

CREATING A SUSTAINABLE PLACE TO LIVE AND WORK

8.1

‘Ensuring environmental sustainability’ is one of the Legacy Corporation’s Key Priorities set out in its vision. This Local Plan as a whole seeks to achieve the sustainable development of the Legacy Corporation area that results in a place that is economically, socially and environmentally sustainable. This is reflected in Policy SD.1: Sustainable development, following the vision set out in the Draft New London Plan. Within Section 2, ‘Our area’, outlines the key sustainability challenges and opportunities within the Legacy Corporation area.

8.2

To ensure that this Local Plan embraces all aspects of sustainability, this section supplements the other policies in this Local Plan relating to sustainability issues by:

- addressing health and wellbeing, and
- focusing on those matters that will help to make the Legacy Corporation area and the development within it resilient to climate change (including relevant mitigation measures) and addressing the requirement to contribute towards the national and London Plan targets for securing reductions in carbon dioxide emissions, and
- the expansion of electronic communications networks, including telecommunications and high-speed broadband.

8.3

In applying the policies of this Local Plan together as a whole (see paragraph 3.7 and 3.8 of this Local Plan), the Legacy Corporation’s aim is to ensure that a significant contribution is made to achieving a healthy place to live and work, that the Legacy Corporation’s area is a place that achieves a high level of wellbeing and that the positive impacts of securing sustainability will reach beyond the Legacy Corporation boundary to those who live and work in the surrounding areas of east London. To avoid repetition only Objective 5 is included within this section, however to reflect the overarching aims that the Legacy Corporation have around sustainability both Objectives 4 and 5 should be referenced when reading this section.

Objective 5: Deliver a smart, sustainable and healthy place to live and work

OBJECTIVE

This will mean:

- Ensuring that development balances its contribution to the economic, social and environmental aspects of the area
- Planned growth and regeneration are delivered in a way that minimises negative environmental and social effects and maximises positive environmental and social outcomes
- Ensuring that development is fit for the anticipated climate of the future and minimises its contribution to climate change and reduces risk from flooding
- Maximising the life chances of existing and new communities
- Ensuring change promotes physical and mental health and wellbeing
- That the population’s health outcomes and general quality of life are equivalent to at least the average for Greater London as a whole.



Strategic Policy SP.5: A sustainable and healthy place to live and work

POLICY

The Legacy Corporation will work with its partners to achieve a sustainable future for those who live and work in its area and contribute to a sustainable future for east London and London as a whole, by:

1. Ensuring that development contributes to the health and wellbeing of those living and working in the area
2. Ensuring that development meets the needs of the present without compromising the ability of future generations to meet their own needs
3. Contributing to the Mayor's objective of London becoming a zero-carbon city by 2050 utilising all measures of efficiency and energy reduction available informed by the energy hierarchy
4. Reducing water use and encouraging the utilisation of rainwater harvesting, grey water recycling and use of non-potable water sources
5. Minimising construction, commercial and householder waste
6. Encourage a reduction in materials use and increase in materials reuse, recycling and composting, ensuring that there is zero biodegradable or recyclable waste to landfill by 2026 and meeting or exceeding the recycling targets set out in the Draft New London Plan
7. Requiring retention of existing waste management facilities as set out in Policy S7
8. Minimising travel demand and increasing opportunities for walking and cycling to support in the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041
9. Requiring development to mitigate and manage the effects of climate change
10. Avoiding overheating and excessive heat generation as a result of new development
11. Urban greening through planting in the public realm and private spaces and green and brown roofs
12. Requiring Sustainable Urban Drainage Measures (SuDS), restriction of surface water run-off rates and interception of pollutants prior to discharge, where appropriate
13. Protecting existing and encouraging the provision of new public and private open spaces and an increase of tree coverage in streets and open spaces
14. Facilitating sustainable lifestyles for residents by considering the performance of buildings and spaces in operational use
15. By supporting the provision and expansion of digital infrastructure within the Legacy Corporation area and enabling development of future infrastructure.

Cross-reference to policies: SD.1; B.5; H.1; H.2; CI.1; CI.2; BN.3; BN.6; BN.8; BN.9; BN.11; BN.12; T.4; T.6; T.7; T.8; T.9; S.1; S.2; S.3; S.4; S.5; S.6; S.7; S.8; S.9; S.10; S.11; S.12
London Plan policies: GG1; GG3; T2

Case Study 13: Chobham Manor exemplar homes

CASE STUDY

Chobham Manor is the first phase of the Legacy Communities Scheme and includes 828 new homes, a community centre and local retail, leisure and employment space.

All dwellings have been built to the Fabric Energy Efficiency Standards (FEES) applied by government to zero-carbon dwellings. All buildings are connected to the district heating network. All homes have smart meters for heat, electricity and water consumption.

The planning permission required inclusion of 25 exemplar homes with a requirement to be zero carbon through on-site measures and achieving water consumption of 80 litres per person per day (lppd). The first phase includes ten exemplar homes that include the following additional measures:

- Materials and construction methods that allow flexibility in use/easy deconstruction for reuse elsewhere
- Healthy materials with commitment to low Volatile Organic Compound paints
- Use of recycled materials such as brick for garden walls
- Efficient cooking appliances such as induction hobs
- Optimisation of output from PV panels; timers on washing machines and dishwashers to minimise energy consumption and manage peak demands
- Sustainable choices for fixtures and fittings by offer of AAA-rated fridges, recycled carpet, recycled glass tiles, bamboo flooring etc.



DEVELOPMENT MANAGEMENT POLICIES

Policy S.1: Health and wellbeing

POLICY

Applications for major development schemes will be required within their Design and Access Statement to describe how the scheme will contribute to the health and wellbeing of those who will live and/or work within the development proposed and would not significantly adversely affect those who live and/or work within the vicinity of the proposed development. This should include information on access to schools, health services, community facilities, leisure activities, local shops and services, parks and publicly accessible open spaces. Major development schemes should also demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators as set out in the Draft New London Plan and Transport for London guidance, as well as access to the development via public transport and permeability through walking and cycling and how these link up with existing networks. They should also aim to reduce the dominance of vehicles on streets and demonstrate that they meet the requirements of all other relevant policies in this Local Plan.

Cross-reference to policies: SD.1; B.5; H.1; H.2; CI.1; CI.2; BN.3; BN.6; BN.8; BN.9; BN.11; BN.12; BN.14; T.4; T.6; T.7; T.8; T.9; T.10; S.2; S.3; S.4; S.5; S.6; S.7; S.8; S.9; S.10; S.11; S.12

London Plan policies: GG1; GG3; T2

Reasoned justification

8.4

The profile of the existing population within the Legacy Corporation area is identified and described in Section 2 of this Local Plan. The Legacy Corporation area, with its distribution of transport nodes, town and Local Centres, parklands and waterways, provides a context and setting for one of London's most significant areas of new development and regeneration, and a unique opportunity to develop a series of places that have the physical and mental health and wellbeing of those who live and work there at its core. These significant changes in the local environment and the high level of accessibility within new development, the public realm and other outside spaces, help to set the scene for enabling the future population to be one that meets at least the average for London as a whole in accordance with the convergence strategy for the Growth Boroughs.

Policy application

8.5

Each major development scheme will, by its nature, play a significant part in achieving the aims of this policy. It is important that these development proposals demonstrate that they are helping to achieve this in a manner that is appropriate to their specific circumstances. Physical development will set the scene for existing and new communities to develop and change, with community organisations, local groups and service providers, including faith groups, having a major role in ensuring that these are communities that thrive. It is important that the Design and Access Statements for major schemes identify, by reference to policies within this Draft New Local Plan and the Draft London Plan, those elements of the proposed scheme that will positively contribute to achieving positive outcomes for those who will live, work or otherwise use the development proposed.

Policy S.2: Energy in new development

POLICY

Developments will be expected to minimise carbon dioxide emissions to the fullest extent possible by application of the Energy Hierarchy as set out below:

1. Reducing energy requirements
2. Supplying the energy that is required more efficiently and where possible generating, storing and using renewable energy on-site
3. Meeting remaining energy requirements through renewable energy sources where viable and exploiting local energy resources.

Major development proposals should be net zero-carbon, with carbon dioxide emissions reduced from both construction and operation. The Draft New London Plan requires a minimum on-site reduction of carbon emissions of at least 35 per cent beyond Building Regulations 2013. Residential development should aim to achieve 10 per cent, and non-residential development should aim to achieve 15 per cent through energy efficiency measures.

Where these targets cannot be met on site, a financial contribution to the Legacy Corporation Carbon Off-setting Fund will be required. The Legacy Corporation Carbon Offset Supplementary Planning Document sets out the rate per tonne of carbon dioxide and the scheme for applying the funds raised.

Major applications will be required to provide an Energy Strategy that sets out how the development has addressed the Energy Hierarchy and meets or exceeds the targets above and the source and method of proposed energy supply and will be expected to monitor and report on energy performance. Energy Strategies should be prepared in accordance with Policy SI2 of the Draft New London Plan.

Cross-reference to policies: S.3; S.4; S.7; S.8
London Plan policies: SI3

Reasoned justification

8.6

In his Draft New London Plan, the Mayor sets out his ambition for London to be net zero-carbon. This reduction is a strategic priority that has the potential to make a significant contribution in a London context to minimising the projected levels of climate change. Achieving reductions in carbon emissions from these sources is an essential element of a London-wide strategy to contribute towards reducing the rate of identified climate change and improving air quality.

Policy application

8.7

The Legacy Corporation has an adopted supplementary planning document which sets out the rate to be applied to its area-wide carbon off-setting scheme and identifies the mechanism for collecting and allocating the funds raised to ensure that funds are applied in a way that adequately mitigates the carbon dioxide emissions from the contributing development. The scheme for allocating funds raised takes into account local opportunities to aid appropriate retrofitting of carbon saving measures to existing buildings and structures within and around the Legacy Corporation area. The rate ensures that development within the Legacy Corporation

area remains viable. The Legacy Corporation's carbon off-setting scheme, designed to meet these carbon targets for the Legacy Corporation's Legacy Communities Scheme development, provides the basis for this wider scheme. Application of the London Plan Energy Hierarchy (set out in Chapter 9 of the Draft New London Plan) will be important:

1. **Be lean:** use less energy
2. **Be clean:** supply energy efficiently
3. **Be green:** use renewable energy
4. **Offset**

Maximisation of energy efficiency should take account of all aspects of a scheme, including, for example, street lighting and communal lighting using LED or other efficient lighting technology. Outdoor lighting should also minimise losses of light to the sky.

Policy S.3: Energy infrastructure and heat networks

POLICY

The Legacy Corporation will support proposals to provide new energy infrastructure, including proposals to generate energy from waste, to meet the future energy demands within its area where these are consistent with the Carbon Reduction and other policies within this Local Plan.

Proposals for new heat networks or extension to any existing heat network, or for renewable energy infrastructure, to serve development within or outside the Legacy Corporation area, will be supported subject to such development proposals being consistent with all other relevant policies in this Local Plan and should provide evidence that appropriate management mechanisms will be put in place to ensure that end customers are protected in respect of the price of energy provided and that heat losses from the network are minimised.

Applications for major development should demonstrate that opportunities to connect to existing energy networks in the Legacy Corporation area or construct and connect to new energy networks, and to facilitate connections from existing development to those networks, have been maximised through provision of localised network connections and through provision of heating and cooling network infrastructure within buildings, where it is viable to do so.

All other development will be encouraged to connect to these networks where it is practical, feasible and viable to do so.

Proposals for bridges, will be required to demonstrate that provision is included to accommodate utilities networks, including where appropriate, heating and cooling network pipes.

Cross-reference to policies: SP.2; SP.4; BN.11; BN.12; S.2; S.6
London Plan policies: SI3

Reasoned justification

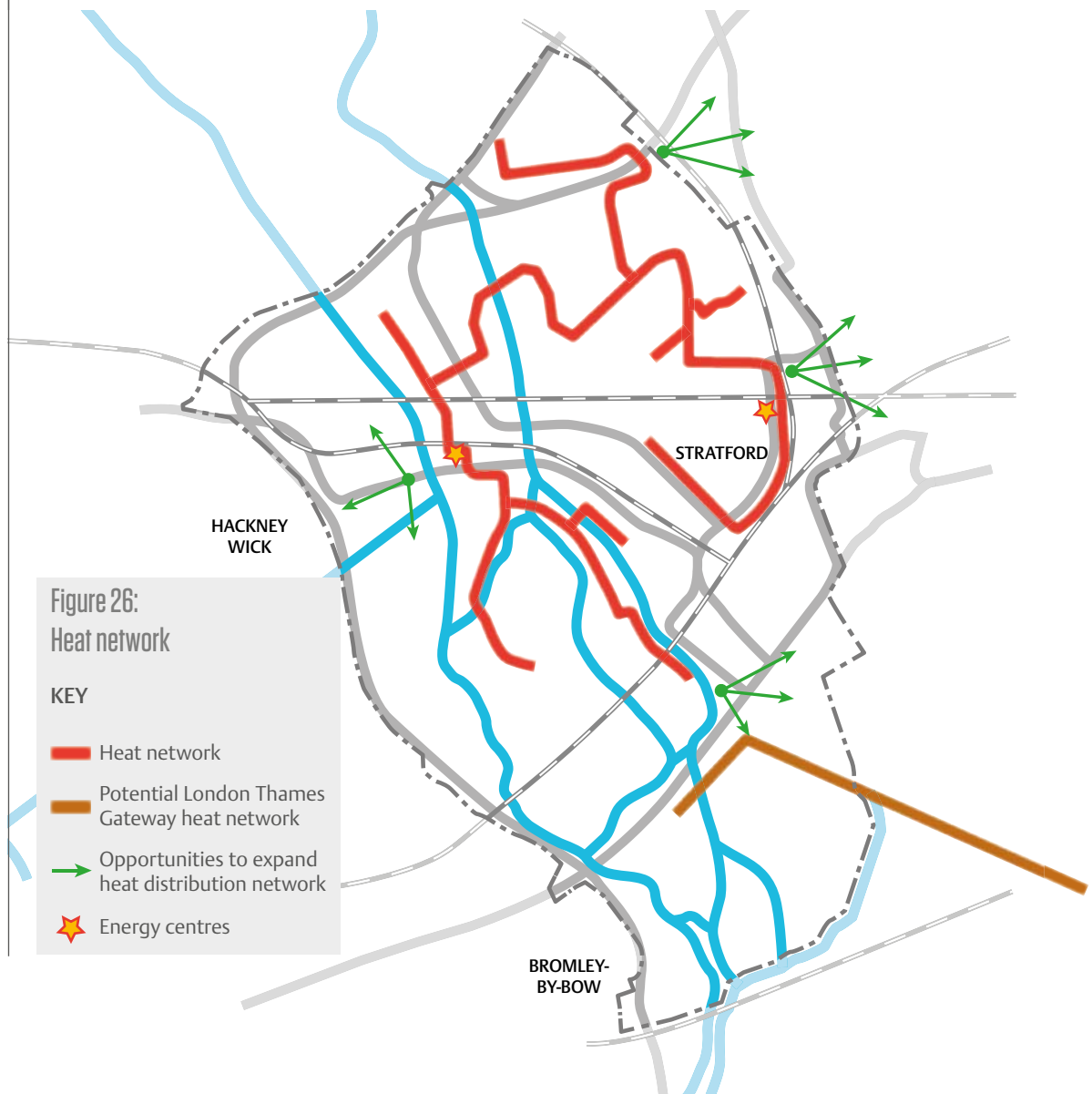
8.8

Queen Elizabeth Olympic Park and Stratford City areas are served by a district heating and a district cooling network powered by two significant energy centres. The district energy network is currently fed by a combined heat and power engine, and gas and biomass boilers, providing a low-carbon heat and cooling source for development. There are opportunities to expand existing networks and provide new ones with the form and type of new development emerging within the area being ideal for an efficient expansion of such networks where this represents the best solution within the Energy Hierarchy. The 2011 OLSPG Energy Study has identified four locations with specific opportunities to expand the network. These are indicated below at Figure 26. The expansion of heat networks will also provide opportunities for existing development to benefit from potential connections.

Policy application

8.9

The networks of waterways, rail and road infrastructure that run through the area present potential barriers to the expansion of these networks. In order to ensure that opportunities are maximised to develop and expand, it is essential that new infrastructure provision makes allowance for potential routes, including passive ducting in new bridges. Temporary utilities crossing structures, such as heat pipe bridges, may be acceptable where it can be demonstrated that a more permanent solution is available in the longer term.



Case Study 14: Queen Elizabeth Olympic Park and Stratford City Energy Centres and heat network

CASE STUDY

Energy Centres have been built at Kings Yard within Queen Elizabeth Olympic Park and at Stratford City to serve a District Heating and Cooling Network that will provide low-carbon heat and, for some locations, cooling to the existing and new development that will be built in these areas through the 16km heat network. This includes the new housing at East Village. These energy centres are fed by a combined heat and power engine, and gas and biomass boilers, providing a low-carbon heat and cooling source for development. At least 20 per cent of the final heat capacity is likely to be available to serve development outside of this existing area in the future.



Policy S.4: Sustainable design and construction

POLICY

Proposals for development will be required to demonstrate that they achieve the highest standards of sustainable design and construction.

Applications for major development will be required to include evidence within the Design and Access Statement that the following have been taken into account within the development of the scheme:

1. Resource efficiency
2. Carbon dioxide emissions reduction (including utilisation of renewable, low and zero-carbon energy sources)
3. Natural heating and ventilation
4. Utilisation of decentralised energy sources
5. Living roofs
6. Sustainable drainage systems.

Non-domestic space within development will be required to demonstrate that it is capable of achieving a minimum of BREEAM 2011 Very Good, while achieving a maximum score for water use (or an equivalent in any future nationally recognised assessment scheme).

Cross-reference to policies: SP.2; BN.4; BN.11; BN.12; BN.14; BN.15; T.8; T.9; S.1; S.2; S.3; S.5; S.6; S.7; S.8; S.9; S.10; S.11; S.12

London Plan policies: D2; D3; The Mayor's Sustainable Design and Construction Supplementary Planning Guidance (April 2014)

Reasoned justification

8.10

The design of and materials used in the construction of new buildings (including the need to choose sustainable materials and sustainable construction methods) can make a significant difference to the energy requirements and associated level of carbon emissions. It is important that sustainable design forms an integral part of the design of development taking into account both its construction and operational stages.

Policy application

8.11

In order to maximise the contribution that the buildings themselves make to carbon emissions reduction and minimisation of energy use, the policy identifies the minimum standards that new development will need to achieve. The feasibility of particular measures will be taken into account in assessing the acceptability of proposals within specific planning applications. The viability of each development scheme will also be taken into account. As technology and the skills associated with implementing those measures improve, it is expected that those standards will be exceeded and, for carbon reduction, that the level of carbon offsetting required will reduce. More detailed guidance can be found in the Mayor's Sustainable Design and Construction SPG, April 2014.

Policy S.5: Water supply and waste water disposal

POLICY

The Legacy Corporation will, in making planning decisions, support the implementation of strategic proposals to manage water supply and to implement improved sewerage infrastructure, including the Lee Tunnel and Thames Tideway Tunnel. It will also encourage localised and building-specific measures to reduce potable water demand and use, including grey water recycling systems, rainwater harvesting and measures to reduce domestic water use to 105 litres of water per person per day or less.

Proposals for major development will be expected to demonstrate that they maximise opportunities to reduce water demand and use. Where feasible and viable, for domestic use, it should be demonstrated that those measures are capable of achieving a design standard of water use of less than 110 litres per person per day (including an external water use of 5 litres of water per person per day).

Proposals for major development will be required to demonstrate that there is sufficient existing or planned water supply and waste water disposal infrastructure capacity to meet the demands of the development. Where it is not possible to demonstrate sufficient existing or planned capacity, permission will only be granted where it is adequately demonstrated that the scheme includes capacity improvements sufficient to meet its needs.

Cross-reference to policies: SP.4; S.4; S.10; S.11
London Plan policies: SI5

Reasoned justification**8.12**

Part of the wider strategy to help London meet its growing demand for water, resulting from an increase in development and increase in population, is the need to ensure that this new development is as water efficient as possible and that opportunities are taken to reduce the amount of potable water required. This is particularly the case in the Legacy Corporation area where a significant amount of new development will come forward over the lifetime of the Local Plan and present a new demand for water and a significant opportunity to implement a range of measures that will make that development as water efficient as possible.

8.13

It is also important that strategic and local projects are supported that help to address the issue of discharge of combined drainage into watercourses. Projects such as the Thames Tideway Tunnel will make a significant difference to water quality in the River Thames, while the Lee Tunnel does this more locally. Locally, smaller-scale projects that help to separate foul and surface water drainage will also be important to help address water quality within the River Lee and associated watercourses and meet the requirements of the EU Water Framework Directive (2000/60/EC).

Policy application**8.14**

The Legacy Corporation will seek to ensure that there is adequate water supply, surface water, foul drainage and sewerage treatment capacity to serve all new developments. Developers will be required to demonstrate that there is adequate capacity both on and off the site to serve the development and that it would not lead to problems for existing users. In some circumstances this may make it necessary for developers to carry out appropriate studies to ascertain whether the proposed development will lead to overloading of existing infrastructure. Where there is a capacity constraint and no improvements are programmed by the water company, the developer will be required to provide for the appropriate improvements which must be completed prior to occupation of the development.



Policy S.6: Increasing digital connectivity, safeguarding existing communications provision and enabling future infrastructure

POLICY

Digital communications and connectivity is a key element in enabling growth and facilitating innovation within the Legacy Corporation area, new development should:

1. As set out in the Draft New London Plan to achieve greater digital connectivity than set out in part R1 of the building regulations
2. Safeguard existing communications infrastructure, or where a significant adverse impact has been identified, prepare an impact statement and implement a mitigation plan as necessary through a Section 106 agreement prior to occupation of the proposed development, especially in relation to mobile connectivity
3. Co-locate services where possible on existing structures, such as masts, or within appropriate street furniture, such as street lighting, to ensure the effective use of public realm to accommodate well-designed and located mobile digital infrastructure that mitigates the impact of new infrastructure on the existing built environment
4. Ensure that sufficient ducting space is provided for future digital connectivity infrastructure

As technologies continue to develop that improve efficiency and help reduce resource usage development proposals should consider the latest innovations to help support requirements around initiatives such as the zero-carbon target and the Healthy Streets Approach. The Legacy Corporation supports the usage of innovations and new technologies that go above the expectations already set in policy to make new development sustainable in the long term. Where it is identified that space should be left for future technology or innovations, such as the requirement for space for ducting already set out above, the Legacy Corporation supports these inclusions and making the most of opportunities to enable future infrastructure where there is evidence to show their benefit.

**Cross-reference to policies: B.1; S.4; CIL Charging Schedule; CIL Infrastructure List; Planning Obligations SPD
London Plan policies: SI6**

Reasoned justification

8.15

Provision of high-quality communications infrastructure is essential for economic growth. The Legacy Corporation therefore supports provision of improved infrastructure and enabling space for new infrastructure. However, it is also important to ensure that new communications and smart infrastructure integrates well into the area and has a satisfactory appearance, and does not have a detrimental impact on the area within which it is proposed.

Policy application

8.16

The Legacy Corporation will require that new infrastructure is located as far as possible on existing buildings and structures to minimise the proliferation of stand-alone telecommunications structures which could have a detrimental impact on the area. Where the policy requires a mitigation plan for new development to address potential effects on communications networks, the scope of this, including any assessment methodology, should be agreed in advance with the Local Planning Authority. New development should, as far as possible, support innovation and enable communications networks and future infrastructure.

Policy S.7: Planning for waste

POLICY

In carrying out its function as a Local Planning Authority, the Legacy Corporation will cooperate with the four Boroughs in matters of strategic waste management and planning. In doing so and in making planning decisions, it will take full account of:

- The waste apportionment targets sets for each Borough within the London Plan
- The adopted local waste plans or waste planning policy for that Borough
- The development of new or review of existing adopted waste plans for that Borough.

Proposals that would result in the loss of an existing waste management facility would only be permitted where it can be demonstrated that:

- An additional waste management facility has been secured, and is deliverable, which will meet the maximum waste throughput of that existing site, or
- An existing site can provide an additional capacity equivalent to that maximum waste throughput, and
- The new site can serve the same waste management needs of the original site, and
- The new site is located within London and continues to meet London's strategic need

Proposals for new waste management facilities will be permitted where:

- It is located within an area designated as Strategic Industrial Locations (SIL) or a Locally Significant Industrial Site (LSIS)
- The proposal does not compromise or otherwise make unviable the existing adjacent employment or transport functions
- Its design and operation will not adversely affect the wider amenity of the proposed location
- It can be demonstrated to have met the tests within the Appendix B of the National Planning Policy: Planning for Sustainable Waste Uses.

Cross-reference to policies: B.1; S.8. ELWA Boroughs Joint Waste Development Plan Document (2012); North London Waste Plan, S.MW1: Managing our waste and D.MW2: New and enhanced waste facilities
London Plan policies: SI7; SI8; SI9

Reasoned justification

8.17

It is acknowledged that the Legacy Corporation as a planning authority relies on waste facilities outside its area to manage waste generated within its area and the Local Plan assumes this pattern will continue. Similarly, the surrounding boroughs may rely on waste facilities in the Legacy Corporation area.

8.18

The Legacy Corporation is the waste planning authority for its area by virtue of its role as a planning authority. The Four Boroughs have responsibility for waste planning within the remainder of their area. Each borough has, or will have within the lifetime of this Local Plan, an adopted waste plan or waste planning policies. The adopted East London Waste Plan includes and has effect within the Newham part of the Legacy Corporation area. In each case it will be necessary for the Legacy Corporation to cooperate and work closely with each Borough where adopted plans and policy are reviewed or specific proposals that affect waste management or waste sites arise. The Boroughs of Hackney and Waltham Forest each belong to the North London Waste Planning group which has prepared its Waste Local Plan. The Legacy Corporation will work closely with these two Boroughs, the North London Boroughs and other key stakeholders to make sure that the North London Waste Plan continues to take account of any waste capacity, sites and related evidence within that part of the Legacy Corporation area. The Legacy Corporation will also work with the Borough and relevant authorities in relation to waste arrangements in new development to ensure that these are efficient, well designed and appropriate, where appropriate through encouraging consideration of innovative solutions such as vacuum systems and compactors on site.

8.19

The Draft New London Plan identifies waste apportionment targets that each Borough should meet for its area. The Draft New London Plan does not include a waste apportionment target for the Legacy Corporation area. However, the Legacy Corporation will cooperate with the four boroughs, the GLA and TfL in seeking to meet the borough apportionment targets and strategy for waste. When determining planning applications, these targets will remain the appropriate policy context against which to judge the acceptability of proposals that have an effect on any existing management site or operation, including proposals for new or expanded facilities.

Policy application**8.20**

With existing waste management facilities located within the area, the policy identifies the criteria that would be necessary for proposals to meet if they would result in the loss of an existing facility, in order for them to be acceptable in terms of the effect on the waste apportionment targets set for each Borough and in order to meet the requirements set out in policies in Chapter 9 of the Draft New London Plan.

8.21

For proposals on undesignated (windfall) sites, Strategic Industrial Locations (SIL) are the locations within which new waste management facilities would be considered as acceptable, provided proposals meet the acceptability criteria in the policy. In the Legacy Corporation area, these are Fish Island South and Bow Goods Yard (see Policy B.1). Proposals may also be considered acceptable within Locally Significant Industrial Sites (LSIS) where it is possible to demonstrate clearly that there would not be an adverse effect on the surrounding uses or area.

Policy S.8: Waste reduction

POLICY

The Legacy Corporation will, in making planning decisions, require that new development proposals contribute to the reduction of waste during construction and once operational, by minimising the amount of waste produced and maximising reuse, recycling and composting and promoting a more circular economy.

Proposals for new development should demonstrate how they have adopted the Waste Hierarchy in their design and how they will enable their residents to minimise waste and maximise both reuse and recycling. Development proposals should demonstrate how they have: designed out waste through lean design, maximised the reused and recycled content within the materials used for construction, minimised the production of excess or waste material during construction and maximised the opportunities for reuse or recycling of materials remaining from construction. Excavated materials should, where practical, be retained and reused on site. Planning applications for major development schemes should include a statement within the Design and Access Statement that sets out how the scheme will comply with the requirements of this policy.

Proposals for all development will, where relevant, be required to demonstrate that adequate provision has been made for domestic and commercial waste storage and for collection that allows for a range of future collection options which include separate collection of general waste, recyclable materials and other waste streams.

Cross-reference to policies: SP.4; S.4; S.7
London Plan policies: SI7; SI8; SI9



Reasoned justification**8.22**

The London Plan sets out the Mayor's policy to manage as much of London's waste as is practicable within London and for this to equate to 100 per cent within the lifetime of this Local Plan. It is also important that the treatment of construction waste and operational waste from development, once completed and occupied, is consistent with the Waste Hierarchy:

1. Reduce the amount of waste generated
2. Reuse
3. Recycle
4. Recovery (of energy and materials)
5. Disposal (least desirable option).

(EU Waste Framework Directive [Directive 2008/98/EC] and the Waste [England and Wales] Regulations 2011).

Policy application**8.23**

The reuse of materials and use of materials with a high level of recycled content, such as use of recycled aggregates and street furniture with a high recycled content, can also make a significant contribution to the achievement of this aim. Seeking to balance the material cut or excavated from a site with the requirements for fill material through reuse will also help to reduce requirements for transport of that material and reduce environmental impacts from that transportation. The provisions made within new development should not simply seek to meet the requirements of existing waste collection and management practices but also allow sufficient space and access for future practices and systems that may be introduced. Consultation with the relevant waste management authorities at the time of any proposal's development will be important in establishing that allowance is made for those changes that might require additional space and that those collection arrangements are consistent with existing borough requirements.



Brendan Howard / Shutterstock.com

Policy S.9: Overheating and urban greening

POLICY

Proposals for new development should ensure that buildings and spaces are designed to avoid overheating and excessive heat generation internally and externally, while minimising the need for internal air conditioning systems, taking into account Draft New London Plan Policy SI4 and the Mayor's zero carbon target of 2050.

Outside the existing parks and open spaces within the Legacy Corporation area, opportunities to introduce planting of trees in private and public spaces, including streets, along with those for including green roofs, green walls and other planting opportunities, should be taken to maximise the contribution that urban greening can make in creating a liveable environment and maximising local biodiversity and encouraging local food growing.

Planning applications for major development schemes should set out within the Design and Access Statement the measures included to avoid overheating (including overheating analysis against a mid-range climate scenario for the 2030s) and excessive heat generation and, where appropriate, to maximise urban greening.

Cross-reference to policies: BN.3; BN.8; S.1; S.4
London Plan policies: D2; SI14, G5

Reasoned justification

8.24

It is predicted that climate change will result in higher average temperatures over time. In order to ensure that the buildings and spaces within the Legacy Corporation area take this into account and continue to provide a comfortable living environment, it is important that the network of open spaces and waterways within the area is protected and that opportunities to increase the number of trees and other vegetation within those spaces and in streets are taken in order to achieve this. Equally, it is important that buildings themselves are designed internally and externally to mitigate this effect, whether through green roofs and walls or the design of internal building ventilation.

Policy application

8.25

All development proposals should consider the opportunities to avoid overheating within buildings and also introduce additional greening to the site environment. Where feasible, and not in conflict with achieving high levels of building fabric efficiency, passive ventilation should be favoured. Applications for major development schemes will be expected to demonstrate that these issues have been addressed within the scheme design. This policy should be read alongside Draft New London Plan Policy SI4 Managing heat risk, in particular taking into account the cooling hierarchy:

1. Minimise internal heat generation
2. Reduce the amount of heat entering a building in summer through orientation, shading, albedo, fenestration, insulation and green roofs and walls
3. Manage the heat within the building through exposed internal thermal mass and high ceilings
4. Passive ventilation
5. Providing mechanical ventilation
6. Active cooling systems (assuming that they are the lowest carbon option).

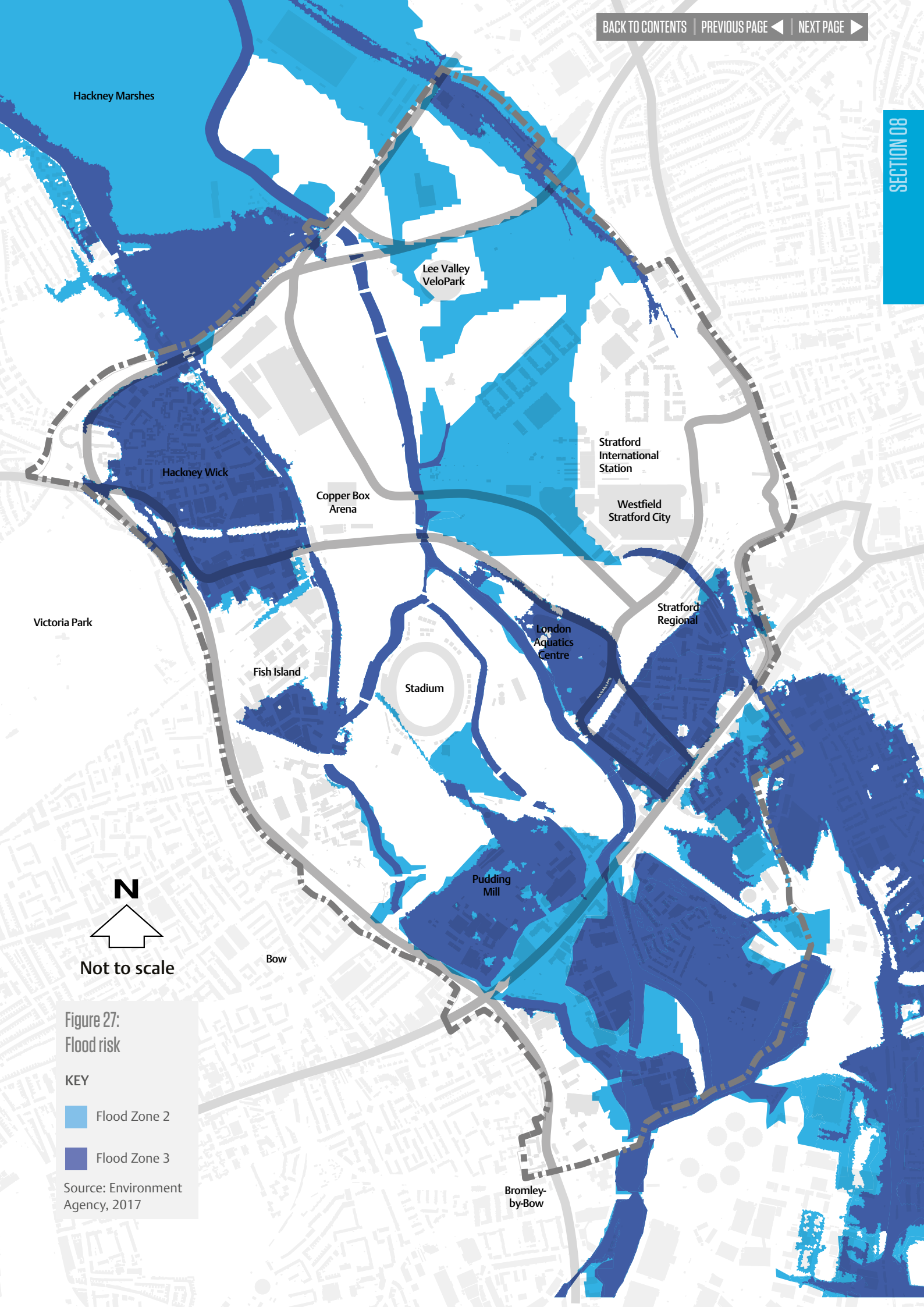


Figure 27:
Flood risk

KEY

- Flood Zone 2
- Flood Zone 3

Source: Environment Agency, 2017

Policy S.10: Flood risk

POLICY

The Legacy Corporation will take into account the most up-to-date flood risk information when carrying out its relevant functions and seek to reduce risk to life and property in doing so.

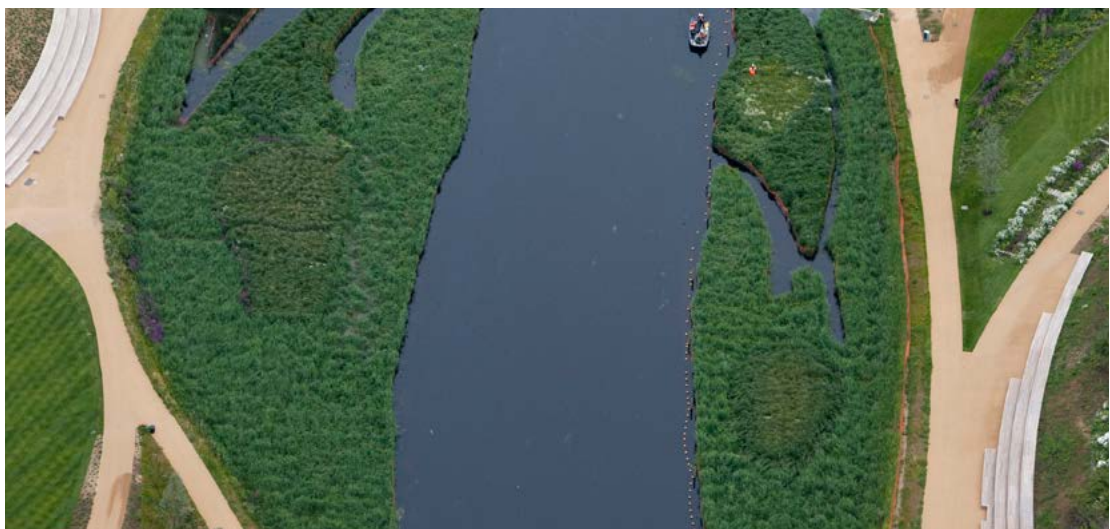
Where development is proposed within Flood Zones 2 or 3 and is outside a Site Allocation within this Local Plan, planning applications should be accompanied by evidence that the proposed development is capable of meeting the Sequential Test and, where appropriate, that the Exceptions Test as defined within the National Planning Policy Framework has been applied to demonstrate that no alternative location for the proposed development is available.

Where no alternative location is available, a flood risk assessment should be submitted demonstrating that the proposal does not increase flood risk to third parties and, wherever possible, reduces flood risk. A site specific flood risk assessment may be required within Local Flood Risk Zones identified in Surface Water Management Plans (subject to location and degree of flood hazard) to ensure that the development will remain safe and will not increase flood risk to others. Where deemed necessary, the development proposals must be supported by a detailed integrated hydraulic modelling within the Flood Risk Assessment.

Development proposals must be designed to reduce vulnerability to climate change, apply the sequential approach on site, be flood resilient and resistant, setting living accommodation finished floor levels 300mm above the predicted flood level for the 1 in 100 chance in any year flood event including an allowance for climate change, and must provide an appropriate means of escape to a higher level within the building or a safe route to a location above the predicted flood level. No basement development will be permitted within Flood Zones 2 or 3.

Where development is proposed on a site that includes an existing flood defence structure, development proposals should be designed to maintain the integrity of the existing structure. Where the need for new or improved flood defences have been identified, relevant planning applications should demonstrate that allowance has been made for the relevant works to take place, including sufficient access for construction. Where a development proposal is dependent on the provision, improvement or repair of a river wall or other flood defence structure, these works should be included within the development applied for within the planning application.

Cross-reference to policies: BN.2; T.10; S.4
London Plan policies: SI12



Policy S.11: Sustainable drainage measures and flood protections

POLICY

The rate of surface water run-off from development sites should be restricted to no greater than the equivalent for a Green Field site of an equivalent size.

It should be managed as close to its source as possible in line with the drainage hierarchy set out in policy SI3 of the Draft New London Plan. Using sustainable drainage techniques as a first choice and only using other methods of flow restriction where it can be shown that sustainable drainage methods are not feasible in that location, particularly in areas where a localised surface water drainage problem has been identified within a Surface Water Management Plan (including potential flooding from sewers). The Legacy Corporation will support developments which do not include proposals for impermeable paving. Sustainable drainage systems that have benefits for water quality and storage, efficiency, habitat and landscapes and amenity and recreation should be fully considered before other options. All drainage systems discharging to a watercourse must include appropriate anti-pollution measures that can be easily accessed and maintained.

Development proposals that create an obstruction within a watercourse or obstruct existing flood flow paths across land which cannot be mitigated through compensatory works or provision of additional flood storage capacity will not be permitted. The design and layout of proposed development should incorporate appropriate buffer strips adjacent to watercourses to allow access for flood risk maintenance and biodiversity and adequate space for sustainable drainage techniques.

Cross-reference to policies: BN.2; T.10; S.4
London Plan policies: SI13

Reasoned justification

8.26

The Legacy Corporation sits within the River Lea catchment area and is influenced by the risks of fluvial flooding from the Lea and its associated waterway network and from tidal flooding from the River Thames should the tidal flood defences of the Thames be breached. The policy responds to this risk and the risk identified from surface water flooding for the four Boroughs of which the area forms a part.

8.27

At the heart of the Legacy Corporation area, the new topography and landscape of Queen Elizabeth Olympic Park, in particular its wetlands bowl area, have been designed to manage and reduce flooding and resulting flood risk. However, significant parts of the area are within Environment Agency Flood Zones 2 and 3 and particular locations such as Hackney Wick and Pudding Mill are at specific risk as a result of their topography and lower levels of flood defence. Repair and maintenance of existing, and where necessary, construction of new flood defence structures and channel walls, will be encouraged. Where there is particular risk of flooding, adequate measures for escape and evacuation will be needed. Buildings will also need to be flood resilient in their design and in the materials used to ensure that long-term disruption from flooding is minimised. The flood risk map at Figure 27 provides a general picture of flood risk within the area. While the strategic importance of the available development sites helps to underline the need for these to come forward for development, specific development schemes will need to be designed in a way that takes the relevant predicted flood risk into account and to ensure that flooding would not be caused or exacerbated elsewhere. The sequential test and exceptions test has been applied to the site allocations in accordance with paragraph 157 of the NPPF (see Flood Risk Review Summary Report 2017 and the Flood Risk Review Addendum 2018).

Policy application

8.28

The Site Allocations within the Sub Area sections of this Local Plan identify the relevant level of flood risk. Account will also need to be taken of the Surface Water Management Plans prepared by each Borough. Where a Critical Drainage Area (CDA) has been identified, development proposals must ensure that sustainable drainage methods are utilised in order to reduce the risk of flooding from surface water. Where feasible, source control SuDs should be used. Undercroft flood storage and attenuation tanks should be avoided and, wherever possible, level for level and volume for volume flood storage be achieved when designing flood risk mitigation measures for schemes.

8.29

The Flood and Water Management Act 2010 makes each of the four Boroughs the Lead Local Flood Authority within their area. This includes a duty on each Borough to develop, maintain, apply and monitor a strategy for local flood-risk management in its area. Where these strategies have been prepared, these or any related Preliminary Flood Risk Assessment will need to be taken into account in carrying out any site-specific flood risk assessment. Formal approval will be required for new drainage systems for new and redeveloped sites and highways. This will be a separate consent regime. However, even where planning permission is in place, the formal consent of the SuDS Approval Body will be required before development can commence. Once in place, the compliance with the National Standards for Sustainable Drainage will be required. Any interim or final SuDS and SuDS Approval Body guidance published by each Borough will also need to be taken into account in designing drainage and seeking this consent. A potential change to national planning policy could result in a move away from the proposed SUDs Approval Body approach to one which relies on securing approval through the existing planning or other processes. If introduced in the form envisaged, proposals for major development will be required to demonstrate that SUDs have been considered as a first option and that the options chosen are accepted as correct through consultation with relevant bodies. Long-term management and maintenance would also need to be secured. Proposals would also need to accord with the National Standards and Specified Criteria for Sustainable Drainage.

Policy S.12: Resilience, safety and security

POLICY

The Legacy Corporation works with a range of development partners and stakeholders in order to ensure and maintain a safe and secure environment within the area, that is resilient against emergencies and threats such as fire, flood and terrorism. Part of this includes working closely with agencies such as the Metropolitan Police Service and the London Fire and Emergency Planning Authority to identify relevant needs, policies and other necessary infrastructure required to maintain a safe and secure environment. To continue maintaining this environment it is key that:

1. Development proposals should maximise building resilience and minimise potential physical risks through good design, use of the building regulations, Draft New London Plan policies and policies within this Local Plan, such as S.10 and S.11 in relation to flood risk
2. New development should consider measures at the start of the design process which aim to design out crime and deter terrorism, assist in the detection of terrorist activity and help mitigate its effects
3. Where required, physical security and safety measures should support and enhance the Healthy Streets vision and create spaces that people can enjoy, where they feel safe and relaxed and encouraged to choose to walk, cycle or use public transport.

Cross-reference to policies: BN.4; BN.5; BN.6; BN.8; BN.11; BN.12; BN.14; S.1; S.2; S.3; S.4; S.5; S.6; S.7; S.8; S.9; S.10; S.11; **London Plan policies:** GG5; D10; D11

Reasoned justification

8.30

The Legacy Corporation's key aims around LIVE, WORK, VISIT and INSPIRE rely on the development of a safe and accessible built environment. The Draft New London Plan puts an increased emphasis in people feeling safe in their environment and includes policies in Chapter 3 around safety, security and resilience. The Legacy Corporation area includes strategic infrastructure such as stations, key routes and iconic facilities in the Queen Elizabeth Olympic Park, as well as large leisure facilities including Westfield Stratford City. There is also a rapidly increasing population, a range of businesses and new development in the area and events that generate large numbers of visitors. This policy therefore supports the Legacy Corporation to deliver a safe, accessible and relaxed environment as supported by the Draft New London Plan.

Policy application

8.31

The London Risk Register sets out hazards and threats across London and sets out controls in place in order to prepare for these, this is maintained and managed by the London Resilience Group and provides an evidence base for wider challenges that Planning Authorities in London might face. This, combined with information around more localised needs, such as protective security relating to crowded spaces within the Legacy Corporation's area, where there are predictable and high levels of crowding, as well as information about schemes that have or will create a higher level of risk than existed previously, provides the background for the Legacy Corporation's approach to resilience, safety and security in the area. This approach also includes health emergencies, such as the 2020 health pandemic, and ensures that measures to achieve future health resilience, including the healthy streets approach, and impact mitigation are considered with all schemes. Supplementary guidance, such as Transport for London's Healthy Streets and Streetspace for London guidance, will adapt and provide more detailed solutions as information on best practice measures become available and lessons are learnt.

8.32

The Metropolitan Police (Designing Out Crime Officers and Counter Terrorism Security Advisers) should be consulted to ensure that major developments in the Legacy Corporation area contain appropriate design solutions from the outset, which respond to the potential level of risk whilst maintaining high quality of place and reducing the need to retrofit solutions in future. Any proposed physical mitigations should give due regard to their impact on the design of the wider area and public realm and how they encourage walking and cycling and help reduce the dominance of motor vehicles. Where appropriate the Legacy Corporation may also consider protective security or safety measures at other major developments that are identified by the police at the time of the proposal being made as having a significant risk. These proposals and measures will be considered on a case by case basis.

Evidence base references

Draft New London Plan (Greater London Authority 2017)
 Draft New London Plan showing Minor Suggested Changes (Greater London Authority 2018)
 National Planning Policy Framework (Ministry for Housing, Communities and Local Government, 2018)
 Planning Practice Guidance, (Communities and Local Government, 2018)
 London Environment Strategy (Greater London Authority, 2018)
 Mayor's Energy Planning Guidance (Greater London Authority, 2016)
 Thames River Basin Management Plan (Environment Agency, 2009)
 Olympic Legacy Supplementary Planning Guidance (Greater London Authority, 2012)
 Olympic Legacy Supplementary Planning Guidance: Energy Study (Greater London Authority, 2012)
 Infrastructure Delivery Plan Study Report (London Legacy Development Corporation, 2018)
 Flood Risk and Sequential and Exceptions Test for the Site Allocations'
 (Appendix 6 of Sites Report, LLDC, 2014)
 Flood Risk Mapping (Environment Agency 2016)
 Flood Risk Within the Legacy Corporation Area, Information Review
 (Legacy Development Corporation, 2018)
 Hackney Climate Change Strategy (London Borough of Hackney, 2009)
 Hackney Surface Water Management Plan, Final Draft (London Borough of Hackney, 2013)
 Hackney Strategic Flood Risk Assessment (London Borough of Hackney, 2010)
 Planning for a Healthier Urban Environment in Tower Hamlets
 (London Borough of Tower Hamlets, 2011)
 Tower Hamlets Draft Surface Water Management Plan (London Borough of Tower Hamlets, 2012)
 Tower Hamlets Strategic Flood Risk Assessment (London Borough of Tower Hamlets, 2012)
 Newham Strategic Flood Risk Assessment (London Borough of Newham, 2012)
 Newham Surface Water Management Plan (London Borough of Newham, 2011)
 Waltham Forest Level 2 Strategic Flood Risk Assessment (London Borough of Waltham Forest, 2011)
 Waltham Forest Surface Water Management Plan (London Borough of Waltham Forest, 2011)
 Newham Health and Wellbeing Strategy (London Borough of Newham, 2012)
 Hackney's Joint Health and Wellbeing Strategy, 2013–2014 (London Borough of Hackney, 2013)
 Towards a Healthier Tower Hamlets, Health and Wellbeing Strategy 2013–2016
 (London Borough of Tower Hamlets, 2013)
 Tower Hamlets Health and Wellbeing Board
 Waltham Forest Health and Wellbeing Strategy (London Borough of Waltham Forest, 2013)
 Legacy Communities Scheme Offset Solutions Study
 (London Legacy Development Corporation, 2013)
 Borough Heat Maps (London Boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest)



