Charging
Ofwat
21 Bloomsbury Street
London
WC1B 3 HF

19th April 2016

Dear Sir/Madam,

RE: **New Connections Charging – HBF Response to Ofwat Discussion Paper**

Given this discussion paper is the precursor to the planned formal consultation by Ofwat the Home Builders Federation (HBF) welcomes the opportunity to provide constructive comment. As the national trade association representing the body of UK House Builders responsible for providing around 80% of all new housing in the UK we trust that appropriate quantitative and qualitative weight will be given to our response. Moreover, as a result of our involvement in this matter (extending over 18 months) we are willing to meet with Ofwat representatives and/or Defra in order to effectively deal with any subsequent queries or questions.

Our response opens with a number of general comments and thereafter proceeds to deal with each question in turn. We apologise for the length of our response but in our view there are a number of key issues that first need to be resolved before we can arrive at a series of crystallised, robust and workable solutions. In addition, throughout our response we have identified a number of important, keynote messages in bold, underlined text.

1. General Comments/Observations

1.1 At the outset we believe it is worth asking a very pertinent question, namely, are we missing an opportunity to look at the Charging Rules from a more positive perspective? In many respects the intended reforms have the appearance of being nothing more than a 'tidying up' of existing Water and Sewerage Company practice rather than more radical reform and direction that addresses the concerns raised by House Builders over the last five years or so. The Market Reform and New Charging Rules present a unique opportunity for Ofwat to provide firm and positive direction in terms of how companies are to **work within the existing legislative framework, together with the application of a fair, equitable, transparent, proportional and evidenced charging regime**. Unfortunately, the complete lack of transparent evidence from WaSCs and WoCs, in particular that relating to quantum and the underlying methodology to determine such, undermines the positive message that these reforms are capable of bringing to major customers such as the development community. Why we say this will become evident in subsequent sections of our response.

1.2 The provision of adequate and timely infrastructure is key to meeting the Government's housing objectives. In our view, Ofwat needs to reflect on the past and how the positive regime that existed up to around 5 years ago facilitated development, without introducing disproportionate costs and/or compromising our wider environmental obligations. More recently, Water UK and certain WaSCs have cited the planning process as failing to provide the necessary certainty to enable them to make the required investment decisions. HBF disagrees and for a number of evidenced-based reasons – see Appendix 2 accompanying this response which we would suggest is read at this particular juncture.

1.3 It remains our firm belief that any intended 'Charging Rules' should open with a clear and unequivocal reaffirmation of the statutory obligations placed on all Water and Sewerage Companies (WaSCs) under the provisions of Section 37 *et al* and Section 94 of the Water Industry Act 1991. Similarly, the right to connect to the public sewerage system under Section 106 of the same 'Act'. Issues associated with the discharge/exercise of these legal obligations/rights together with a host of other matters pertinent to the wider Market Reform/Charging Rule proposals, in particular, aspects of related planning law, have previously been articulated in a series of 9 dedicated papers prepared by HBF. These papers have been shared with DCLG, Defra, Water UK, Ofwat and HM Treasury - the comments/recommendations contained in each of these papers still hold good. More importantly, they identify a number of crucial issues that need to be resolved before the Charging Rules are crystallised and we would ask Ofwat to take due note of their content, in particular the evidence that forms an integral part of our response.

1.4 The discussion paper remains somewhat silent when it comes to surface water drainage. Whilst there have been changes in related legislation there are still occasions when surface water outfalls from new development will need to connect to the public surface water sewerage system. Moreover, the Charging Rules are a further opportunity to resolve the vexed issue of requisitioned surface water outfalls across third party land from upstream, on-site surface water infrastructure, including above and below ground SuDS.

1.5 The opening preamble to the **Charging Rules should also state just how important it is to consider development viability** when setting out a charging regime – this is one of the underlying reasons why we do not believe 'Zonal Charging' should be allowed to gain traction.

1.6 The final version of any intended Charging Rule(s) need to ensure that the outcome maintains a cost balance, i.e. between existing customers and the development community. This discussion paper, which sadly lacks disclosure of current costs as presented to Ofwat by WaSCs as part of the evidence gathering exercise, undermines any confidence that we have that the cost to house builders and the development community in general will not increase. In the absence of quantum and a robust audit of WaSC and WoC costs it is hard to accept that developer costs will not increase. **We therefore see it as imperative that the equivalent of an impact assessment or cost benefit analysis covering each intended 'Charging Rule' would greatly assist in this instance**. Indeed, we consider it to be an essential requirement – see earlier comments under paragraph 1.1.

1.7 It would have been helpful/informative to have known what regional variation exists under the present charging regime(s). Based on HBF experience, such variation is considerable, for example, five WaSCs rarely seek developer funded off-site network reinforcement whilst the remainder do. Moreover, the costs associated with the latter can be considerable – see previously disclosed evidence.

Indeed, **one of the underlying principles that the Charging Rules should seek to introduce is far greater consistency – this is the cornerstone of transparency and therefore trust**.

1.8 The executive summary makes reference to Ofwat's desire to avoid 'overly prescriptive rules'. **We do not believe that this is an appropriate way forward** - certainly not at this stage given the prevailing variance in methodologies and the lack of transparency and effective auditing of costs etc. Moreover, it is essential that we remove the climate in which WaSCs can apply their own subjective interpretation of extant legislation. For example, using the planning system in an attempt to justify developer funded resolution of pre-existing off-site network problems in public foul sewers – see HBF Paper No.9. The HBF view is very much the converse – **Ofwat should use this opportunity to provide more prescriptive statements as to what is and is not acceptable, in addition to clearly defining what a WaSCs obligations are under S94 of the WIA 1991, for example what does "effectually maintain" actually mean**?

1.9 As stated, the comparisons drawn with the Energy and Telecoms Sectors respectively are not correct. Both the Electricity and Gas providers include in their terms and conditions mechanisms for infrastructure provision asset payments to the IDNO and IGT respectively. Openreach provide a rebate to the developer under a nationally agreed mechanism. These are quite significant contributions in recognition of future customer income that is received in perpetuity.

2. Reponses to Specific Questions

Q1 Have we missed any key issues with the current framework?

- Yes – There is no specific guidance relating to mixed-use schemes and how the Charging Rules are to apply. Similarly, what the likely costs/charges will be.

- There is no reference/guidance in terms of how surface water drainage matters are to be dealt with and what costs will/will not apply.

- There is a growing trend in WaSC initiated 'commercial arrangements' – these sit outside of the scope/control of the Regulator. The Charging Rules either need to confirm that such arrangements are not appropriate, or if such an approach is deemed mutually viable, then it is essential for this to be reflected in the Charging Rules. In addition, the 'rules' will need to clearly define how such arrangements are to operate and how they are to be controlled and transparently audited.

- How Infrastructure Charge credits are to apply and in what circumstances remains a key omission. In recognition of Government policy, which is reflected in the sequential approach to land use planning, i.e. 'brownfield first', this remains a fundamentally important consideration.

- Further information/guidance is required in terms of how matters will be dealt with in England and Wales. For example, WaSC operating areas may extend into Wales and *vice versa* **but planning jurisdiction stops at the national, geographic boundaries. How will this be reconciled dealt with as part of Charging Rules given that planning law/policy will differ**?

- Table 1 page 8 should also include the cost of connection to the public sewerage system under the heading 'relevant charges'.

- Based on more recent discussions it is quite clear that there is a major omission, i.e. there should be a section devoted exclusively to Section 185 sewer diversions. There have been far too many occasions when a WaSC has used S185 to secure additional capacity provision at the developer's entire expense. The charging rules should clearly state what is and is not acceptable and what reasonable costs look like.

- There is a need for a consolidated and accepted 'glossary of terms' – at present, different terms mean different things to different WaSCs. Similarly, how they are applied. In the interests of transparency and consistency this would greatly assist and remove much if not all of the subjective interpretation that currently exists.

Q2 Do you agree with our emerging thinking to require work that is remote from the site to be recovered through infrastructure charges only, to increase transparency?

- **There are no issues when it comes to Developers/House Builders having to pay for infrastructure that is specific to the development under consideration**. However, the role of infrastructure charges requires more definitive explanation but to target the use of IC's in the manner suggested would seem to be more appropriate and better aligned to the original intent, providing there is no betterment for other third party interests.

- WaSCs have increasingly brought to our attention that it is difficult to implement off-site reinforcement due to the vagaries of the planning system, in particular the timing of delivery. However, we continue to question this and would refer to Appendix 2 of our response. Moreover, during the course of recent Defra Task and Finish Group discussions, it has been suggested by WaSCs that a single off-site reinforcement cost/payment would/could be the way forward, thereby negating the payment of separate infrastructure charges. That said, it leaves us somewhat confused as such an approach does not solve the timing issues currently considered so important by the Water and Sewerage Sector. **Just how much of a problem is the timing of Local Plan land allocation decisions/delivery? WaSC evidence here would be very helpful**.

Q3 Do you agree with our emerging thinking to allow companies to develop new approaches to charging?

- At a time when there is a need for far greater consistency we do not believe that introducing commercial flexibility that effectively favours the Water and Sewerage Sector is conducive to increased housing provision. **Our first task must be to establish a level playing field supported by a fair, equitable, transparent and proportional charging regime**. We view this as a fundamental pre-requisite before any consideration is given to a finesse of the charging rules that may introduce additional flexibility.

Q4 Do you agree with our emerging thinking to promote a level playing field through increased transparency?

- In short, yes. Greater transparency is essential but more importantly **any costs that are to be levied by WaSCs, together with their accompanying methodology, should be both specific to the development and proportionate**. That said, there are genuine concerns that a robust verification and audit process does not appear to be in place as part of the intended Charging Rules. Frequent recourse to a Determination process that takes far too long is not conducive to housing provision.

In addition, it is not the way forward and it remains a concern that there is a lack of consistency in a number of recent Determinations. Similarly, the way five out of ten WaSCs are relying on subjective and/or skewed interpretations of existing legislation to support their current demands for developer contributions. This undermines any confidence that we may have in the new Charging Rules as there is a clear intent that such flexibility will continue to exist in the Water and Sewerage Sector if the current Charging Rules proposals are introduced.

- **It is important that we have in place an agreed and robust understanding of the present methodology that underpins all aspects of the Charging Rules**, for example, a recent Anglian Water versus Barratt Homes Determination has identified that Anglian Water has been using an incorrect methodology for calculating the Discount Aggregate Deficit Sum (DADS). We would suggest that this error far exceeds the five sites that are the subject of this particular Determination. In light of this we are aware of the Fair Water Connections response to Ofwat's request for comment, in particular the keynote recommendation of undertaking three sample calculations across three different site scenarios – **this is an evidence-based exercise that we fully support and it will tick a number of boxes under the heading of 'transparency'**.

- In terms of off-site network capacity limitations, in particular within public foul sewers, we have raised several concerns in this regard. None more so than the growing reliance that WaSCs are placing on the planning system to secure developer funded off-site network reinforcement. For ease of reference, we have attached a copy of HBF Paper 9 and would ask that Ofwat take note of its content. (This paper has already been the subject of much wider circulation). Moreover, **we are firmly of the opinion that the charging rules cannot go forward without the vexed issue of who pays for off-site network improvements having first been resolved.**

Q5 What would be the impact of requiring wastewater asset payments?

- As much as this would be welcomed by the development community in general, reality, at present, must prevail. It is highly unlikely that matters would be effectively resolved prior to the planned introduction date for the Charging Rules, i.e. April 2017, especially if changes in primary legislation were required. That said, the immediate upfront cost to WaSCs would be significant and there would be pressure to pass this cost on to water and sewerage bill payers. **However, we would ask Ofwat to consider the following suggestion and/or explain why payments to developers in Scotland are possible without the apparent detriment to the commercial interests of Scottish Water and/or customers**.

  If we were to replicate the procedure(s) in Scotland, the potential cost to WaSCs could be in the order of £250 Million, i.e. based on new home completions in the order of 165000 dwellings each year at an average WaSC contribution to Developers of £1500/dwelling. However, the analysis that follows may be worthy of due consideration:

- ***If this payment was to be recovered from an estimated 23 million existing domestic premises/customers and over a 10-yer period, it would represent an increase of around £1.07/dwelling/year on domestic water and sewerage bills***

- ***As an alternative, WaSCs could forego the imposition of infrastructure charges and requests for developer funded network reinforcement by directing/investing the income received from newly acquired income generating assets directly attributable and in consequence to new development***
- ***As HBF Paper No 9 demonstrates, in the case of foul sewers, the peak flow impact on existing foul sewer networks is marginal. This approach would take us that much closer to an equitable 'single charge' concept.***

Q6 Do you agree with our emerging thinking regarding information provision from companies to improve transparency?

- Yes, but we see no reason why improved performance KPIs should not be introduced and backed by financial penalties for non-performance, i.e. replicating what has been introduced in the Energy Sector.

- As we have articulated on previous occasions, it is how costs/charges are determined/applied that causes the greatest concern. Similarly, the underlying justification often advanced by 50% of WaSCs. More recent evidenced-based discussions involving Ofwat, Water UK/WaSCs and HBF have revealed an approach to network capacity assessments (both water supply and foul sewers) that at face value can only be described as being unrepresentative – for example:

    - Water Supply – the application/inclusion of water demand figures far in excess of both current Building Regulation requirements and annual usage data reported to Defra, i.e. between 125 to 150 litres/head/day, or in the latter case and using a household occupation rate of 2.5 persons/dwelling, a usage rate of 375 litres/dwelling/day. With more recent Ofwat Determinations having accepted usage figures between 400 litres/dwelling/day to just under 1480 litres/dwelling/day, HBF remains concerned that there is such a considerable degree of variation/inconsistency with little in the way of transparency in the approach to off-site network capacity checks.

    - Foul Sewerage Networks – it is quite clear that there are a number of pre-existing problems within a number of established foul sewer networks, in particular, in the south of England. Excessive infiltration, illicit connections and the consequences of so-called 'urban creep' (in part) are combining to remove whatever capacity for new development may have existed. We accept that modelling should reflect current use conditions and existing flows but as HBF Paper No.9 demonstrates, the impact in terms of potential foul sewer flooding, as a consequence of new development, is quite nominal. More importantly, to use the planning process to deal with pre-existing infrastructure problems is *ultra vires*.

As a keynote consideration we firmly believe that an integral part of the Charging Rules should set out a clear and unequivocal protocol and robust methodology for off-site capacity checks for both water supply and foul sewers.

Q7 What further information should Ofwat seek to collect from companies to aid transparency of charging in relation to new connections, as well as enabling ongoing monitoring and enforcement?

- Based on the reported experience of HBF members it is clear that reasonably intimate knowledge of existing asset networks, in particular existing foul sewers, is not known within the greater majority of WaSCs. This is leading to initial 'holding' objections from WaSCs when planning applications are submitted to Local Planning Authorities for new residential development. These objections relate exclusively to perceived rather than evidence based network capacity limitations. Any objections are quickly overcome by the imposition of drainage related planning conditions and/or the Local Planning Authority seeking developer funded off-site network reinforcement contributions through Section 106 Planning Agreements. The vires of such an approach is questionable and in discussions with Defra, DCLG, Ofwat and the EA, Thames Water confirmed on 23rd March 2016 that the use of S106 Planning Agreements was not appropriate. In our view, for the Charging Rules to be successful it is essential for all WaSCs to have sufficient evidence-based knowledge of their networks so that informed decisions can be taken. This applies equally to commercial and planning decisions. **The approach taken by Northumbrian Water, who secured capex funding to undertake such a task, can be considered to be not just an exemplar approach but also one that is essential in terms of transparency and the requirement for fair, equitable and proportionate in-consequence charging**.

- **For any Charging Rule to be successful it must be accompanied by statements confirming what is acceptable in terms of quantum**. **For greater transparency it will be essential for all Water and Sewerage Companies to disclose their suite of costs and for Ofwat to confirm what is and is not acceptable**.

Q8 Do you have any specific suggestions on the draft rules set out in Appendix A1?

- See responses to questions 5 and 6.

- How are 'associated works' defined? This requires clarification.

- **There should be an expedited dispute resolution process in place other than resolving disputes by way of a formal determination**.

- **The charging rules should be more explicit in terms of how SLOs are expected to operate and what charges they in turn will be responsible for**.

- How do NAVs/Inset Appointments fit in with the charging rule proposals. This is the potential source for increased competition and the charging rules would be all the better for having a section dedicated exclusively to both SLOs and NAVs.

Q9 Do you consider it to be appropriate for Ofwat to set requirements for companies to engage with their stakeholders as part of the charging rules?

- **Yes - this will be essential for the long-term success of the charging rules but in reality is this likely to happen and how will it be enforced**? For example, whilst second nature to developers, should WaSCs and Water Only Companies better engage with Local Planning Authorities. Similarly, provide sufficient robust evidence to justify the condition of their networks and the necessity for any planning-related demands for developer funded off-site network reinforcement that they may seek through the planning process?

Q10 Do you consider that any additional actions will be required to ensure an effective transition?

- Yes – any transitional arrangements will need to be clearly thought through. In many respects, whatever land allocations have already been crystallised within a local authority's Local Plan and most certainly any sites that have entered the planning process from formal validation thereon, should remain outside of the new Charging Rules unless, by chance, the 'rules' provide a better commercial alternative. **Moreover, the Charging Rules must include a preamble to this effect in the opening narrative**.

- Of fundamental importance to any Charging Rules will be an understanding of the land acquisition process and the need for a degree of cost reflectivity but without undermining project viability and therefore housing delivery.

- The length of time to implement the proposed changes does not appear to have synergy with the needs of the Water and Sewerage Sector in terms of setting out their charging regime. This was very evident in the Overarching Task and Finish Group meeting at Defra's offices on 15th April. **We ask that Ofwat look at this in more detail and perhaps include an events time-line in the eventual consultation**.

3. Summary

3.1 In our opinion the proposals articulated in this discussion paper lack both 'punch' and clear direction on a number of issues. The concept of 'zonal charging' may have merit but how such a system would work, supported by a robust auditing regime, has not been set out, in particular how and who will confirm that the basis for establishing a zonal charge will be both fair and representative – see earlier and subsequent comments on water usage criteria.

3.2 We remain somewhat concerned that these proposals still have a considerable degree of flexibility that is skewed towards preserving the commercial interests of the Water and Sewerage Sector. More importantly, at this stage we are not convinced that the reform proposals will do anything other than increase developer costs whilst maintaining a procedural status quo that favours the Water and Sewerage Sector.

3.3 Under paragraph 5.2 (Environmental Protection) reference is made to companies charging their off-site reinforcement costs on an expected litre per second demand, with reduced water usage influenced by installing more water efficient fittings. Whilst we agree with such an approach we must advise that House Builders are already obligated to do this through the Building Regulations.

In addition, the cost of installing water fittings that are even more efficient than they already need to be would succumb to the 'law of diminishing returns' as the investment would likely exceed the reduction in cost on offer from the water company. Moreover, this part of the discussion papers actually contradicts present practice and one supported in the most recent of Ofwat determinations specific to off-site water infrastructure capacity, in particular perceived water usage demand – see our response to question 6.

3.4 We have discussed at length the merits of a simple single charge that fulfils the requirements of being robust, transparent, proportionate and applied in a consistent way. Zonal Charging does not meet the required criteria in this respect and has the propensity to undermine project viability and ultimately therefore, housing delivery. The key issue is how we are to deal with off-site network capacity and more so how network reinforcement is to be funded whilst maintaining cost balance. Our suggestion articulated in the response to question 5, together with a known one-off payment for on-site mains and services, may be a possible way forward and one that our opinion merits further discussion.

Finally, as an illustrative example we close our response with a simple question: "How can the Wing Main determination accede to water demand criteria of nearly 1500 litres/dwelling/day when current, Defra/EA reported water usage is around 350 to 400 litres/dwelling/day? These latter figures are also consistent with the requirements of the Building Regulations.

As ever, we are more than willing to engage with Ofwat to deal with any requests for additional information or engage in further discussions.

Yours faithfully

HBF London

Enclosed as Appendix 1 HBF Information Paper 9 (Planning Conditions/Section 106 & Foul Sewerage Infrastructure – 20th March 2016)

Appendix 1

PLANNING CONDITIONS/SECTION 106 & FOUL SEWERAGE INFRASTRUCTURE

INFORMATION PAPER No. 9 – 20th MARCH 2016

1. **Introduction**

The house building Industry has always relied on the fundamental principle that Section 94 of the Water Industry Act 1991 provides a clear and unequivocal reaffirmation of one of the main statutory obligations placed upon all Water & Sewerage Companies (WaSCs) – see below:

S94 (1) "It shall be the duty of every sewerage undertaker –

a) To provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so cleanse and maintain those sewers as to ensure that that area is and continues to be effectually drained; and

b) To make provision for the emptying of those sewers and such further provision (whether inside its area or elsewhere) as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers"

Note: The underlining is HBF emphasis

In a modern day context this statutory obligation has existed, (unchanged) since the Public Health Act of 1936, albeit it is a principle that had its origins in the much earlier 'Act' of 1875. More importantly, it is a principle that has been consistently respected in subsequent iterations of Planning Legislation and ever since the coming into force of the Planning Act of 1947 – see later sections of this 'paper' - "Relevant Abstracts from Earlier Government Planning Policy and Related Planning Circulars".

2. **Planning Conditions/S106 Planning Obligations and Their Legitimacy**

As defined in Paragraph 004 of Planning Practice Guidance supporting the NPPF – (Use of Planning Conditions: Ref ID: 21a-004-20140306) for a planning condition/S106 Agreement to be legitimate (vires), it must pass six fundamental tests. Importantly, reference to earlier national planning policy confirms that there has been a long established consistency in having to meet this basic requirement.

One of the key tests is that a condition must fairly and reasonably relate to the development permitted. To satisfy just one of these tests extant Planning Practice Guidance states:

(i) It is not sufficient that a condition is related to planning objectives: it must also be justified by the nature or impact of the development permitted.

(ii) A condition cannot be imposed in order to remedy a pre-existing problem or issue not created by the proposed development [(1)].

(1) This requirement was re-affirmed/upheld in paragraph 78 of a High Court decision handed down on 30th July 2015 – See Case No. CO/4473/2014 (Menston Action Group –v- City of Bradford & BDW Trading (Barratt Developments) as an Interested Party)

In the context of off-site public foul sewer network capacity, both of these tests/requirements apply and have to be satisfied – requirement (ii) being of intrinsic importance. Moreover, if there are foul sewer capacity limitations, (perceived or otherwise) then it is incumbent upon the WaSC to provide the necessary robust evidence in support thereof and not merely rely on an anecdotal statement to the Local Planning Authority – the necessity for evidence is an underlying requirement of PPG paragraph 004.

3. **The Issue with Public Foul Sewers**
Based on investigative work jointly undertaken by HBF and Water UK, (through Northumbrian Water and United Utilities) it is clearly evident that WaSCs are experiencing high levels of infiltration (groundwater) into existing public foul sewer networks – allowances of up to 50% of average daily water usage are being incorporated in foul sewer network analyses in at least five WaSC operating areas.

There are many reasons why infiltration happens but in the main, this is attributable to ageing assets, limited planned maintenance and illicit surface water connections. In turn this leads to progressive deterioration and the erosion of hydraulic capacity, phenomenon that are not attributable to the consequences of new development. In other words, prevailing structural/hydraulic integrity, together with infiltration are clearly pre-existing problems.

4. **In the Context of New Development Why is this a Problem**?
Put simply and using current peak flow formulae, the peak discharge from a development of around 1000 dwellings is just a little over 7 litres/sec – see appendix 1. A 225mm diameter foul sewer laid at a gradient of say 1 in 100(2) has a discharge capacity of 45.6 litres/sec. Therefore, for a new development of this size the contribution in peak flow is a mere 16%. This represents an increase in peak flow that is difficult to accurately model in any foul sewer network analysis. Moreover, it is questionable whether modelling could accurately determine if such a nominal increase in peak flow would manifest flooding from foul sewers. If the above is scaled down to a development of 150 dwellings, the contribution in additional flow becomes almost impossible to model, especially when trying to demonstrate that such a minor contribution in peak flow manifests a demand for network reinforcement.

In our Task & Finish Group 2 discussions and in our separate discussions with Ofwat it has been made quite clear that existing customers should not be responsible for funding any foul sewer network capacity improvements as a consequence of new development. We agree with this basic tenet but conversely, planning and S106 Planning Agreements cannot impose a requirement for foul sewer network reinforcement that is not specific and/or attributable to the proposed development – see para 004 of the PPG cited earlier.

To proceed in this manner would render a related planning condition and/or S106 obligation ultra vires. Moreover, the potential unintended consequence would likely be a significant increase in planning appeals/public inquiries and whilst appeals are proceeding, we are not building much needed new homes.

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(2) The minimum gradient that a 225mm dia foul sewer would need to be assessed at would be 1 in 170. This represents a sewer with the required minimum self-cleansing velocity. Any existing foul sewer that is laid at a gradient that does not achieve this requirement and becomes the subject of a demand by a WaSC that it to be re-laid as a consequence of new development, would be classed as betterment for the wider community and not wholly attributable to the development in question.

If network reinforcement was fully justified, then the development community would rightly expect to pay for only that proportion directly attributable to the development in question – this is an underlying tenet of established planning law. In exercising proportionality in such matters, the Developer's contribution would unlikely exceed a single figure percentage. Clearly, this is a major funding issue and a conundrum in urgent need of effective resolution.

5. **Abstracts from Earlier Government Planning Policy and Related Planning Circulars**
HBF believes that may be helpful and informative to consider how planning policy and planning guidance specific to planning conditions has evolved – a short date-regressive summary follows;

5.1 Planning Policy Statement: Planning & Climate Change (Supplement to PPS1) – Dec. 2007

Paragraph 11 of the 'supplement' to PPS1 read as follows:

"Planning Authorities should adhere to the following principles in determining planning applications:
- *controls under the planning, building control and other regulatory regimes should complement and not duplicate each other".*

5.2 Planning Circular 05/2005 – 18th July 2005
This was a highly relevant circular with a number of paragraphs committed to providing unequivocal guidance relating to the imposition of panning conditions and the obligations that can be incorporated into a S106 planning agreement:

"Para B5 - The Secretary of State's policy requires, amongst other factors, that planning obligations are only sought where they meet all of the following tests. The rest of the guidance in this Circular should be read in the context of these tests, which must be met by all local planning authorities in seeking planning obligations. They can also be used in relation to Local Development Orders (Note: once the relevant provisions in the Planning and Compulsory Purchase Act 2004 have been commenced). A planning obligation must be: (i) relevant to planning; (ii) necessary to make the proposed development acceptable in planning terms; (iii) directly related to the proposed development; (iv) fairly and reasonably related in scale and kind to the proposed development; and (v) reasonable in all other respects".

"Para B7 - Similarly, planning obligations should never be used purely as a means of securing for the local community a share in the profits of development, i.e. as a means of securing a "betterment levy".

"Para B9 - Within these categories of acceptable obligations, what is sought must also be fairly and reasonably related in scale and kind to the proposed development and reasonable in all other respects. For example, developers may reasonably be expected to pay for or contribute to the cost of all, or that part of, additional infrastructure provision which would not have been necessary but for their development. The effect of the infrastructure investment may be to confer some wider benefit on the community but payments should be directly related in scale to the impact which the proposed development will make. Planning obligations should not be used solely to resolve existing deficiencies in infrastructure provision or to secure contributions to the achievement of wider planning objectives that are not necessary to allow consent to be given for a particular development".

HBF underlining for emphasis.

"Para B19. Maintenance Payments - As a general rule, however, where an asset is intended for wider public use, the costs of subsequent maintenance and other recurrent expenditure associated with the developer's contributions should normally be borne by the body or authority in which the asset is to be vested. Where contributions to the initial support ("pump priming") of new facilities are necessary, these should reflect the time lag between the provision of the new facility and its inclusion in public sector funding streams, or its ability to recover its own costs in the case of privately-run bus services, for example. Pump priming maintenance payments should be time-limited and not be required in perpetuity by planning obligations".

"Para B52: Other Legislation - This guidance is not concerned directly with matters arising from other legislation, e.g. the requisitioning of the provision of a water supply or of a public sewer from a water company under the Water Industry Act 1991 or previous legislation; or agreements made under the Public Health Act 1936; or agreements about development in the vicinity of roads under section 278 of the Highways Act 1980 (as substituted by the New Roads and Street Works Act 1991) on which Department for Transport, Local Government and the Regions Circular 4/2001 gives advice. However, there is of course merit in ensuring a joined-up approach is taken to the planning of the provision of all infrastructure and services relating to a site".

This Planning Circular also contained an important and highly relevant note:

"Note - 2 The use of s106 of the 1990 Act in order to secure the provision of infrastructure for water supply, sewerage or sewage disposal should not be necessary because it will already be the developer's responsibility to requisition the provision of a water supply by the water company under section 41 of the Water Industry Act 1991 and/or the provision of sewers under section 98, and the provision of associated infrastructure by the water company is financed by infrastructure charges levied by companies under section 146 of the 1991 Act for any new connection".

5.3 Planning Policy Statement No.1 (Delivering Sustainable Development) – 31st January 2005

This planning statement replaced PPG1 which came into force in February 1997. Paragraph 30 (Spatial Plans) read as follows:

"The new system of regional spatial strategies and local development documents should take a spatial planning approach. Spatial planning goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they can function. That will include policies which can impact on land use, for example by influencing the demands on or needs for development, but which are not capable of being delivered solely or mainly through the granting or refusal of planning permission and which may be implemented by other means. Where other means of implementation are required these should be clearly identified in the plan. Planning policies should not replicate, cut across, or detrimentally affect matters within the scope of other legislative requirements, such as those set out in Building Regulations for energy efficiency".

HBF Underlining for emphasis

5.4 Planning Circular 11/95: (Use of Planning Conditions in Planning Permission: 20th July 1995) This circular revised an earlier, related planning circular, namely 1/85 issued by the DoE. It continued to contain two important statements:

At Para 22 – "*A condition which duplicates the effect of other controls will normally be unnecessary, and one whose requirements conflict with those of other controls will be ultra vires because it is unreasonable*".

Whilst Para 24 advised – "*Unless a condition fairly and reasonably relates to the development to be permitted, it will be ultra vires*".

6 Summary

Planning legislation has always been reasonably clear when it comes to the imposition of planning conditions and/or the terms and conditions of S106 Planning Agreements. Moreover, the approach in respect of foul sewerage infrastructure has been remarkably consistent and can be traced back to planning circulars issued in the 1970's.

More recently, there have a number of occasions when the Supreme Court decision involving Welsh Water and Barratt Developments (2009) has been cited by WaSCs, in particular the expected role of the Planning Authority, in particular, when considering foul drainage capacity. However, one key omission in this judgement/decision was the fact that quantum relating to peak foul discharge from the proposed development was not presented in evidence.

Furthermore, no evidence-based assessment(s) appear to have been disclosed by Welsh Water to demonstrate, (with any degree of accuracy) the precise effect that foul discharge from a new development would have on the foul sewer network under consideration. This remains an important aspect of the chain of evidence.

Attached as Appendix 1 is a worked example covering 3 development scenarios – this is the type of evidence we would expect to see as a 'starter for ten' when any WaSC approaches a Local Planning Authority with assertions that the existing foul sewer network is at capacity, thereby necessitating Developer funded off-site network improvements as a condition of planning. If our method of calculation is wrong then we invite WaSCs to not only say so but more importantly, that we reach a consensus on how foul sewer network modelling should be undertaken, in particular, what input parameters are appropriate.

When considering off-site foul sewer capacity, the approach adopted by Northumbrian Water (NWL) is worthy of mention. NWL rely on an initial theoretical assessment based on the 'network' knowledge they hold. (This is useful information for developers at the important land acquisition due diligence stage). Thereafter, if development becomes even more certain, and if appropriate, this theoretical data can be refined and finessed, using in-situ flow monitoring. Such an approach appears eminently sensible.

However, in going forward, if the expectation is that the right to connect to the public foul sewerage system is to be controlled through the planning process, then the Judicial Opinion cited in paragraph 58 of the Barratt Homes –v- Welsh Water decision (see below) should become a procedural mechanism that forms an integral part of the Charging Rules.

Para 58 - "…. *It would seem desirable that the sewerage undertaker and OFWAT should at least be consulted as part of the planning process*".

This approach could have many mutual benefits, for example:

- WaSCs will have to submit robust evidence in support of any statement made that there are off-site foul sewer capacity restrictions/limitations
- If network analysis is required input parameters can be agreed

- The output from any modelling can be relied upon to determine what proportion of the off-site improvement works may have to be paid for by the developer

- What can be included as a planning condition and/or S106 contribution can be assessed against the six tests of validity as defined in extant Planning Practice Guidance.

- OFWAT would become an integral part of the procedure outside of the Price Determination process by being able to immediately confirm what is and is not acceptable. This would avoid a lengthy dispute resolution process, similarly, recourse to a planning inquiry or Judicial Review in many instances.

However, it may not effectively resolve the vexed issue of which party pays for any off-site foul sewer network reinforcement or part thereof, if indeed this is required. As HBF has advocated on many occasions, evidential disclosure is fundamental to effective decision making.

HBF London
20th March 2016

APPENDIX 1 to HBF Paper No.9

Determining peak flow from a new development and the likely impact on an existing public foul sewer network. The data used in the calculations that follow is based on the information received from respective WaSCs as part of the Defra agreed work undertaken by four members of Task & Finish Group 2.

The variability in the range of input parameters is quite considerable, in particular those specific to infiltration allowances – these varied from 10% to 50% of daily water demand. We have yet to determine if these allowances have any scientific and/or robustly measured basis – the disclosure of both qualitative and quantitative data would help enormously. Similarly, sufficient critical mass in terms of dwelling numbers when it comes to the actual contribution from housing when considering infiltration and illicit connections.

Importantly, new housing represents a mere 25% or thereabouts of all UK construction output and therefore one could easily conclude that the greatest contribution, via infiltration and illicit connections, is the wider construction industry/non-domestic sector.

As you work through this review of the data, it is quite useful if we start at the site level and the basis for arriving at a peak flow discharge/dwelling as defined in SfA 6th Edition, i.e. 4000 litres/dwelling/day. As we know this figure is arrived at as follows:-

1. 3 persons/dwelling, discharging 200 litres/person/day with a peak flow multiple of 6.0 (i.e. six times dry weather flow) and a 10% infiltration allowance. This equates to a discharge rate of 3960 litres which has been rounded up by a further 1.0% to arrive at 4000 litres/dwelling. In addition, it is generally accepted that 95% of all incoming water finds its way into the foul sewer network. This means that the figure of 4000 litres/dwelling contains a further factor of conservatism in design terms of around 5.6%. (One could reasonably conclude therefore that existing design conventions for new foul sewers already contain an allowance of 16.6% for infiltration and/or illicit connections, i.e. 10% + 1% + 5.6%).

2. That said, two of the numbers used in the calculation above are now quite dated, namely, the average occupancy rate (recently confirmed by DCLG at around 2.15 persons/dwelling and the maximum water usage, now capped by AD 'G' of the Building Regulations at 125 litres/person/day. (This latter figure is quite close to the water usage figures recently disclosed to Defra/Ofwat by a number of WaSCs). Re-casting the calculation in (1) above produces a peak flow of 1774 litres/dwelling/day which could be rounded up to say 2000 litres/dwelling/day. This creates a compelling case to seek a revision of the foul sewer design parameters for new residential developments.

3. This now brings us to determining peak flow in established/existing public foul sewer networks. Peak flows can be influenced by a number of factors, for example attenuation and diversification effects tend to reduce peak flows. Consequently, the ratio of peak to average flow generally decreases from the top to the bottom of the foul sewer network. Therefore, the 'peak' factor varies depending on position within the network. That said, whilst not a means of precisely reflecting such a phenomenon, there are a range of established calculations/formulae that help us to predict likely peak flow, i.e. Gaines (1989).

By way of the calculation(s) that follow, it can be demonstrates just how low the peak foul flow from a new residential development is when considered as part of the wider public foul sewer network:

- Use a development of 1000 dwellings for this example
- Gaines formula – $P_F = 2.18Q^{-0.064}$ (where P_F is peak flow and 'Q' is flow in litres/sec, with occupancy rate capped at 2.5 persons/dwelling, daily water consumption is 125 litres/person/day and no allowance for infiltration)
- Calculate daily per capita flow – (1000 x 2.5 x 125) / (24 x 60 x 60) = 3.62 litres/sec
- $P_F = 2.18 \times 3.62^{-0.064} = 2.008$
- Peak flow = 2.008 x 3.62 = 7.268 litres/sec
- To put this into some perspective – a 225mm dia foul sewer laid at a gradient of 1 in 100, has a capacity of 45.6 litres/sec., using a pipe frictional co-efficient (k_s) of 1.5mm.

- It is worth re-calculating the above but using a development of 10000 dwellings as a second example and using the same occupancy/water usage parameters
- Daily per capita flow – (10000 x 2.5 x 125) / (24 x 60 x 60) = 36.2 litres/sec
- $P_F = 2.18 \times 36.2^{-0,064} = 1.733$
- Peak flow = 1.733 x 36.2 = 62.7 litres/sec
- A 300mm dia foul sewer laid at a gradient of 1 in 240 meets this capacity requirement for 10000 dwellings

- Now consider the impact of a development of 150 dwellings entering the network using the same occupancy/water usage parameters
- Daily per capita flow – (150 x 2.5 x 125)/(24 x 60 x 60) = 0.54 litres/sec
- $P_F = 2.18 \times 0.54^{-0,064} = 2.268$
- Peak flow = 2.268 x 0.54 = 1.23 litres/sec
- Such low peak flows and the consequence thereof become almost impossible to accurately model into the wider foul sewer network. Moreover, even taking the discharge rate of 4000litres/dwelling/day, as defined in SfA 6th Edition, the resultant peak flow would be just under 2.0 litres/sec.

In summary, what these calculations demonstrate is just how nominal the foul sewer flow from a new residential development is likely to be, especially when considering peak flow/existing foul sewer capacity implications. Consequently, when combined with the observations in paragraphs 1 and 2 above, the impact of overly conservative design, together with high levels of infiltration, (which is already factored into the design of new foul sewers) are creating a climate of demand for foul sewer network reinforcement, paid for my developers, that is clearly disproportionate. In many instances we would say it is unnecessary.

APPENDIX 2

Ofwat Charging Rules Discussion Paper – Response Date 21st April 2016

"There is More to Planning and Housing Delivery Than Just a Local Plan"

During the course of the Defra Task & Finish Group meetings WaSC representatives and Water UK have cited the planning process as an unreliable catalyst to commit investment capex in adequate water and sewerage infrastructure to serve the needs of new development. We have to disagree for a number of evidenced-based reasons – see later comments.

The reactive approach that is being implemented primarily by southern-based WaSCs and WoCs, is somewhat detached from the underlying ethos of the local plan process, viz. predict, plan and provide. Investment linked to the needs of the development community is not taking place and there is compelling evidence to suggest that investment has continued to progressively fall away ever since privatisation of the Water & Sewerage Sector in 1989. This is leaving a widening infrastructure provision gap that developers are increasingly being forced to resolve/close.

However, we would venture to suggest that the root cause of WaSC and WoC allegations that the planning system does not provide the required certainty is as a result of the Water & Sewerage Sector not having a working understanding of UK planning law and/or land-use planning procedures.

In addition to preparing a Local Plan and/or Neighbourhood Plan, Local Planning Authorities are compelled to undertake and report on the implementation of their local plan objectives on a yearly basis. A critical part of this requirement is progress on new housing completions on sites allocated to deliver the minimum requirement of an identifiable 5-year land supply for housing. In addition, there is a requirement to consider a rolling programme of strategic sites/land to maintain this level of housing provision.

In our T & F discussions, comments have also been raised by WaSCs/Water UK about the uncertain timing relating to the delivery of allocated housing sites. Whilst it is accepted that some slippage can occur this is quite limited and rarely a cause for major concern for the development community in general. More importantly, housing site allocations, dwelling numbers and the delivery timing thereof are often material evidential considerations at public planning inquiries, especially when housing numbers are being debated and/or challenged.

Furthermore, the planning process does not stop at the local plan – all Planning Authorities have in place important supporting documents and guidance, for example, Water Cycle Studies as defined in paragraph 012 (ref ID: 34-012-20140306) of National Planning Practice Guidance. Given the importance and relevance of WCSs paragraph 012 is repeated below:

> *"A water cycle study is a voluntary study that helps organisations work together to plan for sustainable growth. It uses water and planning evidence and the expertise of partners to understand environmental and infrastructure capacity. It can identify joined up and cost effective solutions, that are resilient to climate change for the lifetime of the development. The study provides evidence for Local Plans and sustainability appraisals and is ideally done at an early stage of plan-making. Local authorities (or groups of local authorities) usually lead water cycle studies, as a chief*

aim is to provide evidence for sound Local Plans but other partners often include the Environment Agency and water companies".

The underlining is HBF emphasis. Moreover, in September 2009 the EA gave a presentation on the role and importance of WCSs - at that time some 60 Water Cycle Studies were already in place and effectively supporting extant local plan land-use allocations. More recent examples include the Water Cycle Study Report for Cotswold District Council who had engaged with Thames Water, Severn Trent Water, Wessex Water and Bristol Water who in turn had an intimate knowledge of where, when and in what numbers new housing was either being delivered or due to be delivered up to 2031. This process has been replicated elsewhere in England and Wales.

Given that there are least three occasions when the Water & Sewerage Sector can access real-time evidence to make informed investment decisions suggests to us that the planning regime is being used as an excuse. If our submission in this regard is incorrect then we would challenge the Water & Sewerage Sector and Ofwat to provide the necessary rebuttal evidence. Indeed, to support the allegation being made by the Water & Sewerage Sector, it is reasonable to assume that Ofwat discussion paper would have provided robust supporting evidence – it clearly has not.

As a final comment, we can see no reason why the Water & Sewerage Sector should rely on the planning system to the extent that it is – HBF Paper 9 provides more succinct comment in this regard.

HBF London
19th April 2016