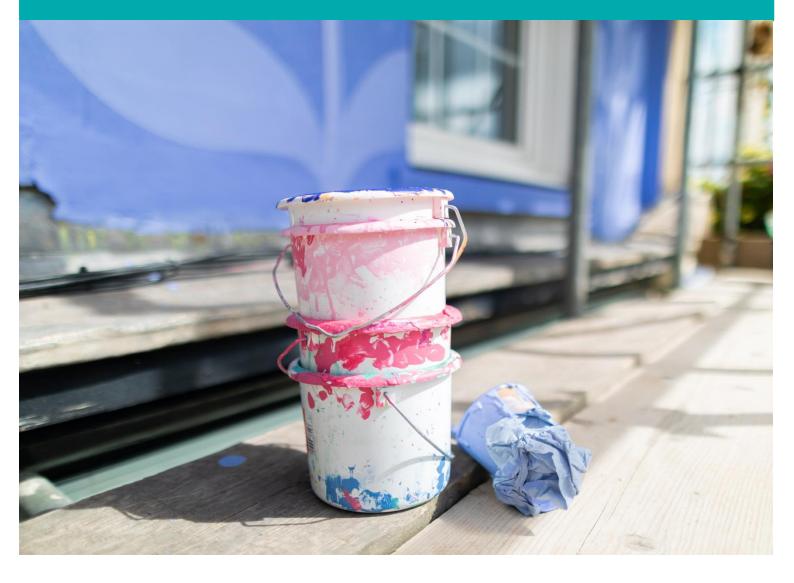
Charging Arrangements for New Connection Services

1 April 2021 to 31 March 2022

New development and infrastructure charges



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CHARGING ARRANGEMENTS FOR NEW CONNECTION SERVICES

1st April 2021 – 31st March 2022

1 Introduction

This charging arrangements document contains the new connection service charges applicable to all customers, developers, retailers, Self Lay Providers (SLPs) and New Appointments and Variations (NAVs) for the year commencing 1st April 2021.

This document for new connection services incorporates the Charges Scheme for infrastructure charges. A summary of the publications accompanying this Charging Arrangements for New Connection Services is provided below:

Charges Scheme	Wholesale Charges Schedule	Charging Arrangements for New Connections
Our charges to all domestic customers for the supply and billing of water.	Our wholesale charges to licensed retailers supplying eligible non- household (business) premises; and the wholesale element of our charges to household customers for the supply of water, and to New Appointments and Variations (NAVs).	Our charges for setting up new water supply connections applicable to developers, retailers, households and businesses

Annual Charges Publications

Statement of Assurance

A statement of assurance provided by the Bristol Water plc. Board that our Charges Scheme, Wholesale Charges Schedule and Charging Arrangements for New Connection Service are compliant with the Ofwat charging rules.

This charging arrangement document reflects the current regulatory approach to charging for new connection services. The Water Act 2014 has allowed Ofwat to change the current charging framework to a new framework. Ofwat published its "Charging Rules for New Connection Services (English Undertakers)" in August 2017, with the latest version issued in March 2020.

Ofwat's latest published rules are available at:

www.ofwat.gov.uk/publication/charging-rules-for-new-connection-services-englishundertakers-from-april-2020/ These rules expect us to follow four overarching principles:-

- Fairness and affordability;
- Environmental protection;
- Stability and predictability; and
- Transparency and customer-focused service

In preparing these indicative charges we have taken steps to ensure that the present balance of charges between developers and other customers (bill payers) prior to implementation of these charges are broadly maintained.

https://www.bristolwater.co.uk/business-developers/charges-regulations/Code for Adoption Agreements

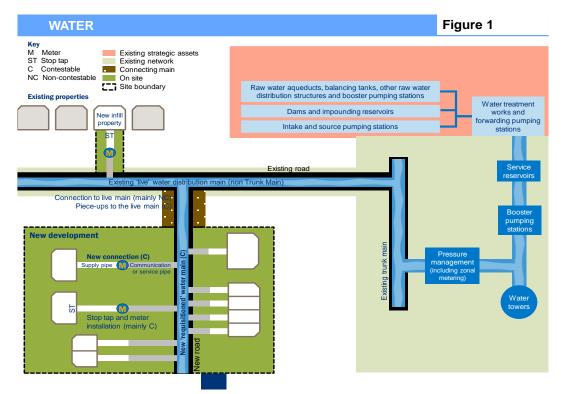
Under the powers of the Water Industry Act 1991 Ofwat initiated a Code for Adoption Agreements effective from November 2017. Under this code Water Companies are required to Produce standard procedures and agreements to enable infrastructure provided by others to be adopted by the water company.

Since 2017 water companies, together with Water UK, have been developing these documents in consultation with Self Lay Providers.

Ofwat has approved these documents and with an introduction date of 1st January 2021 although the majority of the requirements are already been introduced across the industry.

2 Our Charging Approach

Figure 1 below identifies the different elements of work that are required to provide a new water supply



C - Contestable Works which are able to be undertaken by others

NC – Non Contestable Works which are to be undertaken by Water Company only

Areas of costs we incur are split into three categories:

• Site – Specific (green and brown shaded areas above)

Site specific works refers to work on, or the provision of, water structures or facilities located on a development up to a point on the existing network where the connecting pipework is of nominal bore internal diameter no larger than that of our existing network.

The costs of the water mains installed for these works are recovered from developers.

Site costs includes design administration fees that cover the non-design costs of administering and checking designs (whether produced by Bristol Water, Self Lay Providers or their design partners) These are charged on a sliding scale depending on development size and are refunded if a project proceeds within 12 months. Design costs are included within the costs that we recover for installing on-site mains. Where Self Lay Providers ask us to supply a design service, this is charged for separately as it is a contestable activity in this market. The asset payment that Self-Lay Providers receive from us includes our design overhead costs charged to other developers.

• Network Reinforcement Works (grey area shaded above)

Network reinforcement works refers to works upstream of the development that is required as a consequence of the development and not to address any existing deficiencies in the network. The costs of these works are recovered by means of infrastructure charges payable by developers for each domestic connection.

• Resources and Treatment (pink area shaded above)

Resources and Treatment costs are funded through general charges to customers and are not recovered through new connection charges.

3 General Information

For information relating to development enquiries, please see our developer's charter on our website:<u>www.bristolwater.co.uk/business-developers/charges-regulations/#developer-charter</u>

Charges incurred for development sites can be a combination of charges. As a minimum all sites will require either a connection to an existing or a newly provided main. Additional requirements may be new mains and major connection and diversions.

3.1 Record Plans (free)

The provision of a copy of our mains record plan in Geographical Information System (GIS) format for proposed developments is free of charge.

3.2 New Mains and Major Connections

There are three options available to developers, new mains can either be laid by Bristol Water (requisitioned) or a Self-Lay Provider. The decision lies with the developer. The third option for developers is to service the site by a licensed NAV (New Appointment and Variation). This is where the onsite mains and connections (infrastructure) for a site not previously served by Bristol Water is designed, provided, owned and maintained by a NAV, and with a bulk supply of water provided to the NAV by Bristol Water.

Further information on the options available to customers for new connections infrastructure is on our website: <u>www.bristolwater.co.uk/business-developers/</u>

Initial feasibility checks, to determine how a development can be supplied, are free of charge unless significant investigation is required, in which case the fees in table 1 apply. Enquiries requiring the design and costing of new mains installations or major service connections for non-domestic purposes including self lay mains and requisitioned mains applications as well as preliminary designs produced for budget purposes only, are also subject to the fees in table 1.

Design administration fees are charged on a sliding scale depending on development size and are refunded if a project proceeds within 12 months of application. A fee for a re-design is not levied but will impact the time taken to deliver the full design.

Design administration fees in 2021/22 will remain the same as in 2020/21.

Design Administration Fees	Previous Fee 2020/21	New Fee 2021/22
Residential	-	
<10 houses	£300+VAT	£300+VAT
11-25 houses	£400+VAT	£400+VAT
26-75 houses	£600 +VAT	£600 +VAT
76-150 houses	£900+VAT	£900+VAT
151-300 houses	£1,200+VAT	£1,200+VAT
>300 houses	£1,500+VAT	£1,500+VAT
Commercial		
< 0.5 litres/sec	£300+VAT	£300+VAT
0.6-2 litres/sec	£500+VAT	£500+VAT
2.1-5 litres/sec	£800+VAT	£800+VAT
5.1-10 litres/sec	£1,000+VAT	£1,000+VAT
10.1-15 litres/sec	£1,500+VAT	£1,500+VAT
>15 litres/sec	£2,000+VAT	£2,000+VAT

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If the site is a combination of residential and commercial/industrial only a single fee is payable: whichever is the greater out of the fee that corresponds to the residential element of the development and the fee that corresponds to the commercial/industrial element of the development. Fees may be taken into account when calculating the payments required in relation to any resulting main laying. These fees are due at the time of application.

3.3 Design Fees to Self-Lay Providers

Design fees are charged separately to a Self-Lay Provider where the Self-Lay Provider requests that a design is undertaken by Bristol Water. This is because Self-Lay Providers have the option to undertake the design themselves. The fee is charged at a set rate of **£415+VAT**, is non-refundable, and is in addition to the Design Administration Fee. The fee covers the technical element of producing a design for on-site mains up to 300mm internal diameter and only applies where Bristol Water produces a design. The design fee for the exceptional circumstances where larger mains are required will be on a quotation basis.

3.4 Requisition Charges and Income offsets

Prior to 1 April 2020

The requisition charge is the fee levied for mains that are requisitioned for a development site, i.e. the Developer pays Bristol Water to lay mains on the development site. Up to 31st March 2018 the requisition charge was calculated based on the cost of mains to be installed on the site together with the expected water charges income to be recovered over a 12 year period. The level of charge was calculated using the DAD's (Discounted Aggregate Deficit) calculation. This "discount" is commonly known as the income offset and was offset against mains installations only.

Charges for site specific mains (requisitioned) and other charges are now based on the schedule of rates shown in section 4 below.

The average recovered charges from developers in 15/16 and 16/17 showed we recovered 15% requisition charges (using DAD calculations) after deducting the income offset, this meant we provided developers with an 85% discount to the cost of on-site mains calculated up until 31st March 2020.

Income Offset payments were introduced from 1st April 2020, and in 2021/22 the Income Offset will continue to apply to all new Bristol Water customers. This means that the level of Income Offset is payable back to the new customer once the new connection is made. The net amount represents the Requisition Charges. We show the two elements separately as the income offset is available irrespective of the competitive option that developers may

choose, including where Bristol Water does not undertake on-site work (and under the legislation there is no requisition).

The benefit of this approach is that all new customers will benefit from the income offset . This will provide developers with greater certainty and shorten the time necessary for all, including self lay providers, to understand development costs.

This approach is available to New Appointments and Variations (NAVs) and self lay providers (SLPs) on an equivalent basis as other developments. Our approach benefits the development of competition in the developer services market, compared to the alternatives of retaining the previous requisition "DAD" calculation.

Where Bristol Water adopts on site assets in respect to an agreement under section 51A of the Water Industry Act 1991, previously an Asset Payment was made, calculated on the same basis as the income offset, however from 1st April 2020 these site assets are adopted at nil cost with an Income Offset applied on connection of properties. Requisition agreements reached before 1st April 2020 will continue. For NAVs the income offset was deducted from the bulk supply charges in the first year of supply. We will require information from self lay providers and NAVs on the characteristics of the development.

From 1 April 2020

From 1 April 2020, income offset is applied as a payment that offsets the infrastructure charge that applies to each newly connected property. There will be an income offset payment to each newly connected property, whether we carry out the connection, an SLP makes the connection, or a property is added according to the build schedule of a NAV. The income offset payment will be made when the infrastructure charge is due on connection, and the income offset payment less the infrastructure charge will result in a net infrastructure payment.

Developers and SLPs can choose to fix the value of the infrastructure charge/income offset and net infrastructure payment at the time of the development / adoption agreement.

3.5 Developer Payments

These fees are levied on Self Lay Providers (SLPs) for Non Contestable (work which has to be undertaken by Bristol Water) or Contestable work (work which can be undertaken by an SLP) that an SLP chooses not to do and is undertaken by Bristol Water. Developers payments are to be paid prior to works being undertaken by Bristol Water.

The fee is based on fixed rates as set out in this document.

3.6 Asset Payments

Asset payments no longer exist from any scheme started from 1st April 2020 but will continue for all existing schemes whereby an existing Self Lay Agreement is in place. Upstream reinforcing mains as a consequence of a development are recovered through Infrastructure Charges which apply to all new developments, including where a Self Lay Provider has been engaged by the Developer. See figure 1 on page 5 for illustration of these components.

Where a scheme provides for an upsized main for future development the apportioned cost of upsizing will be funded from Infrastructure Charges and not borne by the Developer through other new development charges. Where an SLP is required to lay these mains the upsizing cost of providing the main will be paid in full to the SLP.

3.7 Diversions

Diversions are required whereby works proposed affect Bristol Water existing infrastructure and there is a requirement to divert the infrastructure.

Bristol Water's preference is to avoid diversions where possible and for designs to be amended to avoid the requirement for a diversion.

Basic advice on the requirement for a mains diversion is provided free of charge.

The design and costing of simple mains diversions (internal diameter <300mm) are subject to a fee of **£360+VAT**. This cost is based on our cost of providing this service.

Payment should be included with the enquiry. Further charges may be payable if certain investigations are required.

Fees relating to the provision of a preliminary design and budget estimate for the diversion of larger mains (generally those over 300mm in internal diameter) are determined on a case by case basis, following receipt of the request and relevant details from the developer. Such fees start at **£2,500+VAT**, but an estimate will be provided at enquiry stage.

Diversion of mains and services are charged at full cost with the estimated cost paid as a deposit and adjusted once the final account has been calculated.

Diversions below an estimated **£5,000** are offered at a fixed cost and only revisited if the scope of work required changes substantially.

4 Site - Specific Water Mains Charges

As shown in figure 1 these charges apply to new site - specific water mains. These mains are installed to serve a site and are dependent on pipe material, size and surface type. The

mains costs below are per metre and include labour, plant, materials and overheads and before any income offset is applied.

4.1 Mains

Description	Diameter (mm)	Customer Excavation (£/metre)	Verge/Unmade Ground/Field (£/metre)	Unmade / Developmen t Site (£/metre)	Footway (Rigid) (£/metre)	Road (Type 3/4) (£/metre)
PE Pipe Standard	63	£19.17	£60.08	£57.85	£150.53	£201.38
PE pipe Barrier	63	£25.88	£66.79	£64.56	£157.25	£208.10
PE Pipe Standard	90	£20.03	£60.94	£58.71	£151.39	£202.25
PE pipe Barrier	90	£27.03	£67.94	£65.71	£158.40	£209.25
PE pipe Standard	125	£24.46	£72.14	£69.79	£170.68	£226.79
PE pipe Barrier	125	£28.95	£76.63	£74.27	£175.16	£231.28
PE pipe Standard	180	£33.64	£87.30	£84.71	£204.07	£267.20
PE pipe Barrier	180	£42.08	£95.74	£93.15	£212.51	£275.64
PE pipe Standard	250	£51.21	£124.75	£121.87	£274.80	£345.66
PE pipe Barrier	250	£63.22	£136.75	£133.88	£286.80	£357.66

Type 3/4 road is vast majority of roads, for example side streets etc.

The above rates will cover the vast majority of scenarios. Any work not covered above will be priced on a case by case basis. For Example type 1/2 roads with reinforced concrete road construction and whereby existing surfacing material contains coal tar with increased disposal costs.

4.2 Thrust Blocks

Description (Concrete)	Diameter (mm)	Customer Excavation (each block)
Thrust	63/90	£152.96
Blocks		
Thrust	125	£183.92
Blocks		1105.52
Thrust	180	£307.76
Blocks		1307.70
Thrust	250	£493.62
Blocks		£495.02

Thrust blocks are required where restraint is required on mains connections to prevent movement of the pressurised mains prior to backfilling and reinstatement. These are total costs.

4.3 Connections to Existing Site Mains (diameter is existing main)

Description	Diameter (mm)	Customer Excavation Required (each connection)	Unmade Ground (each connection)
In-Line Connection	63/90	£265.53	£341.23
In-Line Connection	125	£275.44	£353.09
In-Line Connection	180	£359.46	£450.58
In-Line Connection	250	£429.33	£525.29

This is where a connection to an existing site main is required and will consist of a fused connection to the main. Total cost includes up to 2 metres of pipe. Additional cost of pipe will be charged under section 4.1.

4.4 Connections to Existing Mains where cut out or under pressure connection

Description	Diameter (mm)	Customer Excavation (each connection)	Verge/Unmade Ground/Field (each connection)	Footway (Rigid) (each connection)	Road (Type 3/4) (each connection)
Connection	63/90	£578.72	£929.13	£1543.99	£1858.22
Connection	125	£598.14	£949.18	£1593.19	£1910.64
Connection	180	£687.38	£1039.44	£1716.45	£2043.61
Connection	250	£876.39	£1700.78	£2587.52	£3013.81

This is where a connection to an existing off-site main is required and will include either an under-pressure connection or a cut out. Total cost includes up to 2 metres of pipe. Additional cost of pipe will be charged under section 4.1.

4.5 Fittings

Description	Diameter (mm)	Customer Excavation Required (fitting)	Verge/Unmade Ground/Field (fitting)	Footway (Rigid) (fitting)	Road (Type 3/4) (fitting)
Fittings	63/90	£222.02	£322.57	£435.79	£528.77
Fittings	125	£235.79	£336.26	£464.86	£543.62
Fittings	180	£261.40	£363.80	£495.67	£574.90
Fittings	250	£306.30	£420.74	£566.98	£648.29

Fittings includes Air Valves, Hydrants, Washouts, Valves or Meters and includes chamber and cover.

These are total costs.

4.6 Mains Pressure Test including third party verification

Description	Diameter (mm)	Customer Excavation (pressure test)
Pressure Test	63/90	£335.51
Pressure Test	125	£335.51
Pressure Test	180	£404.78
Pressure Test	250	£514.30

All mains that are laid by Bristol Water or adopted by Bristol Water require pressure testing. Third Party verification is not undertaken by Bristol Water but by an accredited company. These are total costs per test.

4.7 Mains Chlorination including flushing, sampling and analysis

Description	Diameter (mm)	Customer Excavation (Chlorination)
Chlorination	63/90	£664.28
Chlorination	125	£664.28
Chlorination	180	£664.28
Chlorination	250	£664.28
Sampling and analysis where not carried out as part of chlorination per sample		£163.13

All mains that are laid by Bristol Water or adopted by Bristol Water require to be chlorinated. Analysis of samples is to be undertaken by an accredited testing house.

These are total costs per chlorination.

4.8 Trial Holes

Description	Verge/Unmade Ground/Field	Footway (Rigid)	Road (Type 3/4)
Trial Hole < 1 m3	£355.21	£566.76	£699.24
Trial Hole > 1 m3	£268.16*	£499.41*	£625.10*

* Price is per cubic metre.

These are total costs

4.9 Other	Unit	Price
ChargesActivity		(£/unit)
Excavating in Rock/Concrete	Cubic metre	£127.10
Granular Fill E/O	Cubic metre	£78.51
Traffic lights 2 way	Day	£26.06
Traffic lights 3 way	Day	£36.61
Traffic lights 4 way	Day	£62.10
Traffic Plan	Number	£153.50
2 Man Stop and Go	Day	£654.47
Lane Closure up to 40 mph 1 day	Day	£479.83
Lane Closure up to 40 mph additional days	Day	£83.26
Lane Closure up to 50 mph 1 day	Day	POA
Lane Closure up to 50 mph additional days	Day	POA
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 20 signs	Week	£516.60
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 20 signs additional week	Week	£213.80
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 40 signs	Week	£867.11
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 40 signs additional week	Week	£400.54

4.9 Other	Unit	Price
ChargesActivity		(£/unit)
Road Closure Diversions		
advance warning notices (site		
specific) including installation	Week	£1147.15
and maintenance checks - up		
to 60 signs		
Road Closure Diversions		
advance warning notices (site		
specific) including installation	Week	£587.28
and maintenance checks - up		
to 60 signs additional week		
Topsoil Strip including store	Square metre	£4.39
and reseed		
Temporary stockproof fencing	Metre	£9.47
3 Strand Post and wire fencing	Metre	£7.26
Post and Rail Fencing	Metre	£16.48
Pin and Tape Demarcation	Metre	£4.66
Crossing point including gate	Number	£503.36
In Situ Grade C20 or C30	Cubic metre	£197.07
concrete		
Foam Concrete Grade C4	Cubic metre	£166.77
E/O Coloured Tarmac	Square metre	£41.95
E/O Anti Skid Surfacing	Square metre	£232.10
Continuous road marking lines	metre	£16.53
Intermittent road marking	metre	£16.53
lines	metre	110.55
Road marking letters and	Number	£156.57
shapes		E150.57
Road studs	Number	£34.92
Re-lay kerb	metre	£50.80
Re-lay edging	metre	£38.74
Marker post and plate	Number	£66.36
Reinstatement of land drains	Number	£231.20

Traffic lights will be required for works in existing highway and will be in agreement with the Local Highway Authority.

Traffic Plans are required to be submitted to the Local Highway Authority where complicated works or a road closure is required.

Type of fencing required will be dependent on the land where main-laying is required.

4.10 Watercourse crossing including reinstatement

Description	Diameter (mm)	Price (crossing)
Watercourse Crossing	63/90	£2465.66
Watercourse Crossing	125	£2645.11
Watercourse Crossing	180	£2735.94

Watercourse Crossing 250	£2975.12
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These are total costs.

4.11 Road Closure Fees & Highway Permits

Where mains of services are required to cross the public highway the local Highway Authority may dictate that the work will require a road closure to ensure the safety of the general public and the workforce undertaking the work. Road closure charges vary from each local authority. In certain circumstances if there is a road closure in the location we may be able to undertake the work at the same time. We will advise in advance if a road closure is required and the minimum notice period that the local authorities require is 3 months. A list of road closure fees by council is as follows:-

Bath & North East Somerset Council

Temporary Orders (up to 18 months) = Minimum £1,326 including advertising

Bristol City Council

Temporary Traffic Regulation Order = £2040 (Plus £801 per additional street) Includes extra cost if legal/advertising cost amount to more. E.g. Large Road Closure.

Somerset County Council

Temporary Full Order (up to 18 months) = £1250 Cost includes administration and production of signing schedule and diversion route. For placing adverts in local paper.

North Somerset Council

Temporary Order (up to 18 months) = £1250

Urgent Notice (5 day or 21 day maximum) = \pm 550 Cancellation fee = \pm 250

South Gloucestershire Council

Temporary Order (Up to 28 Days) = £1914.50 Temporary Order (Over 28 Days) = £3190.40 5day notice = £253.30

Wiltshire Council

Temporary Traffic Order = £1473 **Gloucestershire County Council** Temporary Traffic Order = £1129.50 Include these costs below if:

- £287 for deferral of start date
- £287 for any extension to closure

• £150 per any additional road on same application

In addition to road closure fees, all of the Councils listed above were due to implement Permit schemes under the Traffic Management Act by 1 April 2020. Developers will also pay the costs of us obtaining the Highways Permits, and any additional costs that arise where this is driven by developer requirements.

The Schedule of fee are listed below. These rates are liable to change.

South Gloucestershire / North Somerset Permit Scheme Fees Table

	Main Roads			Minor Roads
Reinstatement category of street	0, 1 and 2	3 ar	nd 4	3 and 4
Street designated as traffic sensitive or not	All streets	Traffic sensitive at some times/locations		Non traffic sensitive at any time or location
Time and location of activity	Any time and location	Any part within traffic sensitive times / locations	Wholly within non traffic sensitive times / locations	Any time and location
Provisional Advance Authorisation	£105*	£105	£75	£75
Major Works - over 10 days and all major works requiring a traffic regulation order	£240*	£240	£150	£150
Major works - 4 to 10 days	£130*	£130	£75	£75
Major works - up to 3 days	£65*	£65	£45	£45
Standard Activity	£130*	£130	£75	£75
Minor Activity	£65*	£65	£45	£45
Immediate Activity	£60*	£60	£40	£40
Permit Variation	£45	£45	£35	£35

* A discount (30%) will be applied where works are undertaken wholly outside of traffic sensitive times on Traffic Sensitive Streets. See Above. Note: That in line with the Permit Authorities policies and procedures, the above fees will be reviewed on an annual basis.

Lower fees or discounted fees will be given in the following circumstances:

i. Where several Permit applications for works that are of part of the same project but which are carried out on more than one street, but on a scale comparative to one street, are submitted at the same time.

- **ii.** Where several Promoters are working within the same site submit applications at the same time. Where the Highway Authority Promoter is collaborating with Statutory Undertakers, those Undertakers will be eligible for the discount.
- iii. Where works are undertaken wholly outside of traffic sensitive times on Traffic Sensitive Streets.
- iv. A discount may be applied where it is demonstrated that an activity provides significant economic benefit to the local authority or Council. For instance supplies for a new development, or where it is demonstrated that a network investment programme is being undertaken to meet customer demand.

PERMIT VARIATION FEES

£45 for activities on category 0, 1 & 2 streets, and on 3 & 4 traffic sensitive streets.

£35 for activities on category 3 and 4 non traffic sensitive streets.

If a Permit variation moves an activity into a higher fee category, the Promoter will be required to pay the difference in Permit fee.

No fee is payable if a Permit variation is initiated by the Permit Authority. The review will take into account the on-going Scheme costs and inflationary rates.

The fees will not exceed the maximum charges as set by the DFT.

All Promoters will be notified of any changes to the fees.

Gloucestershire County Council

	Road category		
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive	
Provisional Advance Authorisation	£90	£59	
Major Works - over 10 days and all major works requiring a traffic regulation order	£183	£97	
Major works - 4 to 10 days	£92	£49	
Major works - up to 3 days	£46	£25	

	Road category	
Standard Activity	£112	£56
Minor Activity	£57	£29
Immediate Activity	£52	£25
Permit Variation	Not Published	Not Published

Bristol City Council

	Road category		
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive	
Provisional Advance Authorisation	£49	£35	
Major Works	£111	£69	
Standard Activity	£60	£35	
Minor Activity	£30	£21	
Immediate Activity	£28	£19	
Permit Variation	£21	£17	

Bath & North East Somerset Council

	Road category		
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive	
Provisional Advance Authorisation	£32	£23	
Major Works	£72	£45	
Standard Activity	£39	£23	
Minor Activity	£20	£14	
Immediate Activity	£18	£12	
Permit Variation	£14	£11	

Somerset County Council

	Road category		
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive	
Provisional Advance Authorisation	£92	£60	
Major Works - over 10 days and all major works requiring a traffic regulation order	£186	£98	

	Road category	
Major works - 4 to 10 days	£114	£57
Major works - up to 3 days	£58	£30
Standard Activity	£114	£57
Minor Activity	£58	£30
Immediate Activity	£54	£25
Permit Variation	£45	£35

Wiltshire Council

	Road category	
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£32	£23
Major Works - over 10 days and all major works requiring a		
traffic regulation order	£72	£45
Major works - 4 to 10 days	£72	£45
Major works - up to 3 days	£72	£45
Standard Activity	£39	£23
Minor Activity	£20	£14

	Road category	
Immediate Activity	£18	£12
Permit Variation	£14	£11

4.12 Land Entry Costs

Where mains and/or services are required to be laid in third party land. These costs would include potential compensation costs to land owners for loss of crops etc. We estimate a value of £10/metre for mains and services laid. The charge levied will be the actual costs incurred.

4.13 Archaeological/Ecological Charges

These fees become payable when mains and/or services are due to be laid in land that is of Archaeological/Ecological importance. At the design stage we investigate any potential route issues and engage Archaeologists/Ecologists as necessary. Reports start at around £1,000 but could include recommendations that require a watching brief etc. Whilst excavation is on-going we have an obligation to report any Archaeological finds. Both reports could have an impact on the timing of the works and increase the costs payable to Archaeologists/Ecologists.

4.14 Exceptional Items

These are items that are priced on a case by case basis as there are too many variables to give standard charges, some examples below:-

Rail Crossings – Mains to be laid either over or under railways.

Bridge Crossings- Mains to be laid in bridge decks

Archaeological Areas – Mains laid through Archaeological sites where excavation maybe required by hand under a watching brief.

Ecological Areas – Mains laid in ecological areas where protection of species maybe required.

Motorway Crossings – Mains laid either over or under motorways, Possibility to lay in existing culverts.

River Crossings – Mains laid either under rivers or over on pipe bridges.

Large Diameter Mains Connections – Mains connections to large diameter trunk mains depending on work required to isolate main.

Non Open Cut Mains Installation – Drilling long lengths of mains, improving efficiency of main laying and reducing costs.

5 Site-specific Connection Charges (Services)

These charges apply to new connections except where customers are replacing existing lead or galvanised pipes. In these two cases the connection to the company's mains may be free. Further explanation can be found in the booklet. Copies of the booklet explaining these schemes can be obtained by calling the number below or it is also on our website at <u>www.bristolwater.co.uk/about-service-connections</u> On site connection charges are due prior to connection being made.

The procedure for new connections is described in detail in our New Connections Information pack, copies of which can be obtained by contacting the New Supplies Department on 0345 602 8022 or at <u>www.bristolwater.co.uk/new-supplies-new-mains/</u>.

Payment must be received before a connection can be made. The following prices will apply for most new 25mm or 32mm outside diameter pipes, connected to mains up to 200mm internal diameter. However, for connection sizes out of this range, not included in the listed examples at the end of this document we will provide an estimate, and if below £5,000 will be as a fixed cost.

All charges include the cost of the Company supplying and fitting the meter. VAT at the current rate will be added to charges where applicable. All the charges have been calculated based on the cost of the Company supplying these services.

A maximum of six separate connections are allowed in any one trench.

Inspection visits due to work not being up to standard or work not being ready when an inspection has been booked will incur an extra charge of £91. Charges will also be payable in the event that connection work cannot be made on the scheduled date due to the development site not being sufficiently prepared (abortive visit charge of £91). This may be levied for each connection, which cannot be completed on this date.

The preferred method of providing a new connection is via a boundary box (housing the stoptap and meter) installed in the footpath or, alternatively, on private property, less than one metre inside the boundary with the highway in which the main is laid. In some circumstances, but only with the prior agreement of the Company, boundary boxes may be acceptable in other locations. The alternative method is via a wall mounted box at the front of the property. It should be in a position which gives a meter reader unimpeded access, otherwise it will require a remote radio meter to be fitted by Bristol Water. In all cases, the meter must be in a location which can be safely accessed at all times by a meter reader or Company employee.

Bristol Water does not accept internal meters. However, when circumstances dictate, at the Company's discretion, meters may be provided at a location other than outside the property at a cost to be determined at the time.

There are three common examples of new connections, tapping only (whereby a connection to the main only is required), tapping plus service pipe, and tapping plus service pipe and boundary box. The requirements and costs associated with each option as follows. The full charging schedule for mains and services is contained in the charging spreadsheet available on the Bristol Water website <u>www.bristolwater.co.uk/business-developers/charges-regulations/</u>

5.1 Tapping only

Tapping only applies principally to connections to mains in site roads and in private land such as fields and other un-surfaced areas.

The Customer provides and fits a boundary box or wall mounted box and excavates and lays the service pipe¹ and trace wire to a point 150mm above the main. The company exposes and taps the main and fits the meter. The customer then backfills and reinstates the surface as appropriate.

Costs:	£
Basic cost	£140.55
Each additional service in same trench (Maximum 6)	£101.26
Additional Charge if wall mounted box not readily accessible	£32.37

5.2 Tapping plus service pipe

Tapping plus service pipe applies principally to connections to mains in adopted and other existing surfaced roads (including footpaths, verges etc) where a boundary or wall mounted box is to be installed on private land. **The customer** provides and fits a boundary box or wall mounted box and excavated and lays the service pipe and trace wire to the highway boundary leaving sufficient pipe and trace wire to be connected to the main. **The Company** excavates to the main, lays the service pipe and trace wire, taps the main, backfills, reinstates and fits the meter.

Costs:	£
Basic Cost including first metre of excavation and pipe	£768.61
Each additional service in same trench (maximum 6 in total)	£101.26
Additional cost per metre of standard pipe	£134.30
Additional cost per metre of barrier pipe	£136.19
Additional cost per metre for each additional standard PE service in same trench	£5.77
Additional cost per metre for each additional barrier pipe service in same trench	£7.67
Additional charge if wall mounted box not readily accessible	£32.37

¹ Service Pipe – this is the length of pipe between the Company's main and the property. It is usually in two parts: the Company service pipe (known as the communication pipe), which normally runs from the main to the highway boundary, and the customer service pipe (known as the supply pipe) which is the remainder.

5.3 Tapping plus service pipe and boundary box

Tapping plus service pipe and boundary box applies principally to connections in adopted and other surfaced roads (including footpaths, verges etc). **The customer** excavates and lays the service pipe and trace wire to the highway boundary, leaving at least one metre of pipe and trace wire to be connected to the main. **The Company** provides and fits a boundary box, excavates to the main, lays the service pipe and trace wire, taps the main, backfills, reinstates and fits the meter.

Costs:	£
BW fits box and taps main, including first metre of pipe	£929.54
BW fits box and taps main in contaminated land, including first metre of pipe	£960.02
Each additional service in same trench (maximum 6 in total)	£114.61
Each additional service in same trench in contaminated land (maximum 6 in total)	£177.15
Additional cost per metre of standard PE pipe	£134.41
Additional cost per metre of barrier pipe	£136.19
Additional cost per metre for each additional standard PE service in same trench	£5.89
Additional cost per metre for each additional barrier pipe service in same trench	£7.67
BW fits box and taps main in one excavation (surfaced road, footpath, verge)	£928.04
BW fits box and taps main in one excavation (private unsurfaced land)	£482.33

5.4 Ancillary Charges

Costs:	£
Fee for additional inspection visit	£91.00
Abortive installation charge (to be paid if installation not ready for connection to be made)	£175.26

5.5 Service pipe disconnection charge

£694.36

This fee may be incurred for lead or galvanised iron service pipe replacements up to 1" diameter where the new connection and disconnection require separate excavations.

In certain other situation, removal of apparatus may be charged for at cost.

5.6 Non-Standard Costs

Where possible we offer fixed costs. By exception, where there are elements of the work that are unusual or of high risk, we will price then individually on a site-specific basis.

Railway and river crossings are typical examples where site specific pricing will be appropriate.

5.7 Non-Physical Connection Charges

These fees are levied on Self-Lay Providers as an administrative fee for processing self laid service connections undertaken by them and represents the amount of work that Bristol Water is required to do to process these connections. This charge is due once the connection has been made.

Non-physical connection charges will remain at same charge as 2020/21.

Charge	First Connection on site	First Connection of a batch of connections	Subsequent Connections in a batch
2020/21	£28.70	£20.86	£15.69
2021/22	£28.70	£20.86	£15.69

5.8 New appointments and variations (NAV) boundary metering

We do not charge for boundary metering for the bulk supply to NAVs.

6 Infrastructure Charges

6.1 General

The purpose of the charge is a contribution to the cost of providing the infrastructure of pipes, pumping stations and treatment works necessary for the provision of water services as a direct consequence of developments.

When water is first made available for domestic purposes (including such properties as hotels or offices) then an infrastructure charge is due. This charge is in addition to any charges for connections or site-specific mains and must be paid by the person who pays for the connection. The charge is due as soon as the connection to the main has been made and it is capable of providing water for domestic purposes.

Infrastructure charges do not apply where the water is required solely for process needs i.e. a manufacturing process.

The level of Infrastructure Charge is set on a yearly basis and adjusted to ensure that expenditure costs are recovered over a five year period. This means that the infrastructure charge set every year will be based on the latest estimate of the predicted investment required and the number of new connections expected over the next 5 years, plus any correction from previous years' charges.

We apply a single level of Infrastructure Charge across our supply area, as we plan our water supplies as a single Water Resource zone and have the ability to supply much of the supply area from more than one treatment works.

We previously consulted on whether we should vary Infrastructure Charges according to the water efficiency and sustainability of the development. We did not identify through our consultation any specific options for water efficiency that were not already requirements of Part G of the Building Regulations to use water efficient fittings which apply to all developments. We remain open to further options from our customers, developers and stakeholders to introduce efficiency incentives within infrastructure charges in future years. If you would like to contact us to discuss water efficiency of developments please contact our Development Services Manager on tim.stjohn@bristolwater.co.uk.

For non-domestic use the charge will be based on loading units (for each water use fittings) and the relevant multiplier of the standard charge. For each application with more than 24 loading units the loading units are totalled to calculate the relevant multiplier of standard charges. Infrastructure Charges are payable once the property is capable of taking water.

Costs:	2020/21	2021/22
Infrastructure Charge	£256	£273
Income offset payment	-£706	-£686
Net Infrastructure Payment	-£450	-£413

Appendix A to this document gives the value of loading units and examples.

The £273 charge per property is the average infrastructure charge expected for the next five years based on forecast new property numbers, any adjustments between the balance of network reinforcement expenditure and past infrastructure charges, and an assessment of off-site mains required together with known growth mains required, and growth mains already provided but not paid for (as an estimate of equivalent expenditure required over the next 5 years).

Full details of the calculation are shown in Appendix B.

6.2 Income Offset Payments

As shown above, an income Offset payment is due once a connection is made to mains and an Infrastructure Charge has been paid. For 2021/22 the Income Offset payment is £686 per eligible property. To maintain the balance between developers and other customers, this has been calculated based on an 81% discount to the cost of requisitioned mains, SLP mains and NAV connection cost (both based on the costs we would have incurred per property if we had undertaken the work).

Contribution	2021/22 £
Design Administration Fees	44,138
Requisition Charges	2,318,816
SLP non-contestable work	341,000
SLP contestable design fees	7,470
Non-Physical Connection Fees	37,904
Connection Charges	2,361,765
Infrastructure Charges	1,444,879
Mains diversions revenue	575,000
Income offset	-3,635,399
Total net of income offset	7,130,970
Total gross of income offset	3,495,571
Number of properties connecting	6,185
Number of properties which infra charges apply	
to	5,302
Value of income offset per property based on	
85% discount to requisition charges	-£686
Infrastructure charge	£273
Net infrastructure payment per connection	£413

The balance between income and cost is shown in the table below:

The payment and infrastructure charge will vary from year to year and will apply at the rates at the point they become due.

6.3 Domestic housing

For domestic housing developments, a single standard charge is made on each separate dwelling. For the domestic element of a commercial property the minimum is one standard charge.

6.4 Redevelopment

For sites being redeveloped, provided a live connection has existed at any time in the five years before redevelopment started, infrastructure credits will be given for the maximum number of premises connected to our network within that period. This means that the overall infrastructure charge payable will reduce by the number of credits applicable. Alternatively, meter records may be used to determine previous consumption. If the existing connection is less than 20mm or 3/4" internal diameter, only one standard infrastructure charge credit will be given, irrespective of the number of existing fittings.

An infrastructure charge is also payable if a service connection is "up-sized" to supply redevelopment, for example an extension to a hotel or nursing home.

7 Summary - Timing of Payment of Charges and Payments

Design administration fees are payable at the time of application.

Design Fees for Bristol Water designs are payable on application.

Refund of design administration fees will be made within 6 weeks of the requisition or Developer payment charge being paid.

Infrastructure Charges are due once the property is capable of taking water. This does not affect the timing of reinforcing mains laid to service the site. Income Offset Payments are due when connection to mains are made, and will offset the infrastructure charge to arrive at a net infrastructure payment to be paid at the point the property connects.

Developers and SLPs can choose to fix the value of the infrastructure charge/income offset and net infrastructure payment at the time of the development / adoption agreement.

On-site connection Charges are due prior to requisition connection being made.

Non-Physical Connection Charge is payable once the self-laid connection is made.

Developers Payment to be paid prior to any necessary "Non-Contestable" or "Contestable" works that a Self-Lay Provider chooses not to do. The Developers Payment will be reduced by the expected final Income Offset Asset Payment.

Asset Payments to be paid by Bristol Water within 5 weeks of invoice. For medium to large schemes we offer to assess and pay a monthly valuation based on work completed within a particular month. This is intended to reduce the upfront financial burden to Self-Lay Providers. (This only applies to existing schemes as of 1st April 2020)

Diversion Costs to be paid upfront as a deposit and adjusted on scheme completion unless value is less than £5,000 in which case is an upfront fixed cost.

Payments to be made electronically where possible although we do have a facility to take payments over the phone and accepted cheques.

Standard Traffic Management is assumed (Standard two-way lights and signing lighting and guarding), with actual traffic management costs recovered if different.

No additional security deposits other than for specific aspects set out above which reflect the commitment risk of Bristol Water are required.

8 Costed Examples

a. Ofwat specific scenarios

Ofwat's new connection charges requirements require us to provide worked examples for the following eight scenarios:

Example 1 – Single Connection

- 25mm MDPE Standard Pipe
- Short Side is connection to existing main in type 3/4 road, 4 metres of service pipe and provision of boundary box with meter and stoptap.
- Long Side is connection to existing main on far side of road, 4 metres of service pipe in type 3/4 road, 4 metres in unmade ground and installation of boundary box with meter and stoptap.
- Uncontaminated Ground
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273
- Income Offset Payments £686

2021/22 Connection charges	Connection to existing main in road plus 1 metre of pipe	Type 3/4 Road (3 metres)	Unmade Ground (4 metres)	Permit Fee	Total
Short Side	£929.54	£403.24	£0	£45.00	£1,377.78
Long Side	£929.54	£403.24	£537.65	£45.00	£1,915.42

Connection charge breakdown				
Item	Cost	Quantity	Total Cost	notes
Тор Тее	£9.26	1	£9.26	
Pipe standard	£0.45	1	£0.45	
Reducer 32mm x 25mm	£0.86	1	£0.86	
Atplas Box	£15.53	1	£15.53	
Meter	£13.85	1	£13.85	
BW fits box and taps main	£889.59	1	£889.59	

Additional cost per metre of standard PE	£134.41	3	£403.24	
pipe				
Additional cost per metre of standard PE	£134.41	4	£537.65	long side only
pipe				

Summary	Connection charges	After Infrastructure charges / income offset	
Total cost Short Side 2021/22	£1,377.78	£964.78	
Total cost Short Side 2020/21	£1,280.37	£830.37	
Change on 2020/21 - Short Side	7.6%	16.2%	
Total cost Long Side 2021/22	£1,915.42	£1,502.42	
Total cost Long Side 2020/21	£1,777.38	£1,327.38	
Change on 2020/21 - Long Side	7.8%	13.2%	

The increase in charges for this scenario is due to several factors including a 6.6% rise in Infrastructure charges, annual adjustment of Contract rates and current material prices for 21/22.

Example 2 - New block of flats (10 units) – Connection only

- 63mm MDPE service pipe
- Short Side is connection to existing main in type 3/4 road, 4 metres of service pipe and provision of boundary box with meter and stoptap.
- Long Side is connection to existing main on far side of road, 4 metres of service pipe in type 3/4 road, 4 metres in unmade ground and installation of boundary box with meter and stoptap.
- Greenfield site so no infrastructure credits due.
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 10 = £2,730
- Income Offset Payments £686 x 10 = £6,860

2021/22 Connection Charges	Connection to existing main in road plus 1 metre of pipe	Type 3/4 Road	Unmade Ground	Permit Fee	Total
Short Side	£1,858.22	£624	£0	£45	£2,527.52
Long Side	£1,858.22	£624	£258.25	£45	£2,785.76

Connection charge breakdown				
Item	Cost	Quantity	Total Cost	notes
Ductile tee 63/90	£32.66	1	£32.66	
Flange adaptor 63/90	£22.06	1	£22.06	
63mm MDPE standard pipe	£57.85	1	£57.85	
BW fits box and taps main	£1,745.65	1	£1,745.65	
Additional cost per metre of standard PE pipe	£208.10	3	£624.30	
permit fee	£45.00	1	£45.00	
short side cost			£2,527.52	
Additional cost per metre of standard PE pipe	£64.56	4	£258.25	long side only
long side cost			£2,785.76	

Summary	Connection charges	After Infrastructure charges / income offset
Total cost 2021/22 Short Side	£2,527.52	-£1,602.48
Total cost 2020/21 Short Side	£2,544.55	-£1,955.45
Change on 2020/21 Short Side	-0.7%	18.1%
Total cost 2021/22 Long Side	£2,785.76	-£1,344.24
Total cost 2020/21 Long Side	£2,788.71	-£1,711.29
Change on 2020/21 Long Side	-0.1%	21.4%

Charges decrease for this scenario because of reduced materials and contractor costs. The small net reduction in net payment results in high percentages, demonstrating that the 10% significant change indication is not informative once income offset is included, in some scenarios.

Example 3 - Small house development (10 new connections) – Main and Services

- 20 metres of 63mm MDPE standard main in unmade surface
- 20 metres of 90mm HPPE standard main in unmade surface
- 10 metres of 90mm HPPE standard main in type 3/4 road
- 10 connections 3 metres unmade ground
- Greenfield site so no infrastructure credits due.
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 10 = £2730
- Income Offset Payments £686 x 10 = £6860

2021/22 Requisition charges	Design Admin Fee	Connection to Existing Main	Mains	Washout	Pressure Test	Permit Fee	Chlorinatio n	Total	Notes
10 metres of 90mm HPPE main in type 3/4 road	£300	£1,858.22	£2,022.00	£322.57	£335.51	£45	£664.28	£5,548.02	Chlorination in one length
20 metres of 90mm HPPE main in unmade surface			£1,174.16					£1,174.16	
20 metres of 63mm MDPE main in unmade surface			£1,156.91					£1,156.91	
							Total =	£7,879.10	

21/22 Connection charges	Connection	Unmade	Footpath	Permit Fee	Total
Service Connections	£9,295.42	£2,688.00			£11,983.65

Connection Charge breakdown

	Cost per unit/metre	Quantity	Total Cost
63mm MDPE standard main in			
unmade surface	£57.85	20	1156.91
90mm HPPE standard main in			
unmade surface	£58.71	20	1174.16
90mm HPPE standard main in			
type 3/4 road	£202.25	10	2022.45
Ductile tee 63/90	£32.66	1	32.66
Flange adaptor 63/90	£22.06	1	22.06
BW fits box and taps main	£1,803.50	1	1803.50
design admin fee	£300.00	1	300.00
washout	£322.57	1	322.57
pressure test	£335.51	1	335.51
permit fee	£45.00	1	45.00
chlorination	£664.28	1	664.28
total			7879.10

Summary	2021/22	2020/21	Change
Mains	£7,879.10	£7,633.40	3.2%
Services	£11,983.65	£11,425.10	4.9%
Infrastructure Charges	£2,730.00	£2,560.00	6.6%
Income Offset	-£6,860.00	-£7,060.00	-2.8%
Total	£15,732.75	£14,558.50	8.1%

The increase in charges for this scenario is due to several factors including a 6.6% rise in Infrastructure charges, annual adjustment of Contract rates and current material prices for 21/22.

Excluding the impact of income offset payments the increase in charges is 5%

Example 4 - Medium house development (50 new connections) – Mains and Services

- 10 metres of 180mm HPPE standard main in type 3/4 road
- 90 metres of 180mm HPPE standard main in unmade surface
- 100 metres of 125mm HPPE standard main in unmade surface
- 100 metres of 90mm HPPE standard main in unmade surface
- 50 connections 3 metres made ground
- Greenfield site so no infrastructure credits due
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 50 = £13650
- Income Offset Payments £686 x 50 = £34300

2021/22	Design	Connectio	Mains	Washou	Pressur	Chlorinatio	Total	Notes
requisition	Admin	n to		t	e Test	n		
charges	Fee	Existing						
		Main						
10 metres of	£600	£2,043.61	£2,672.00				£5,315.63	Type 3/4
180mm HPPE								
main								
90 metres of			£7,624.00				£7,623.92	Unmade surface
180mm HPPE								
main								
100 metres			£6,978.96				£6,978.96	Unmade surface
of 125mm								
HPPE main								
100 metres			£5,870.81	£322.57	£335.51	£664.28	£7,193.16	Unmade surface
of 90mm								
HPPE main								
						Total =	£27,111.67	

2021/22 connection charges	Connection	Unmade	Footpath	Permit Fee	Total
Service Connections	£46,477.08	£13,441.00			£59,918.27

Connection Charge breakdown			
	Cost per unit/metre	Quantity	Total Cost
180mm MDPE standard main in type 3/4 road	£267.20	10	2672.02
180mm HPPE standard main in unmade surface	£84.71	90	7623.92
125mm HPPE standard main in unmade surface	£69.79	100	6978.96

90mm HPPE standard main in unmade surface	£58.71	100	5870.81
Ductile tee 180mm	£67.75	1	67.75
Flange adaptor 180	£15.49	2	30.98
BW fits box and taps main	£1,944.88	1	1944.88
design admin fee	£600.00	1	600.00
washout	£322.57	1	322.57
pressure test	£335.51	1	335.51
chlorination	£664.28	1	664.28
total			27111.67

Summary	2021/22	2020/21	Change
Mains	£27,111.67	£25,809.10	5.0%
Services	£59,918.27	£55,544.50	7.9%
Infrastructure Charges	£13,650.00	£12,800.00	6.6%
Income Offset	-£34,300.00	-£35,300.00	-2.8%
Total	<u>£66,379.94</u>	<u>£58,853.60</u>	12.8%

Excluding the impact of income offset payments the increase in charges is 7%

Example 5 - Large house development (200 new connections) – Mains and Services

- 10 metres of 180mm HPPE standard main in type 3/4 road
- 290 metres of 180mm HPPE standard main in unmade surface
- 300 metres of 125mm HPPE standard main in unmade surface
- 400 metres of 90mm HPPE standard main in unmade surface
- 200 new connections 3 metres made ground
- Greenfield site so no infrastructure credits due.
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 200 = £54600
- Income Offset Payments £686 x 200 = £137200

2021/22 requisition charges	Design Admin Fee	Connection to Existing Main	Mains	Washout	Pressure Test	Chlorination	Total	Notes
10 metres of 180mm HPPE main	£1,200	£2,043.61	£2,672.00				£5,915.63	Туре 3/4
290 metres of 180mm HPPE main			£24,565.96	£322.57	£335.51	£664.28	£25,888.31	Unmade surface
300 metres of 125mm HPPE main			£20,936.87	£322.57	£335.51	£664.28	£22,259.22	Unmade surface
400 metres of 90mm HPPE main			£23,483.24	£322.57	£335.51	£664.28	£24,805.60	Unmade surface
						Total	£78,868.76	

2021/22 connection charges	Connection	Unmade	Footpath	Permit Fee	Total
Service Connections	£185,908.32	£53,765.00			£239,673.07

Connection Charge breakdown

	Cost per unit/metre	Quantity	Total Cost
180mm MDPE standard main in type 3/4			
road	£267.20	10	2672.02
180mm HPPE standard main in unmade			
surface	£84.71	290	24565.96
125mm HPPE standard main in unmade			
surface	£69.79	300	20936.87
90mm HPPE standard main in unmade			
surface	£58.71	400	23483.24
Ductile tee 180mm	£67.75	1	67.75
Flange adaptor 180	£15.49	2	30.98
BW fits box and taps main	£1,944.88	1	1944.88
design admin fee	£1,200.00	1	1200.00
washout	£322.57	3	967.70
pressure test	£335.51	3	1006.53
chlorination	£664.28	3	1992.83
total			78868.76

Summary	2021/22	2020/21	Change
Mains	£78,868.76	£74,722.82	5.5%
Services	£239,673.07	£222,178.00	7.9%
Infrastructure Charges	£54,600.00	£51,200.00	6.6%
Income Offset	-£137,200.00	-£141,200.00	-2.8%
Total	£235,941.83	£206,900.82	14.0%

Excluding the impact of income offset payments the increase in charges is 7%

Example 6 - Self Laid Small Development (10 New Connections)

- 20 metres of 63mm MDPE standard main in unmade surface
- 20 metres of 90mm HPPE standard main in unmade surface
- 10 metres of 90mm HPPE standard main in type 3/4 road
- 10 connections 3 metres unmade ground
- Greenfield site so no infrastructure credits due.
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 10 = £2730
- Income Offset Payments £686 x 10 = £6860

	Design Admin Fee	Connection to Existing Main	Design Fee	Non Physical Connection Fee	Infrastructure Charges	Permit Fee	Income Offset	Total
21/22	£300	£1,858.22	£415	£169.91	£2,730.00	£45	-£6,860.00	-£1,341.87
20/21	£300	£1,913.21	£415	£169.91	£2,560.00	£45	-£7,060.00	-£1,656.88

Connection Charge breakdown			
	Cost per unit/metre	Quantity	Total Cost
first non-physical connection	£28.70	1	28.70
subsequent non-physical connections	£15.69	9	141.21
Ductile tee 63/90	£32.66	1	32.66
Flange adaptor 63/90	£22.06	1	22.06
BW fits box and taps main	£1,803.50	1	1803.50
design admin fee	£300.00	1	300.00
design fee	£415.00	1	415.00
permit fee	£45.00	1	45.00
infrastructure charges	£273.00	10	2730.00

income offset payments	-£686.00	10	-6860.00
total			-1341.87

Excluding the impact of income offset payments the increase in charges is 2%.

Example Seven – Self Laid Medium house development (50 new connections) – Mains and Services

- 10 metres of 180mm HPPE standard main in type 3/4 road
- 90 metres of 180mm HPPE standard main in unmade surface
- 100 metres of 125mm HPPE standard main in unmade surface
- 100 metres of 90mm HPPE standard main in unmade surface
- 50 connections 3 metres made ground
- Greenfield site so no infrastructure credits due
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 50 = £13650
- Income Offset Payments £686 x 50 = £34300

	Design Admin Fee	Connection to Existing Main	Design Fee	Non Physical Connection Fee	Infrastructure Charges	Permit Fee	Income Offset	Total
21/22	£600	£2,043.61	£415	£823.36	£13,650.00	£45	-£34,300.00	-£16,723.03
20/21	£600	£2,102.73	£415	£823.36	£12,800.00	£45	-£35,300.00	-£18,513.91

Connection Charge breakdown			
	Cost per unit/metre	Quantity	Total Cost
first non-physical connection	£28.70	1	28.70
First Connection of a batch of connections	£20.86	5	104.30
subsequent non-physical connections	£15.69	44	690.36
Ductile tee 180mm	£67.75	1	67.75
Flange adaptor 180	£15.49	2	30.98
BW fits box and taps main	£1,944.88	1	1944.88
design admin fee	£600.00	1	600.00
design fee	£415.00	1	415.00
permit fee	£45.00	1	45.00

infastructure charges	£273.00	50	13650.00
income offset payments	-£686.00	50	-34300.00
total			-16723.03

Excluding the impact of income offset payments the increase in charges is 5%.

Example Eight – Self Laid Large house development (200 new connections) – Mains and Services

- 10 metres of 180mm HPPE standard main in type 3/4 road
- 290 metres of 180mm HPPE standard main in unmade surface
- 300 metres of 125mm HPPE standard main in unmade surface
- 400 metres of 90mm HPPE standard main in unmade surface
- 200 new connections 3 metres made ground
- Greenfield site so no infrastructure credits due.
- Permit Fee (Highways Authority charge) applies to works undertaken in Highway.
- Infrastructure Charges £273 x 200 = £54600
- Income Offset Payments £686 x 200 = £137200

	Design Admin Fee	Connection to Existing Main	Design Fee	Non Physical Connection Fee	Infrastructure Charges	Permit Fee	Income Offset	Total
21/22	£1,200	£2,043.61	£415	£3,254.41	£54,600.00	£45	-£137,200.00	-£75,641.98
20/21	£1,200	£2,102.73	£415	£3,254.41	£51,200.00	£45	-£141,200.00	-£82,982.86

Connection Charge breakdown			
	Cost per unit/metre	Quantity	Total Cost
first non-physical connection	£28.70	1	28.70
First Connection of a batch of connections	£20.86	20	417.20
subsequent non-physical connections	£15.69	179	2808.51
Ductile tee 180mm	£67.75	1	67.75
Flange adaptor 180	£15.49	2	30.98
BW fits box and taps main	£1,944.88	1	1944.88
design admin fee	£1,200.00	1	1200.00
design fee	£415.00	1	415.00
permit fee	£45.00	1	45.00
Infrastructure charges	£273.00	200	54600.00
income offset payments	-£686.00	200	-137200.00

total	-75641.98
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Excluding the impact of income offset payments the increase in charges is 6%.

b. Bristol Water scenarios

In previous new connection charges documents we have provided worked examples against a set of scenarios we defined. We retain these scenarios in addition to those required by Ofwat's charges rules to provide consistency and additional transparency.

The following examples set out the costs for different types of connection in 2021/22, based on the costs set out in this document. These costs are compared for reference to the equivalent charges in 2020/21, prior to the implementation of changes in the charges structure.

Example One

Single Householder connection, with capacity in mains outside property (i.e. no upstream reinforcement required and no previous use) i.e. single service connection.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Total
Short Side service Connection 20/21	£-	£865.14	£256.00	-£706	£415.14
Short Side service Connection 21/22	£-	£929.54	£273.00	-£686	£516.54
Long Side service Connection 20/21	£-	£1,610.82	£256.00	-£706	£1,160.82
Long Side service Connection 21/22	£-	£1736.01	£273.00	-£686	£1,323.01

Short side service consists of connection to existing main in footpath outside of property, installation of 1 metre of service pipe and provision of boundary box with meter and stoptap.

Cost breakdown - short side

1 x £929.54 = £929.54 – as shown in Section 5.3

Long Side service consists of connection to existing main in footpath on far side of road from property excavation of 1 metre footpath, 5 metres road crossing and 2 metres of footpath and installation of boundary box with meter and stoptap.

<u>Cost breakdown – long side</u> 1 x (£929.54+ 6 x £134.41 as shown in Section 5.3) = £1736.01

In both cases 1 x property infrastructure charge of £273 applies.

In this example, there is an increase in charges compared to 2020/21.

Example Two

Small development site - 10 houses – Capacity in mains at site entrance, on-site mains and services required. On-site mains required consisting of 63mm diameter x 35 metres standard pipe.

Description	Mains	Services	Infra- structure Charges	Income Offset Payment	Total
Small development site 20/21	£3,447.82	£12,379.80	£2,560.00	-£7,060.00	£11,327.62
Small development site 21/22	£3,436.67	£13,327.77	£2,730.00	-£6860.00	£12634.45

Services cost includes 50% short side and 50% long side. (i.e. 5 short services and 5 long services). Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2021/22

Design Administration Fee - £300 (refunded if proceeds with 12 months)

<u>Mains</u>

Connection (In footway) – as shown in Section 4.4	£1,543.99
Mainlaying in trench provided by Developer (as shown in Section 4.1) x 35	£670.88
End Washout – as shown in Section 4.5	£222.02
Pressure Test – as shown in Section 4.6	£335.51
Chlorination – as shown in Section 4.7	£664.28

Total

<u>Services</u>

Short Services – 5 x £929.54 (as shown in Section 5.3)	£4,647.71
Long Services – 5 x (£929.54+ 6 x £134.41 (as shown in Section 5.3))	£8,680.06
Total	£13,327.77
Infrastructure charges	
10 properties x £273	£2,730.00

In this example, there is a 11.5% increase in charges compared to 20/21, due to lower income offset.

Example Three

Medium Development Site – 50 houses, 25 built in year 1 – Capacity in mains at site entrance, on-site mains and services required. On-site mains 70metres of 63mm diameter, 105 metres 90mm diameter standard pipe.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Total
Medium development site 20/21	£5,983.22	£61,899	£12,800.00	-£35,300.00	£45,382.22
Medium development site 21/22	£6,120.18	£66,638.86	£13.650.00	-£34,300.00	£52,109.04

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2021/22

Design Administration Fee - £600 (refunded if development proceeds with 12 months)

<u>Mains</u>

Connection (In footway) - as shown in Section 4.4	£1,543.99
Mainlaying in trench provided by Developer (as shown in Section 4.1)	£3,354.38
End Washout – as shown in Section 4.5	£222.02
Pressure Test – as shown in Section 4.6	£335.51
Chlorination – as shown in Section 4.7	£664.28
Total	£6,120.18
<u>Services</u>	
Short Services (as shown in Section 5.3)	£23,238.54
Long Services – 25 x (£929.54+ 6 x £134.41 (as shown in Section 5.3))	£43,400.32
Total =	£66,638.86
Infrastructure charges	
50 houses x £273	£13,650

In this example, there is a 14.8% increase in charges compared to 20/21, due to reduced income offset.

Example Four

Medium Development Site – 50 houses, 25 built in year 1 – Insufficient capacity at site entrance, 200 metres of upstream reinforcement required 90mm diameter standard pipe, on- site mains and services required. On-site mains required 70metres of 63mm diameter, 105metres of 90mm diameter standard pipe.

Description Mains	Services	Infrastruct ure Charges	Income Offset Payment	Total
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Medium development site 20/21	£5,983.22	£61,899	£12,800.00	-£35,300.00	£45,382.22
Medium development site 21/22	£6,120.18	£66,638.86	£13,650.00	-£34,300.00	£52,109.04

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

The offsite capacity is reflected in infrastructure charges, rather than in mains costs.

Cost breakdown 2021/22

Design Administration Fee - £600 (refunded if proceeds with 12 months)

<u>Mains</u>

Connection (In footway) - as shown in Section 4.4	£1,543.99
Mainlaying in trench provided by Developer (as shown in Section 4.1)	£3,354.38
End Washout – as shown in Section 4.5	£222.02
Pressure Test – as shown in Section 4.6	£335.51
Chlorination – as shown in Section 4.7	£664.28
Total	£6,120.18
<u>Services</u>	
Short Services (as shown in Section 5.3)	£23,238.54
Long Services – 25 x (£929.54+ 6 x £134.41 (as shown in Section 5.3))	£43,400.32
Total =	£66,638.86
Infrastructure charges	C12 CEO 00
50 houses x £273	£13,650.00

In this example, there will be a 14.8% increase in charges compared to 20/21, due to the reduction in income offset.

Example Five

Large Development Site – 500 houses phasing over ten years 50 houses/year, 25 in year 1 – Capacity in mains at site entrance, on-site mains and services required. On-site mains 960metres of 63mm diameter, 30metres of 90mm diameter, 90 metres of 125mm diameter and 390metres of 180mm diameter standard pipe.

Description	Mains	Services	Infrastruct ure Charges	Income Offset Payment	Total
Large development site 20/21	£46,829.67	£618,985	£128,000	-£353,000	£440,814.67
Large development site 21/22	£48,397.42	£666,389	£136,500	-£343,000	£508,286.03

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2021/22

Design Administration Fee - £1,500 (refunded if development proceeds with 12 months).

<u>Mains</u>

Mainlaying in trench provided by Developer (as shown in Section 4.1):

PE Pipe Standard 63mm x 960	£18,401.18
PE Pipe Standard 90mm x 30	£600.91
PE Pipe Standard 125mm x 90	£2,201.66
PE Pipe Standard 180mm x 390	£13,120.65
Washouts x 10 as shown in Section 4.5	£2,220.16
Pressure Test x 2 as shown in Section 4.6	£809.56
Pressure Test x 8 as shown in Section 4.6	£2,684.08
Chlorination x10 as shown in Section 4.7	£6,642.77
Connection (In footway) -as shown in Section 4.4	£1,716.45

Total

<u>Services</u>

Short Services – 250 x £929.54 as shown in Section 5.3 = £232,385	£232,385.41
Long Services – 250 x (£929.54 + 6 x £134.41 as shown in Section 5.3)	£434,003.21
Total	£666,388.61
Infrastructure charges	
500 houses x £273	£136,500.00

In this example, there is a 15.3% increase in charges compared to 20/21, due to reduced income offset.

Example Six

Large Development Site – 500 houses phasing over ten years 50 houses/year, 25 in year 1 – insufficient Capacity in mains at site entrance, 1km of mains reinforcement required 180mm standard pipe, on-site mains and services required. On-site mains 960metres of 63mm diameter, 30metres of 90mm diameter, 90 metres of 125mm diameter and 390metres of 180mm diameter standard pipe.

Description	Mains	Services	Infra- structure Charges	Income Offset Payment	Total
Large development site 20/21	£46,829.67	£618,985	£128,000	-£353,000	£440,814.67
Large development site 21/22	£48,397.42	£666,389	£136,500	-£343000	£508,286.03

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

In this case the insufficient capacity at the site entrance results does not result in additional charges compared to Example Five as would currently be the case as these works will be funded through Infrastructure Charges.

Cost breakdown 2021/22

Design Administration Fee - \pm 1,500 (refunded if proceeds with 12 months) as shown on Page 7

Mains

Mainlaying in trench provided by Developer (as shown in Section 4.1):				
PE Pipe Standard 63mm x 960	£18,401.18			
PE Pipe Standard 90mm x 30	£600.91			
PE Pipe Standard 125mm x 90	£2,201.66			
PE Pipe Standard 180mm x 390	£13,120.65			
Washouts x 10 as shown in Section 4.5	£2,220.16			
Pressure Test x 2 as shown in Section 4.6	£809.56			
Pressure Test x 8 as shown in Section 4.6	£2,684.08			
Chlorination x10 as shown in Section 4.7	£6,642.77			
Connection (In footway) -as shown in Section 4.4	£1,716.45			

Total

£48,397.42

Services

Short Services – 250 x £929.54 as shown in Section 5.3 = £232,385	£232,385.41
Long Services – 250 x (£929.54 + 6 x £134.41 as shown in Section 5.3)	£434,003.21
Total	£666,388.61
Infrastructure charges	
500 houses x £273	£136,500.00

Example Seven – Self-Lay/Bristol Water Comparison (New Charges 21/22)

This example is to show how the financial transactions between Developer/SLP and Bristol Water is affected by the decision of who designs and/or lays mains on-site.

Example - Medium Development Site 50 houses – On-site mains required plus spur connection to existing mains outside of development area.

Total installation cost £10,000 including £1,000 non contestable works (spur connection) and £9,000 for on-site mains. Services are excluded from this example. as well as Infrastructure Charges and Income Offset Payments which will be the same irrespective of the route chosen.

This includes Contract cost, Materials and overheads including BW design costs.

Design Administration Fee - £600 (refunded if progresses within 12 months)

Bristol Water Route (Costs that would have been payable without self laid mains, by Developer)

Design Administration Fee - £600.

Requisition Charge £10,000.

Net payable by developer assuming doesn't progress within 12 months - £10,600

Costs incurred by Bristol Water:- **<u>£10,000</u> + £600 - £10,600 = £0**

Self Lay Route (Assumed costs paid by/to Self Lay Provider)

Self Lay means that the Self-Lay Provider (SLP) incurs the installation cost for contestable activities, of £9,000. This includes the cost of design of the site.

Cost Breakdown 2021/22

Checking Fee - £600 (same charge as design administration fee)

Non Contestable Works - £1,000 (spur connection undertaken by BW)

Under new rules there is no Asset Payment to SLP as the Developer will enter into a Commercial Agreement with SLP to lay mains.

Costs incurred by Bristol Water - £1,000 + £600 - £1,600= £0

Self Lay Route (Assumed costs paid by Self Lay Provider) (Design undertaken by BW)

In this example an additional charge of £415 is payable by the Self Lay Provider for the Bristol Water design. If the SLP can undertake the design for less than £415, or as part of their total site cost for less than £9,000, then this charging approach makes sure it is worthwhile them undertaking this work on behalf of the developer, ignoring the other reasons that affect the developer's decisions on site approach.

Cost Breakdown 2021/22

Checking Fee - £600 (same charge as design administration fee)

Non Contestable Works - £1,000 (spur connection undertaken by BW)

Under new rules there is no Asset Payment to SLP as the Developer will enter into a Commercial Agreement with SLP to lay mains.

BW Design Costs - £415

Costs incurred by Bristol Water - £1,000 + £600 + £415 - £2,015= £0

Appendix A - Examples of calculation of infrastructure charges incorporating a Relevant Multiplier (RM)

New Development

Fitting	No. of Fittings (Proposed)	Loading units per fitting (see table below)	Total Loading Units
WC flushing cistern	25	2	50
Wash basin (not in a house)	20	3	60
Shower	15	3	45
Sink (tap nominal size ½" or 15mm)	15	3	45
Communal or commercial appliance	3	10	30
		Total	230

Relevant Multiplier (RM) = Total loading units (230)/24 = 9.58

Infrastructure charge = Standard Domestic Infrastructure Charge x RM

(£351)

x (9.58) = £3,362.58

Redevelopment of offices into housing

Fitting	No. of Fittings (Proposed)	Loading units per fitting (see table below)	Total Loading Units
WC flushing cistern	21	2	42
Wash basin (not in a house)	20	3	60
Shower	2	3	6
Sink (tap nominal size ½" or 15mm)	4	3	12
		Total	120

Relevant Multiplier (RM) = Total loading units (120)/24 = 5

Credit is given for existing use on a specific site. Thus there would be no infrastructure charge payable on the first five dwellings on the development. A standard infrastructure charge would be payable on all subsequent dwellings.

Loading units for calculating the Relevant Multiplier

Water fitting/appliance	Loading unit
WC flushing cistern	2
Wash basin in a house (see note 2)	1.5
Wash basin elsewhere	3
Bath (tap nominal size ¾" or 20mm)(see note 3)	10
Bath (tap nominal size larger than ¾" or 20mm)(see note 3)	22
Shower	3
Sink (tap nominal size ½" or 15mm)	3
Sink (tap nominal size larger than ½" or 15mm)	5
Spray tap	0.5
Bidet	1.5
Domestic appliance (subject to minimum allowance of six loading units per house)(see notes 4 and 5)	3
Communal or commercial appliance (see note 4)	10
Any other water fitting or outlet including a tap but excluding a urinal or water softener	3

Notes for Appendix A

- 1. Any fitting includes any plumbing =, dedicated space or planning or other provision for that fitting.
- 2. "House" means any building or part of building which is or will be occupied as a private dwelling.

This includes a flat, boat or caravan connected to the water supply.

- 3. "Bath" includes a whirlpool or Jacuzzi.
- 4. "Domestic appliance" means any water-using appliance including a dishwasher, washing machine and waste disposal unit other than in a house, including communal facilities.
- 5. A minimum of six loading units shall be included for each house for domestic appliances whether or not the dwelling has any such appliances. This does not apply 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.

Appendix B: Five Year Calculation and Reconciliation of Infrastructure Charges

The table below shows forecast and incurrent network reinforcement schemes, which together with the forecast of new properties eligible to pay infrastructure charges, contributes to the calculation of the rate shown of £273

Scheme	21/22	22/23	23/24	24/25	25/26
Known Schemes for growth					
200mm ID Main to reinforce 10" in Frampton Cotterell	£100,000	£274,039			
North Chase main		£178,735			
Forum to Shepton Mallet Growth	£1,034,000	£1,243,000			
AMP 7 remaining specific					
schemes					
Churchill (Reservoir)	£21,467	£205,145	£1,173,795	£1,115,932	
Known Developer Driven Mains	£500,000	£500,000	£500,000	£500,000	£500,000
AMP 8 initial assumption on specific schemes					£1,200,000
Total expenditure after targeted programme efficiencies	£1,413,205	£2,030,064	£1,4128,372	£1,380,490	£1,406,744

2021-26 projected expenditure	£7,658,874
less timing from previous years	-£747,000
	£6,911,874
2021-26 property numbers	25,364
Infrastructure Charge	£273