site costs. 10. Severn Trent have introduced caveats regarding SuDS infrastructure. 11. Northumbrian Water have confirmed in their charging arrangements documentation that from April 2020 Developers will experience a considerable increase in cost. See Para 1 Page 4. 12. United Utilities have capped their IC credit at zero.



Technical & Development
Services Holdings Ltd.
West End House,
60 Oxford Street,
Wellingborough,
Northants,
NN8 4JJ

Tel: 01933 423720
Mob: 07939 595778
Email: enquiries@t-d-s.com
Web: www.t-d-s.com



Stephen Wielebski
Principal Partner & Consultant
WA Consultancy Limited
3 Carmarthen Close
Callands
Warrington
Cheshire
WA5 9UT

Email: sew@waconsultancy.co.uk
Company Reg: 626981