



1. Purpose and introduction

- 1.1 The purpose of this briefing is to provide an update on the provision of infrastructure to support growth, with a particular focus on provision in the Isle of Dogs and of utilities infrastructure.
- 1.2 The paper responds to a question from the Strategic Development Committee about the role of the planning system in requiring and/or facilitating infrastructure provision, particularly that related to utilities, with a focus on what we can consider when determining individual planning applications. The paper also sets out some of the strategic partnership working that the Council is undertaking with utilities providers.

Recommendation

- 1.3 That the Strategic Development Committee notes the contents of the briefing paper.

2. Policy Context

- 3.1 The predominant stage where infrastructure is considered is the plan making stage, with plans required to utilise evidence and engagement with providers to plan for and ensure the broad deliverability of the necessary infrastructure to accommodate growth within the plan. This is an appropriate approach given the timescales required in securing, designing and delivering infrastructure. In some circumstances there is a need for further consideration of infrastructure at a site by site level, where for example there is a need for on-site delivery of infrastructure or bespoke infrastructure needs that are specific to one particular development. This briefing will explore further where those circumstances exist and how they should be considered by Strategic Development Committee.
- 3.2 The following paragraphs are pointers towards key references to infrastructure within planning policy:

National Planning Policy Framework (2021) and Guidance

- 3.3 It is the National Planning Policy Framework (NPPF) that sets out the approach to be taken when considering infrastructure through the planning system.
- 3.4 At the core of this document, it sets out that there is a presumption in favour of sustainable development. There are three objectives to achieving this, one of which is economic. To help to build a strong, responsive and competitive economy, it references the need to identify and coordinate the provision of infrastructure. Furthermore, within Paragraph 11 of the document, it sets out that when plan making, the demands from growth shall be met and aligned with infrastructure provision.

- 3.5 This strategic approach to dealing with infrastructure needs continues throughout the NPPF. In particular paragraphs 20, 73, 161 and 186, whereby it stresses the importance of planning policy setting an overall strategy to ensure there is sufficient provision for infrastructure, including references to water, flooding, digital, telecommunications, air quality and education amongst others.
- 3.6 There follows multiple sections of the NPPF that refer to the need to plan for individual types of infrastructure. Broadly each section continues the approach of front-loading the planning of infrastructure into plan making stages.

London Plan (2021)

- 3.7 At a London Plan level, there are a number of policies regarding infrastructure.
- 3.8 There is considerable emphasis on the need for Development Plans to set out requirements for meeting strategic level infrastructure needs, which is picked up by the Local Plan – such as Policies SD1, SI5 & SI6. This is set out by these policies referencing the need for a boroughs local plan to provide the necessary social and other infrastructure to sustain growth, including improvements to water supplies and supporting the delivery of full fibre or equivalent digital infrastructure.
- 3.9 Where there are requirements for individual development proposals these are largely requirements for good on-site design, for example to incorporate surface water drainage (Policy S113), manage the on-site use of water (SI5) and where appropriate facilitate connections to heat networks (SI3).
- 3.10 There are also a number of requirements for local authorities to identify sites for new infrastructure delivery, predominantly relating to social infrastructure such as schools and health centres. This is picked up within the Local Plan.

Tower Hamlets Local Plan (2020)

- 3.11 The vision and objectives of the Local Plan set out that growth must be delivered alongside appropriate social and transport infrastructure, recognising that without provision of adequate infrastructure, growth cannot be supported. In particular, Policy S.SG1 outlines that for sites within a site allocation it is fundamental that they deliver the right infrastructure requirements. The Local Plan secures options for the delivery of over 50 pieces of on-site infrastructure across 21 Site Allocations, including schools, health centres and parks. This approach is necessary given the pressure on available land in the borough and also has many benefits. On-site provision ensures delivery occurs at the same time as growth, is located where growth is happening and can be more efficient in cost and delivery terms than off-site delivery.
- 3.12 The Local Plan sets an expectation that developers should contribute towards meeting the additional infrastructure needs arising from new development. This can be through onsite delivery and/or the funding mechanisms available.

3. The role of the Community Infrastructure Levy (CIL) and Planning Obligations (S106)

- 3.1 The Community Infrastructure Levy (CIL) is a planning charge, introduced by the Planning Act 2008. It is a tool for Local Planning Authorities (LPA's) in England and Wales to help

deliver infrastructure to support the development of their area. In London there are two types of CIL:

- Local CIL – adopted in April 2015 - which helps pay for borough infrastructure projects that are needed to support new developments
- Mayoral CIL (MCIL) – adopted in April 2012 - which currently helps fund Crossrail.

3.2 CIL is set through a strategic approach by setting a Charging Schedule for the entire borough and then administered in the manner of a ‘tax’ on each development, without the need for or opportunity to negotiate the contribution on a site by site basis.

3.3 For CIL, the money received goes into a central ‘pot’ and monies from this pot are then allocated and spent on infrastructure needed to support planned growth across the borough. A 25% portion of the funding is ringfenced to support local level infrastructure in the neighbourhood within which it was collected. This is known as the Local Infrastructure Fund and projects are delivered following engagement with local people about their infrastructure priorities and specific project nominations.

3.4 Planning Obligations (secured using Section 106 legal agreements) are obligations on the developer which can be financial or in-kind contributions. These are required from a developer when the council considers that the development will have an impact that cannot be dealt with through the planning conditions when granting planning permission. Obligations can be non-financial in nature (e.g. to provide a certain amount of affordable housing), or can require a financial contribution (e.g. a contribution towards a public realm improvement to serve the development).







3.5 Planning obligations must meet the following statutory tests:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind to the development

How do CIL and s106 work together?

3.6 Since the adoption of Tower Hamlets CIL in April 2015, CIL has been the main mechanism by which granted and implemented planning permissions have contributed towards strategic local infrastructure needs. After April 2015, there are still occasions when infrastructure funding is secured through planning obligations. However the legislation is clear that this must be where there is a specific need that is generated by a development, that is not already accounted for in the adopted CIL. i.e. there cannot be double counting.

3.7 While the use of CIL and Planning Obligations to secure funding towards strategic infrastructure are important parts of the planning system, as explained above, they are largely set at a strategic level and therefore not for negotiation at a scheme level. This briefing therefore does not go into further detail on these processes, although further details can be provided if required.

Section 106 (s106)	Community Infrastructure Levy (CIL)
 <p data-bbox="327 315 643 376">Negotiated between the developer and the LPA</p>	 <p data-bbox="946 315 1366 376">Not-negotiated calculated based on the net increase in floorspace</p>
 <p data-bbox="327 450 737 607">Site-specific to mitigate the impact of the development. Must be fairly and reasonably related in scale, size and kind to the development</p>	 <p data-bbox="946 450 1350 573">Non site-specific can be pooled and spent anywhere in the borough on infrastructure to support development</p>
 <p data-bbox="327 674 734 797">Payments due from the developer according to triggers for example completion, occupation etc</p>	 <p data-bbox="946 674 1377 763">Payments due from the developer upon commencement of the development</p>

4. Consideration of infrastructure in planning decisions

- 4.1 Section 70 of the Town and Country Planning Act 1990 provides the legal framework for determining planning applications.
- 4.2 In dealing with an application for planning permission the authority shall have regard to:
- the provisions of the development plan, so far as material to the application,
 - any local finance considerations, so far as material to the application, and
 - any other material considerations.
- 4.3 Judicial statements have held that **any consideration which relates to the use and development of land** is capable of being a planning consideration.
- 4.4 In this context the capacity of infrastructure to support new development, particularly in areas subject to significant growth would be a material planning consideration.
- 4.5 In terms of how to approach infrastructure issues in decision making, the committee should consider the role of CIL in contributing to borough wide strategic infrastructure. The Committee report will set out the estimated CIL liability, based on floor space.
- 4.6 The Committee can also take into account how planning obligations may be used to mitigate local or site specific infrastructure impacts, that would not be addressed by CIL.
- 4.7 For site allocations, the Committee should consider whether the application addresses the on-site infrastructure requirements set out in the local plan.
- 4.8 The impact of new development in high growth areas on utilities infrastructure - water, heat and power – has been the focus of discussion at SDC when considering applications for high density residential schemes.
- 4.9 Representations have highlighted the capacity of existing utilities infrastructure to meet rapidly increasing demands arising from new development in the Isle of Dogs, where the

Local Plan indicates development potential of more than 31,000 new homes to 2031. The adequacy of water distribution networks has been a particular area of concern and the anecdotal evidence of low water pressure in some consumers homes on the Isle of Dogs has been highlighted.

- 4.10 The Committee has sought advice on how these concerns should be considered when determining individual applications for planning permission, bearing in mind that utilities providers have certain statutory obligations. The next section deals with these issues.

5. Utilities infrastructure

Water companies – statutory obligations

- 6.1 All Water utility companies, such as Thames Water, have a legal obligation under the Water Industries Act 1991 (WIA 1991) to provide developers with the right to connect to a water supply and a public sewer regardless of capacity issues.
- 6.2 Water companies also have a general duty under the WIA 1991 to maintain, improve and extend water supply systems within their areas, to ensure sufficient capacity to meet anticipated demands.
- 6.3 Network upgrades are usually delivered through Thames Water's 5-year assets plan. However, the changing nature of development activities and the planning process, can create challenges for the utility company in delivering timely solutions to infrastructure constraints. Sometimes it may be necessary to use what is known as a requisition agreement, where both the developer and Thames Water contribute to an upgrade solution.
- 6.4 Given these statutory duties and obligations, Thames Water cannot object in principle to a planning application for new development.
- 6.5 Similarly, the Council could not refuse to grant planning permission for development on the grounds that no improvement works are planned for a particular area. This is because the WIA 1991 specifically requires Thames Water to accommodate the development whatever the circumstances
- 6.6 Early engagement between the developer and the water company will help to ensure that the need for any capacity improvements or upgrades necessary to establish the new supply and sewerage connections can be planned for in advance.

UK Power Networks – statutory obligations

- 6.7 Section 16 of the Electricity Act 1989 (the EA) imposes upon the electricity distributor a duty to make a connection between the electricity distribution system and a new development.
- 6.8 UK Power Networks (UKPN) is the DNO (Distribution Network Operator) for London with regards to electricity. The role of the DNO is to take the energy from the transmission network (the network operated by the National Grid which receives energy from power stations operated by utility companies) and distribute it (via the distribution network) to homes and businesses. This is done via substations, which 'step down' the voltage of the power being transmitted. Note that some works in the distribution/connection network are required to be undertaken by UKPN (known as uncontestable works), however other works (known as contestable works) can be delivered by a range of connection suppliers in the marketplace.

- 6.9 UKPN therefore have a statutory duty to make electricity available for new development and cannot object in principle to a new development. Similarly, the council could not refuse permission based on the statutory requirement that a connection will be made available.
- 6.10 A difficulty in arranging electricity connections exists in areas where there is mass growth split between a wide range of development sites and developers, such as the Isle of Dogs. UKPN are forbidden by regulations to speculatively provide increased distribution and connection infrastructure without having the equivalent sized formal requests from developers. As developments come forward at different times over many years, this can lead to piecemeal solutions, or the full cost of a strategic upgrade of the distribution network falling on the one development that happens to trigger the need. There is therefore a need for coordination and collaboration outside of the formal statutory process. The council are working to facilitate this approach with UKPN, other providers and local developers and landowners (see detail in Section 5 of this report). Planning conditions can also be used to help manage the timing of connection requests.

Cadent Gas Supplier – statutory obligations

- 6.11 The gas distribution network (GDN) is owned and managed by Cadent in London. Its role, as required by the Gas Act 1986 (specifically Section 10) is to transport gas through its pipelines to homes and businesses.
- 6.12 The council are not aware of any strategic level concerns regarding the capacity of the gas network to provide sufficient gas to new development in the area. Standard local connections will be required per development, but these can be arranged between the developer and Cadent. Given the Mayor of London's desire to reduce dependence on gas, there is likely to be a reduced need for strategic capacity in the future.

Use of planning conditions

- 6.13 Thames Water and the other utilities companies are not statutory consultees (i.e. defined in law) on most planning applications¹. However, it is good practice for the local planning authority to consult them on major development proposals and this is the approach in Tower Hamlets.
- 6.14 When the utilities companies do respond to applications, they may comment on whether the development would physically affect their assets, current infrastructure capacity and potential improvements. They may also recommend a *Grampian style* planning condition is imposed on the grant of planning permission. A Grampian condition is one that prevents the start of a development until off-site works have been completed on land not controlled by the applicant.
- 6.15 The purpose of this type of condition is to enable Thames Water to manage the timing of connections to the water supply and public sewer so that it can properly comply with its statutory duties or to similarly manage the timing of the connections to the electricity and gas networks. It will allow the utility provider to agree a strategy with the developer, the preferred point of connection, allow for existing capacity to be considered and any necessary upgrading work to be programmed. This allows the **legal right to connect** to be sensibly managed prior to implementation of the development.

¹ Water and sewerage undertakers are statutory consultees on applications for development involving the boring of or getting of oil and natural gas from shale.

6.16 The Council can include such a condition on the grant of planning permission, provided we are satisfied that it would meet the national policy tests for the use of planning conditions, i.e. that they are:

- Necessary
- Relevant to planning
- Relevant to the development to be permitted
- Enforceable
- Precise
- Reasonable in all other respects

6. Strategic partnership working in Tower Hamlets

6.1 The Council's Infrastructure Planning Service coordinate and lead the council's relationship with the GLA's Infrastructure Coordination Service on a programme of infrastructure delivery and coordination pilot projects for the Isle of Dogs, South Poplar and the Leaside Area. These projects cover infrastructure relating to water, energy and digital amongst others. We have worked in collaboration with several external partners to better understand the complexities and challenges facing the planning, delivery and maintenance of utilities infrastructure.

6.2 Whilst historically there have been several concerns with utilities infrastructure planning, in terms of capacity and disruption to local people and business, through this work we have been able to gain additional information and understand in greater detail where the challenges lay for utility providers.

6.3 To help them better understand likely future demand, we have shared data on projected development levels. This has helped to provide them with a greater degree of certainty as to when things will happen, for them to adjust and adapt their investment plans. By taking this approach it allows for better planning of utilities infrastructure. Furthermore, where opportunities arise, we are also looking to explore innovative solutions as to how to better deal with some of the barriers to utilities planning, such as the possibility of futureproofing, whereby some infrastructure could be provided within the ground ahead of it being required, thus reducing the need to dig up the carriageway twice.

Strategic partnership working - Water

6.4 In summer 2021, LBTH and the GLA concluded the Integrated Water Management Plan (IWMP), reviewing water supply and drainage needs for the Isle of Dogs, South Poplar and Leaside. Key findings for the Isle of Dogs include that water supplies are currently generally sufficient, but over the next few years, the flow towards the IoD needs to be increased. An additional major water main along Burdett Road, planned for installation by Thames Water by 2025, will enhance the supply.

6.5 Thames Water is installing a new water main along Byng Street by summer this year to allow connection of current and future developments in this area. The Infrastructure Planning team in collaboration with the GLA, is also investigating the option of laying spare electrical ducts while these street works are taking place to reduce the need for future street works.

6.6 Low water pressure and supply issues have been reported for some households in the Isle of Dogs. The cause appears to be low water pressure generated from the distribution within developments rather than insufficient mains pressure at the point of connection.

- 6.7 The IWMP also addresses drainage as new developments discharge more foul water and may also increase surface water discharge peaks. Sewers are generally the largest pipes in our highways, they need to be laid at a gradient for the effluent to flow and on the IoD we mostly have combined sewers, which means they carry foul and rainwater in one pipe. During extreme storms, the sewer capacity is exceeded and local flooding may occur and a storm overflow near the Blue Bridge discharges excess flows to the Thames. This storm overflow will continue to operate, as it is not connected to the Tideway tunnel.
- 6.8 Sewer capacity is harder to increase because of the size of pipes involved and associated cost. In the Isle of Dogs, the dock system creates additional engineering challenges. A sewer must drop below the dock, to a depth of around 15m and on the northern side sewage must be pumped up to continue flowing by gravity in sewers closer to ground level.
- 6.9 It is therefore not proposed to install further sewers, but to manage discharges from new developments to balance flows in the existing sewers and ensure capacity is not exceeded. This is readily achieved by reducing storm water discharges to sewers and freeing up capacity for additional foul flows. Thames Water sets discharge flow rates per development which mean that during heavy storms discharge needs to be stored (attenuated) on site and can then slowly be discharged to the sewer to balance flows in sewer. Attenuation can be in the form of 'grey' solutions, such as underground tanks, that do not reduce discharge, but instead slow the release of water. They can also be in the form of 'green' solutions that seek to absorb and/or re-use storm water for biodiversity and amenity purposes. Either approach is considered acceptable by Thames Water.

Strategic partnership working – Heat and Power

- 6.10 Developers derive heat and power from below ground utilities and services, as follows:
- Electricity is supplied via the UKPN distribution network and, in addition to lighting and small power, can also be used within the development to generate heating, for example using air source heat pumps.
 - Gas supplies are available from the Cadent distribution network and gas fired boilers or CHP engines generate the heat.
 - The Barkantine District Heating System can provide heat directly to developments via below ground distribution pipework from central gas fired CHP engines and boilers.
- 6.11 On the Isle of Dogs large developments need to route high voltage supplies from two separate locations to their site, requiring at least four 150mm diameter ducts to be accommodated in the public highway per plot. The nearest point of connection for such high voltage supplies are north of the Isle of Dogs at Westferry Circus or along Preston's Way.
- 6.12 Since the end of last year, the Infrastructure Planning service has worked to employ UKPN to undertake the IoD Electrical Supply Feasibility Study, which will model electrical demand based on future development and decarbonisation scenarios and timelines to then identify suitable points of connection and routes to supply the IoD in an integrated manner avoiding disruptive, untimely and costly ad-hoc solutions per development. UKPN aim to complete the study in the coming months, in line with the timescales for accompanying strategic long-term work called the Local Area Energy Plan (see below).
- 6.13 The gas distribution network to and on the Isle of Dogs has adequate capacity, although local connections may require routing to suitably sized mains, which also contributes to below ground congestion. There are no proposals to upgrade the system, but some long-term maintenance is planned. It is likely that new connections to the gas network are going

to reduce sharply based on the recent Mayor of London's Pathways to Net Zero Carbon by 2030, which proposed to discontinue the installation of gas fired boilers. Over time, existing boilers will also be replaced, freeing further capacity in the network.

- 6.14 The Barkantine District Heating System has provided electricity and heat to local residences for over 20 years. It is now operating near capacity, so could not supply significant additional developments without expansion. The contract with the system operator will expire in 2025 and the procurement of a future operator is under way with urgency to enable utilisation of this option as soon as possible.
- 6.15 The council are working with the GLA and statutory energy providers to produce a Local Area Energy Plan (LAEP). This approach reviews power and heat supply options against local, London wide and national Zero Carbon targets, fuel options, development trajectories, local building and infrastructure stock as well as social acceptability. It follows an Ofgem endorsed approach and is expected to be delivered in the summer, providing a route map to accommodating future growth; achievable decarbonisation of the local heat and power supply; and maximising the social value of the network.

Strategic partnership working – Digital

- 6.16 Work relating to digital utilities infrastructure is currently underway and it covers the Isle of Dogs, South Poplar Opportunity area and the Leaside AAP area. The outcomes of this work will be in two forms - a baseline study and a digital infrastructure strategy. The baseline study is due to be completed later this month and the digital strategy by the end of April. There are three main aims of this work, these are:
- To understand whether the digital infrastructure (fibre and mobile) within the Study Area is of a scale and standard commensurate with existing and planned growth.
 - To identify areas within the Study Area with gaps in connectivity and therefore priority areas for improved fibre and mobile infrastructure.
 - Beyond the foundations of fibre and mobile coverage, to identify other digital projects/initiatives that should be deployed in the Study Area.
- 6.17 The work to date has involved conducting over 60 stakeholder interviews spanning telecom carriers and operator communities, developers, public sector partners and representatives from various departments across the council. We have also sought to align this strategic exercise with current strategic work being undertaken within the council in respect to digital inclusion, as well as building upon some of the initiatives already being progressed in terms of the Social Housing Wayleave Agreements. This emphasis on alignment has been to ensure that all digital related initiatives and actions are aligned and are of mutual benefit, and collectively help to realise a long term and sustainable digital vision.

Infrastructure coordination

- 6.18 A new optional service has been established at LBTH in collaboration with the GLA to support developers in their liaison with utility providers and facilitate timely and coordinated solutions on a site-by-site basis (despite this not being a statutory role). This Infrastructure Coordination Service offers local insight, detailed knowledge of processes and good communication flows to subscribing developers. The LBTH's Infrastructure Planning team also maintains good relationships with utility providers including the supply of up-to-date development trajectories, to assist in their forward planning for likely new connection asks.