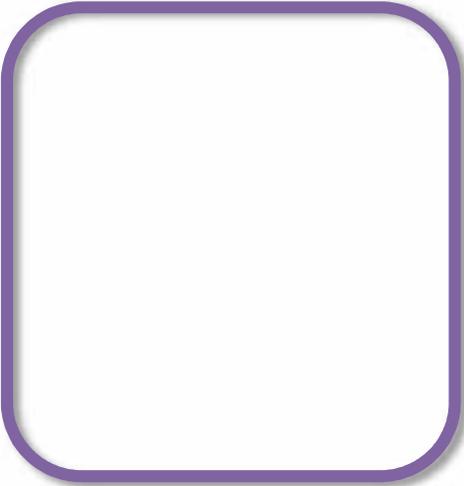
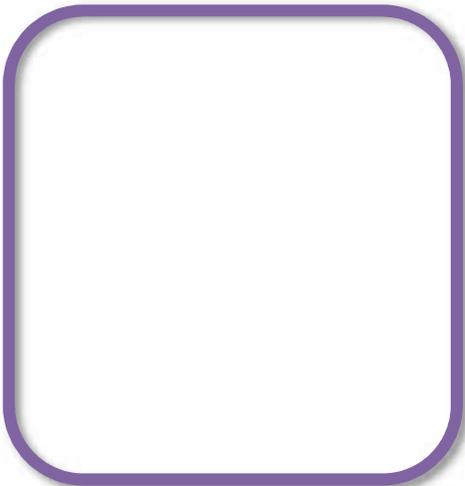
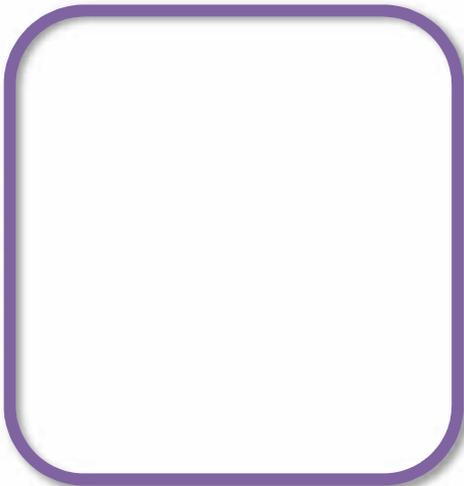
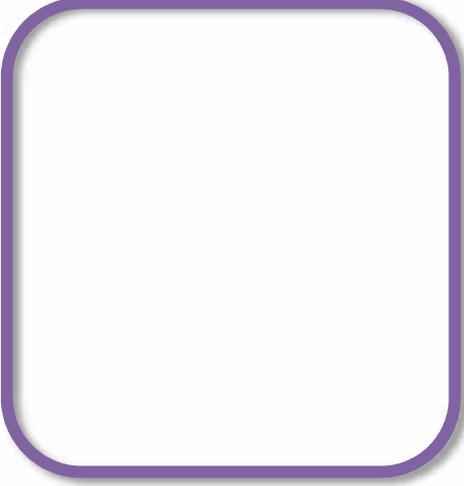
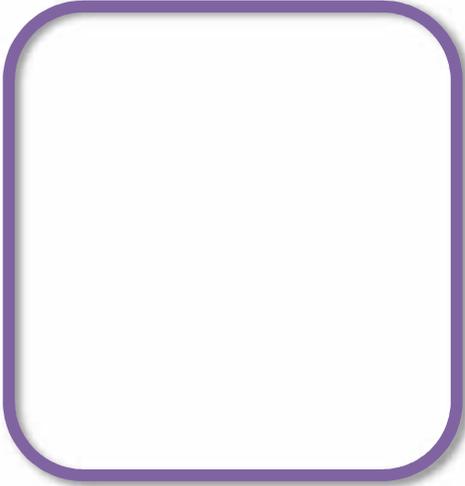
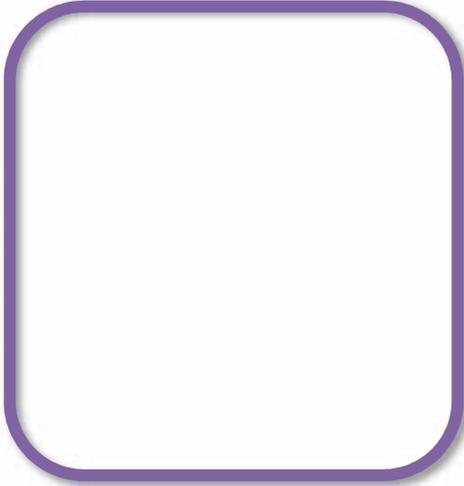
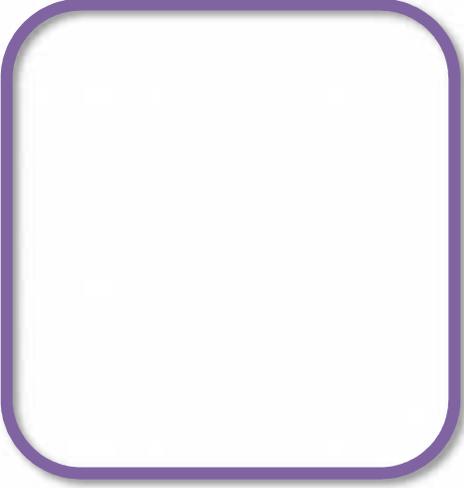
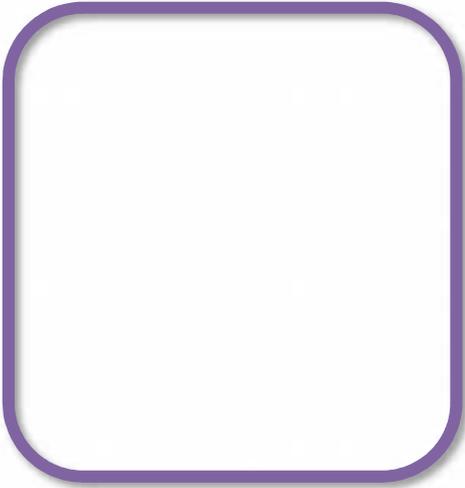
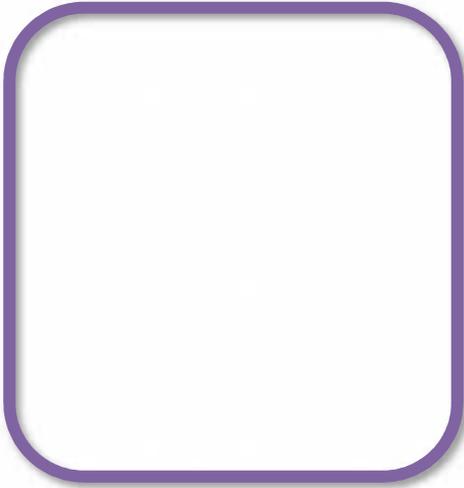


Environment



Policy 8
Environment



Strategic Policy O8.1

Open Space, Green Infrastructure and Nature Conservation

We understand the key role that having accessible open space and green infrastructure plays in ensuring the health and wellbeing of all people. We aim to make Merton an attractive and green borough, through the protection and enhancement of open space, green infrastructure and the natural environment.

We will do this by:

- a) Protecting and enhancing open spaces, green infrastructure and areas of nature conservation to provide high quality environments for residents and local communities;
- b) Improving accessibility to all open spaces and areas of nature conservation throughout the borough by public transport, cycling, mobility vehicles and on foot;
- c) Enhancing existing open spaces and the natural environment, providing habitats for biodiversity to flourish and expand;
- d) Protecting and enhancing the borough's biodiversity, particularly on sites of recognised nature conservation interest, and supporting the objectives of the borough's Biodiversity Action Plan and the Mayor's Biodiversity Strategy;
- e) Encouraging new green links, green corridors and islands to seek to reduce areas of deficiency in nature conservation and to create safe species movement and havens for nature;
- f) Protecting and retaining trees and other landscape features of value;

- g) Working with partners to develop and implement proposals for the Wandle Valley Regional Park;
- h) Enhancing accessibility to our waterways, including the River Wandle and its banks, for leisure and recreational use while protecting its biodiversity value;
- i) Providing a balance between areas for quiet enjoyment, wildlife and areas to be used for sports, games and recreation.
- j) Improving opportunities for our residents and visitors to experience nature;
- k) Promoting healthy lifestyles to encourage physical education and well-being through the use of our leisure centres, schools, open spaces, playing pitches, recreation space and engagement in the arts through the use of our schools and colleges, open spaces, theatres and libraries.
- l) Working with partners to facilitate and enable them to deliver culture, sport, recreation, play facilities and events for community benefit and to encourage shared use of sites and space through joint funding initiatives and commissioning, external funding including public and private sources.

Justification

- 8.1.1. This policy should be read alongside Chapter 8 Green Infrastructure and Natural Environment of the London Plan. These policies are intended to work together to ensure that Merton's green and open spaces remain a valued asset of the borough.
- 8.1.2. Open space is defined in the NPPF (2018) and the London Plan (2016). 18% of Merton is green space, compared with the London average of 10%. Due to the large amount of green and open space in the borough, the emphasis is on protection and long-term management of the existing space and opportunity spaces (such as along railway corridors and allotments) and encouraging access to green and open spaces.

Policy O8.2

Open Space and Green Infrastructure

The council is fully committed to ensuring that all green and open space throughout the borough remains protected and is well managed to ensure green spaces are available to all.

We will:

- a. Protect and enhance the borough's public and private open space network including protecting Metropolitan Open Land (MOL) and designated open spaces from inappropriate development in accordance with the London Plan and government guidance;
- b. Ensure that, in accordance with the NPPF, existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:
 - i. an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
 - ii. the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
 - iii. the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.
- c. Ensure that, development proposals within designated open spaces, which have met the conditions set in part b) above, will be required to meet all the following criteria:
 - i. the proposals are of a high quality design and do not harm the character, appearance or function of the open space;
 - ii. the proposals retain and/or improve public access between existing public areas and open spaces through the creation of new and more direct footpath and cycle path links; and,
 - iii. the character and function of leisure walks and green chains are preserved or enhanced.
- d. Support the creation of new open spaces as part of major development proposals

where suitable and viable;

- e. Ensure that development in proximity to and likely to be conspicuous from MOL or designated open space will only be acceptable if the visual amenities of the MOL or designated open space will not be harmed by reason of siting, materials or design;
- f. Expect development to incorporate and maintain appropriate elements of open space, play areas and landscape features such as trees which makes a positive contribution to the wider network of open spaces. Where this is not feasible, planning contributions will be sought to do so;
- g. Require that any proposals for new dwellings in back gardens are justified against the:
 - i. local context and character of the site
 - ii. impact on existing trees
 - iii. biodiversity value of the site
 - iv. value in terms of green corridors and green islands
 - v. flood risk and climate change impacts
- h. Expect proposals for paving over front gardens to include and/or retain appropriate areas for existing and/or new landscaping;
- i. Safeguard our existing allotments and encourage the use of land for growing food;

Justification

- 8.2.1. People use open space for exercise, play, socialising and relaxing. Visual accessibility is equally as important as physical access. Development adjacent to open spaces must not adversely affect the amenity, quality or utility of the open space. Design of new development should consider the most effective use of open space, including biodiversity interest and opportunity. Where housing is included, development must make provision for play/informal recreation in line with the London Plan.

- 8.2.2. The protection and enhancement of open spaces enables the provision of areas for active and passive leisure activities, has a positive impact on health and wellbeing, provides opportunities for social cohesion between members of Merton's diverse communities, provides safe pedestrian and cycle routes, provides areas for nature within urban areas and can provide areas for flood mitigation measures.
- 8.2.3. The 2011 Merton Open Spaces Strategy (MOSS) provided an assessment of open space provision, an audit of existing facilities and an understanding of the likely demand and need for future facilities throughout the borough. The council is currently undertaking a review of all the green infrastructure, biodiversity and open spaces throughout the borough and will have a draft strategy in early 2019.
- 8.2.4. Planning obligations set out the scale and form of any contribution required for development regarding the creation and enhancement of the open space network. Contributions will be sought to improve facilities or create public access to private facilities in developments, especially in areas identified as deficient in publicly accessible open space, along the Wandle Valley and where play, sports or recreational facilities are needed as identified in council strategies.

Metropolitan Open Land

- 8.2.5. The council will continue to protect Metropolitan Open Land (MOL) from inappropriate development in accordance with the London Plan and government guidance.
- 8.2.6. Development of land outside the boundaries of MOL, but in proximity to it, may damage the open character of the MOL. MOL therefore needs to be protected from development proposals which would be visually intrusive, particularly high buildings or other high structures.



- Metropolitan Open Land

- Urban Area

- Other Borough Boundaries

- River Wandle

Designated Open Spaces

- 8.2.7. The open spaces relevant to this policy are designated on the Policies Map and typically consist of parks, playing fields, MOL and allotments. As stated in this policy, the council is committed to ensuring the protection and enhancement of open space.
- 8.2.8. Many designated open spaces have existing buildings within them, such as leisure facilities and changing rooms. Proposals to redevelop these buildings should be of high quality design, and of a scale, height and massing that is appropriate to their setting. Proposals should show how uses are needed and linked to the function of the open space, and all new uses should complement and enhance the function of the open space (e.g. pavilions and changing rooms for playing pitches).
- 8.2.9. It is also important to note that the assessment that is referred to in b) i above, is a borough wide or sub-regional strategic assessment such as the Merton Open Space Study 2011 and the assessments described in paragraph 97 of the NPPF, not assessments done on a site-by-site basis.
- 8.2.10. Due to transport and access considerations, it is considered that buildings nearer to the edges of open space that have independent access may be appropriate for a greater range of uses than buildings that are accessible only by crossing the open space.
- 8.2.11. The visual amenity provided by designated open spaces has much public value and therefore development in proximity to and likely to be conspicuous from designated open spaces must not harm these amenities.
- 8.2.12. Where new publically accessible open space is proposed as part of major developments, for which it is proposed that the council will take responsibility, the council will require developers to make contributions towards maintenance for the first 5 years.
- 8.2.13. There are numerous small pockets of landscaped undesignated open space which often form part of the road reserve. These open spaces make a positive contribution to the public realm and in some neighbourhoods such as the St. Helier Estate, are characteristic features recognised in the Borough Character Study. However, these open space areas are not relevant to this policy.
- 8.2.14. Allotments are recognised for their contribution to enabling healthy and sustainable lifestyles. Allotments not only offer biodiversity and conservation value but also allow people in urban

areas to grow fresh produce, offer recreational value and health and social benefits. We will therefore protect Merton's existing allotments.

- 8.2.15. In line with the London Plan, the council supports the urban greening factor. Major planning applications should contribute to the greening of the borough by including urban greening features and high quality landscaping such as trees, green roofs, green and living walls as part of the site design.

Improving links between open spaces and other public areas

- 8.2.16. Proposals for development in Merton should take the opportunity to integrate landscaping into developments, provide outdoor amenity space and conserve and enhance the natural environment.
- 8.2.17. It is important to protect the existing green chains and improve links between and across open spaces. Such links provide important informal recreational opportunities for walking and cycling, create a safe and pleasant environment, and allow appreciation of attractive landscapes and features of historical significance.
- 8.2.18. A large number of open space areas in Merton are linked by rivers, brooks and small or linear open spaces, or are separated from one another by short sections of built development. This provides opportunities to exploit the informal recreation potential of the open spaces and waterways by making them more accessible to the public, in line with the principles set out in the Mayor's All London Green Grid guidance. Where appropriate, proposals should utilise opportunities to improve public access to the existing open spaces. Improving accessibility to open space will be delivered in tandem with the council's transport and accessibility policies.

Policy O8.3

Biodiversity and nature conservation

The council is committed to ensuring that the natural environment and areas of environmental importance remain protected. We will:

- a. Refuse development that has a significant adverse effect on the population or conservation status of protected or priority species and priority habitats;
- b. Protect all sites of recognised nature conservation interest and the green corridors linking them, against inappropriate development and wherever possible, secure measures that enhance their nature conservation value;
- c. Require any development proposals likely to affect a Site of Special Scientific Interest, Metropolitan, Borough or Local Sites of Importance for Nature Conservation and Local Nature Reserve, as shown on the Proposals Map, to demonstrate that such development will not adversely affect the nature conservation values of the site;
- d. Expect new development within the area of the Wandle Valley Regional Park, where appropriate, to incorporate physical, visual and landscape connections that will encourage pedestrian and cycle accessibility and enhance the attractiveness of the park;
- e. Require, where appropriate, development to integrate new or enhanced habitat or design and landscaping which encourages biodiversity and where possible avoid causing ecological damage. Developers must propose full mitigation and compensation measures for any ecological damage that is caused;
- f. Ensure that development which may destroy or impair the integrity of green corridors will not be permitted and proposals in and adjacent to these corridors will be expected to enhance their nature conservation value.

Justification

- 8.3.1. Protecting biodiversity and the wider natural environment can lead to various opportunities, not just for wildlife activity and connection, but also health, recreation, contributing to climate change adaptation and improving quality of life. Habitat improvement and creation are crucial to the aims of protecting and enhancing biodiversity. We will protect and seek to enhance the borough's biodiversity through supporting measures which meet the objectives of the London Plan targets for habitats and seek to improve access to nature.
- 8.3.2. New development should avoid causing ecological damage and propose full mitigation and compensation measures for ecological impacts that do occur. Where appropriate, new development should include new and or enhanced habitat or design and landscaping which promotes biodiversity. Improvements to biodiversity should not be restricted to conventional habitats but should extend to the increased use of green roofs and living walls; developments including these features will be encouraged where these are also in accordance with our design policies.
- 8.3.3. The location and extent of the sites of recognised nature conservation interest within Merton, such as Sites of Special Scientific Interest, Metropolitan, Borough or Local Sites of Importance to Nature Conservation, Local Nature Reserves, and the Green Corridors that link them, are designated on Merton's Policies Map.
- 8.3.4. Proposals should, wherever possible, have a positive impact on biodiversity by assisting in achieving targets in biodiversity action plans or by addressing matters in the relevant SINC management plan. Proposals that may affect a site of nature conservation interest will be assessed in the order as set out in London Plan policy: (1) avoidance, (2) minimization and mitigation and (3) compensation.
- 8.3.5. The value of front and back gardens in terms of biodiversity, climate change and flood mitigation is recognised. We encourage the use of permeable surfaces and the retention of landscaped areas with planting within gardens which makes for a more attractive green oasis and enhances the appearance of the property and road, and is better for the environment in accordance with our flood risk management policies. Retaining green areas helps reduce the 'heat island effect', reduces dust in the air, supports nature and protects against climate change.

- 8.3.6. Private back gardens also provide a significant resource for biodiversity and amenity space and contribute to mitigating against the impacts of climate change and flood risk.

Sites of Special Scientific Interest / Special Areas of Conservation – Wimbledon Common

- 8.3.7. Wimbledon Common is protected by European legislation as a Special Area of Conservation (SAC) and national legislation as a Site of Special Scientific Interest. The Habitats Regulations require an 'Appropriate Assessment' to be carried out if a plan or project is likely to have a significant effect on Wimbledon Common (either alone or in combination with other plans or projects). This may apply to development projects and this is not the same as an Environmental Impact Assessment. The Natural England website has more information to help decide whether or not a development project requires an 'Appropriate Assessment'.

Green corridors

- 8.3.8. The council recognises the importance of maintaining and enhancing a network of green corridors which are relatively continuous areas of green space leading through the built environment, and which link large green spaces or to each other. They can assist the movement of some plant and animal species through the borough, allow some animals to undertake movements between different habitats that they require for survival, maintain the presence of some animals and plants in places where they would not otherwise be found, and help to ensure the maintenance of the current range and diversity of flora and fauna, and the survival of important species.

Geodiversity

- 8.3.9. There are no regional or locally important geological sites in Merton however there is a site on Putney Heath, approximately 160 metres from the borough boundary, which has potential to be of local importance. Development proposals that could have an impact on the geological features of this site should have regard to London Plan Policy.

Wandle Valley

- 8.3.10. We support the protection of the Wandle Valley Regional Park, which creates a linkage of existing open space through the Wandle corridor. This provides a key cultural and recreational asset for the borough, as set out in our Wandle Valley area policy.
- 8.3.11. The biodiversity value of the river Wandle, Beverly Brook and Pyl Brook will be protected and we will work with developers to encourage new linkages in landscape and visual terms into the river corridor when development opportunities arise. The council recognise the waterways as a natural asset and will follow relevant advice of the Environment Agency's and the London Plan.

8.3.12. In line with our policy to protect and enhance the river Wandle and its green infrastructure network, development within 400 m of the Wandle Valley Regional Park boundary will be required to consider its relationship to the park in terms of visual, physical and landscape links, to ensure that new development enhances the accessibility and attractiveness of the park. Our aspiration is to ensure the arrangement of buildings within new developments complement the existing green corridors and prevent disjointed pedestrian and cycle accessibility, removing physical barriers such as railings and built form that disrupt continuity and access into and around the park. As identified in the design policies we will enhance the legibility and reinforce the green character of the borough.

Policy O8.4

Protection of Trees

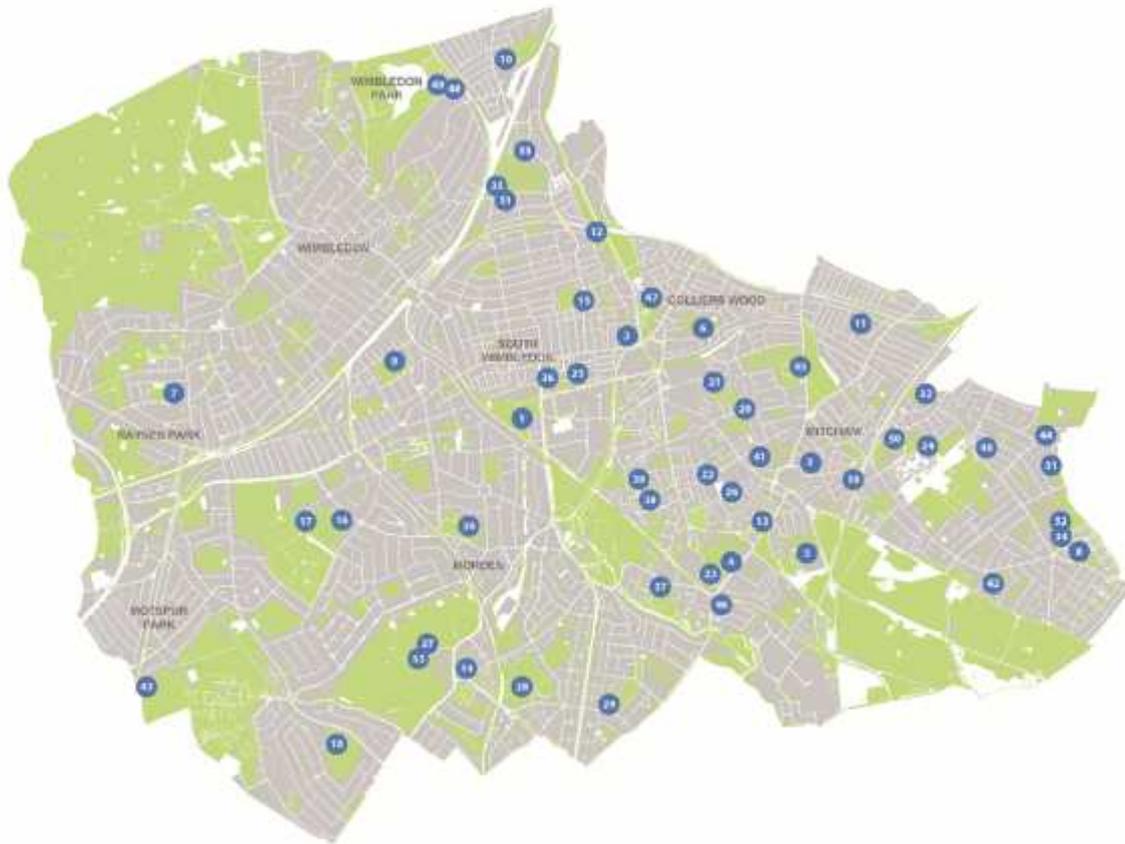
The council is committed to protecting trees and enhancing other features of the natural environment. We will:

- a. Protect street trees and secure replacements utilising current technological advancements for the successful growth and establishment of trees;
- b. Protect trees, hedges and other landscape features of amenity value, both within open spaces but also within the built environment and to secure suitable replacements in instances where their loss is justified;
- c. Use Tree Preservation Orders to safeguard significant trees of amenity value;
- d. Expect development proposals to retain, and where possible enhance, hedges, trees and other landscape features of amenity value.
- e. Only permit development if it will not damage or destroy any tree which:
 - i. is protected by a tree preservation order;
 - ii. is within a conservation area; or,
 - iii. has significant amenity value.
- f. However, development may be permitted when:
 - i. the removal of the tree is necessary in the interest of good arboricultural practice; or,
 - ii. the benefits of the development outweigh the tree's amenity value;
- g. In granting permission for a proposal that leads to the loss of a tree, hedge or landscape feature of amenity value, replacement planting or landscape enhancement of a similar or greater value to that which has been lost, will be secured through the use of conditions or planning obligations;

- h. Expect proposals for new and replacement trees, hedges and landscape features to consist of appropriate native species to the UK;
- i. Ensure that trees should not be planted in close proximity to the highway drainage system or over sewers due to the impact of tree root damage or where excavation of the sewer would require removal of the tree.

Justification

- 8.4.1. Trees make an important contribution to the borough's townscape and the quality of life for residents. The council will use the existing planning mechanisms i.e. Tree Preservation Orders and Conservation Area designations to protect existing trees on private land.
- 8.4.2. The council considers it important that development proposals are accompanied by appropriate reports and surveys to deal with the impact of the proposals on the existing vegetation. When applicable, developers will need to demonstrate that they have paid regard to current British Standards such as, BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations', BS 3998:2010 'Tree Work – Recommendations' and other relevant documentation such as the Arboricultural Advisory and Information Service's 'Arboricultural Practice Note 12'.
- 8.4.3. The council may require semi-mature replacement trees when, for example, the original trees had an important landscape or screening function.
- 8.4.4. Although exotic species can have interesting aesthetic qualities, they can also have a damaging impact on biodiversity and the local ecology. The council has a strong preference for native species to be planted but, where appropriate, will consider suitable exotic species.



	Urban Area
	Green Space
	Play Areas
1	Abbey Recreation Ground Playarea
2	All Saints Recreation Ground
3	Armfield Crescent Playground
4	Baron Court Play Area
5	Canons Playground
6	Colliers Wood Recreation Playground
7	Cottenham Park Playground
8	Donnelly Green Play Area
9	Dundonald Play Area
10	Durnsford Road Play Area
11	Edenvale Play Area
12	Garfield Road Play Area
13	Glebe Court Playground
14	Hatfield Mead Basketball Court
15	Haydons Road Play Area

16	Joseph Hood Recreation Ground Playground East
17	Joseph Hood Recreation Ground Playground West
18	King Georges Play Area
19	Laburnum Estate Playground
20	Lavender Park Play Area East
21	Lavender Park Play Area West
22	Lewis Road Play Area
23	London Road Playing Fields Play Area
24	Long Bolstead Play Area
25	Marsh Court Playground
26	Miles Road Play Area
27	Morden Park Play Area
28	Morden Recreation Play Area
29	Moreton Green West
30	Mostyn Gardens Open Space
31	Northborough Road Play Area
32	Oakleigh Way Play Area
33	Pitt Crescent Play Area
34	Pollards Hill Play Area

35	Poplar Court Gap Road
36	Priory Close Play Area
37	Ravensbury Park O.S. Playground
38	Rock Terrace Teenage Play Area
39	Rock Terrace Toddler Play Area
40	Rowan Road Recreational Ground
41	Sadler Close Playground
42	Sherwood Park Play Area
43	Sir Joseph Hood Play Area
44	Stanford Road Play Area
45	Tamworth Play Area
46	The Beeches Playground
47	Wandle Park Play Area
48	Wimbledon Park Play Area East
49	Wimbledon Park Play Area West
50	Acacia Adventure Playground
51	Moffat Court Play Area
52	Pollards Hill Skateboard Park
53	Morden Road Play Area South

Policy O8.5

Leisure, Sport and Recreation

To encourage healthy and active lifestyles and improve mental well-being, we will:

- a. Promote opportunities in sport, culture, recreation and play, based on assessment of need and capacity including;
 - i. Safeguarding the existing viable cultural, leisure, recreational and sporting facilities and supporting proposals for new and improved facilities;
 - ii. Supporting the refurbishment and replacement of sport, cultural, recreational and play facilities in our parks and open spaces;
 - iii. Safeguarding existing, and seeking to provide enhanced, play facilities along with formal and informal play spaces where these are needed.

Justification

- 8.5.1. Safeguarding our parks, play areas, leisure, recreation and cultural facilities helps to encourage healthier, more active lifestyles and improve mental well-being and social interaction.
- 8.5.2. Investment in green space has been shown to deliver better public health, both physical and mental, helping to bring disparate communities together. We will continue to encourage regular participation in sport and recreation activities and improving opportunities for leisure and recreation, in a bid to improve health equality throughout the borough.
- 8.5.3. The 2011 Merton Playing Pitch Strategy (PPS) provided an objective assessment of the supply future demand for playing pitches and the potential future requirements for the borough's sporting needs. The council is currently undertaking a review of the Playing Pitch Strategy, which will provide an update of the needs and demands, with a draft strategy expected in early 2019.
- 8.5.4. Sport, leisure and recreation activities generally take place on designated open spaces, which can often result in conflict between users of these spaces. Wimbledon Park is a prime example, where the lake is regularly used for various water sports, such as paddle sports and sailing. This can conflict with more sedate activities such as fishing. The council is currently preparing a Masterplan for Wimbledon Park and we will aim to support different communities by providing a range spaces and of activities designed to meet specific needs.
- 8.5.5. We work with many partners in the delivery of services and in line with the London Plan policies, support the shared use of services between schools, colleges, sports providers and community facilities.
- 8.5.6. The importance of providing for children's play is emphasised in the Mayor's SPG "Providing for Children and Young People's Play and Informal Recreation" (2008). Play is an important aspect in our lives, not only in terms of health but also encouraging happiness, social cohesion and development.

Managing flood risk



Strategic Policy F8.6

Managing flood risk from all sources of flooding

As Lead Local Flood Authority the council will work in partnership with all Risk Management Authorities, including the Environment Agency, water supply, sewerage and highway infrastructure providers, developers, community groups, residents and businesses to reduce flood risk from all sources of flooding. All sources of flooding includes the risk posed from surface water, groundwater, river flooding, sewers, reservoirs and ordinary watercourses.

The council will seek to direct development away from areas at the highest risk of flooding from all sources, through the application of a sequential, risk-based approach to the location of site allocations using the borough's Strategic Flood Risk Assessment as the evidence base.

Where development is proposed in areas at risk of flooding, the council will ensure it is safe for the lifetime of development taking climate change into account, without increasing flood risk elsewhere.

This will be achieved by:

- a. Applying the Sequential Test to allocated sites at the conceptual stage in the development planning process, to identify any suitable sites that are within a lower flood risk area. This process will be used to identify key growth and opportunity area locations, therefore enabling development which is not exposed to flood risk whilst meeting development objectives and the borough's housing demand.
- b. Major developments in Flood Zone 1 and all new development within Flood Zones 2 and 3 will be required to provide site specific Flood Risk Assessments (FRAs), which are proportionate with the degree of flood risk posed to and by the development, taking account of the advice and recommendations within the Council's Strategic Flood Risk Assessment, Local Flood Risk Management Strategy and Surface Water Management Plan;

- c. Following application of the Sequential Test and Exception test, use the sequential approach within the development sites boundary to inform site layout by locating the most vulnerable elements of a development in the lowest risk areas. For example, the use of low-lying ground in waterside areas for recreation, amenity and environmental purposes can provide an effective means of flood risk management as well as providing connected green spaces with consequent social and environmental benefits.
- d. Seek opportunities for new development to achieve reductions to wider flood risk issues where possible, e.g. larger developments may be able to make provisions for the inclusion of SuDS within areas of public or private realm.
- e. Identify long-term opportunities to remove development from the floodplain through land swapping.
- f. Large potential development areas with a number of new allocation sites should look to develop a strategy for providing a joint SuDS scheme. This should be on an integrated and strategic scale and where necessary would require the collaboration of all developers involved in implementing a specific expansion area or site.
- g. Requiring development proposals to account for possible groundwater contamination in Source Protection Zones 1 and 2.

In addition, the Council will promote the implementation of green and blue infrastructure, including the principle of 'Urban Green/Blue Corridors', especially along river corridors. This will enable a network of multifunctional spaces and corridors that provide safe routes and storage for flood water.

This will be achieved by:

- h. Adopting a catchment based approach to development and supporting schemes that make space for water in flood events;

- i. Supporting schemes to de-culvert any sections of the River Wandle, Beverley Brook, Pyl Brook and other ordinary watercourses across the borough;
- j. Preserving and enhancing landscape, heritage and culture through protection and access improvements to the borough's ponds, open water and water heritage sites; and
- k. Maximising opportunities to establish overland flow paths, surface water ponding areas, urban watercourse buffer areas and multi-use flood storage areas in locations of high surface water flood risk.

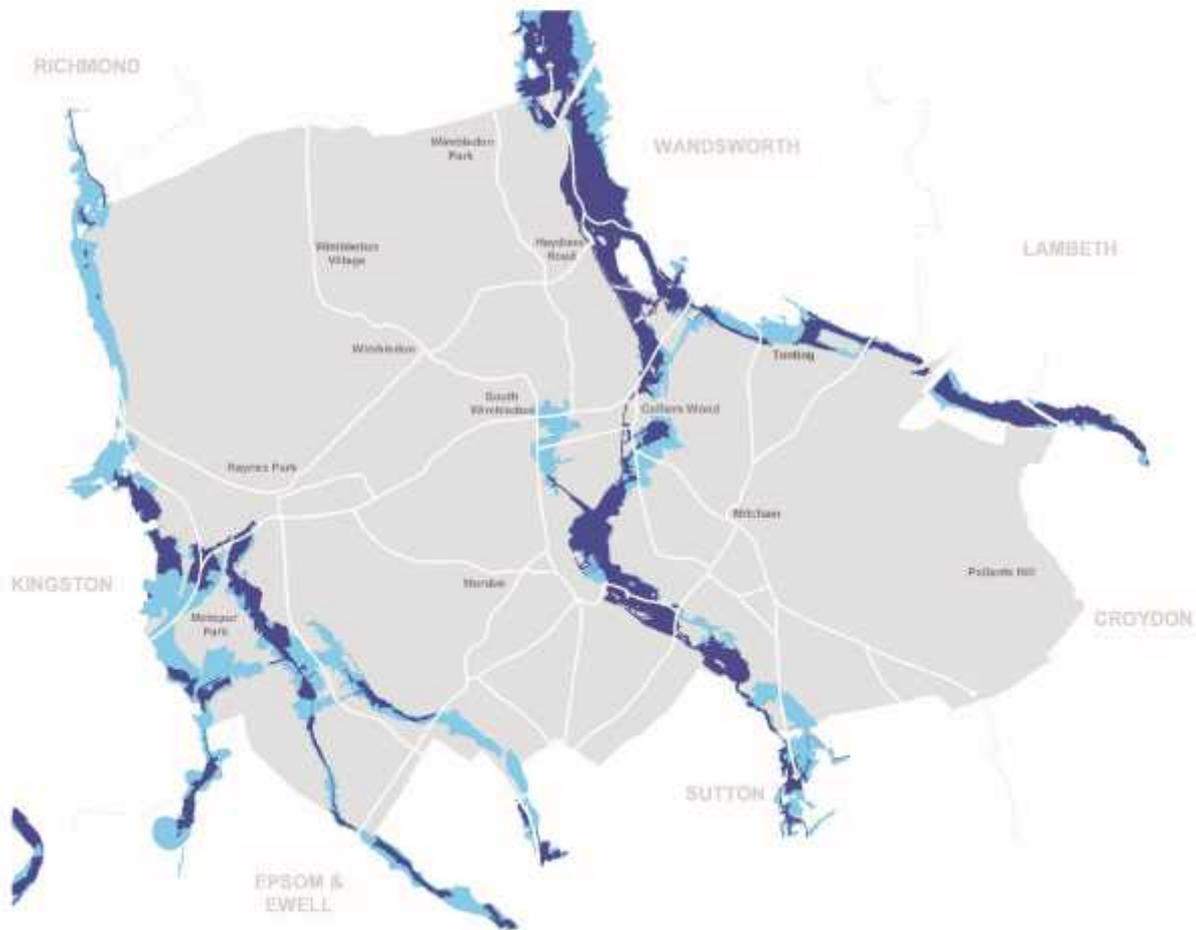
Justification

- 8.6.1 Management of flood risk within the London Borough of Merton will be undertaken in line with the National Planning Policy Framework 2012 (NPPF), Flood and Water Management Act 2010, Flood Risk Regulations 2009 and the European Water Framework Directive 2000 transposed into law through the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.
- 8.6.2 The council has statutory duties and responsibility as the lead local flood authority (LLFA) in Merton. As the LLFA, Merton are the risk management authority for local flood risk, including flooding from surface run-off, ordinary watercourses and groundwater. Merton will work in partnership with other Risk Management Authorities including the Environment Agency, which is the Risk Management Authority for Main River and tidal flooding; Thames Water Utilities Ltd, which is the Risk Management Authority for flooding from public sewers; and neighbouring LLFAs.
- 8.6.3 Merton's Strategic Flood Risk Assessment (SFRA), Level 1 (2015) and Level 2 (2017), was produced in partnership with neighbouring borough's in the River Wandle catchment, in consultation with the Environment Agency and Thames Water and outlines all sources of flooding to the borough, at a strategic level. Level 1 of the SFRA provides an overview of flood risk issues in Merton, and Level 2, which analyses specific site allocations or other locations where development is proposed in areas at risk from flooding. The Level 2 SFRA provides sufficient information to allow the application of the NPPF Exception Test.
- 8.6.4 In addition, the SFRA contains guidance on planning policies, building design, site or area specific Flood Risk Assessments and vulnerability, developments located within the River

Wandle, Beverley and Pyl Brook floodplains, surface water flooding and the use of Sustainable Drainage Systems (SuDS), water resources, residual risk and emergency planning.

- 8.6.5 Flood zone maps are included within Merton's SFRA. These maps divide the borough into zones on the basis of the probability of flooding occurring, ignoring the presence of any flood defences or flood alleviation measures. The flood zone maps are based upon data produced by the Environment Agency. Although the SFRA is updated regularly, more up-to-date flood risk data and information may be available from the Environment Agency and others, through data requests. Development proposals will be assessed against the most up-to-date information. Pre-application discussions are therefore recommended to confirm which flood zone the proposal is within and appropriate flood levels.
- 8.6.6 Information and guidance on how to carry out a Sequential Test and Exception Test and what is required as part of Flood Risk Assessments can be in Merton's SFRA. Further guidance can also be found in the Environment Agency current advice on FRA's requirements, NPPF and the National Planning Practice Guidance, all of which are available online.
- 8.6.7 Merton's Local Flood Risk Management Strategy identifies Merton objectives and measures for managing local flood risk, including surface runoff and groundwater, and will include specific requirements with regards to management of flood risk to and from development. Developers should ensure that development proposals meet the objectives and requirements identified in the Local Flood Risk Management Strategy.
- 8.6.8 The NPPF, Planning Practice Guidance, Merton's Strategic Flood Risk Assessment, Local Flood Risk Management Strategy and Surface Water Management Plan and policies in the London Plan all recommend the application of sustainable urban drainage (SuDs) to manage flood risk through reducing surface water runoff, improving water quality and provision of amenity and biodiversity benefits.
- 8.6.9 Major development sites and development sites within opportunity areas or regeneration zones offer the potential to significantly enhance the public realm and streetscape environment through implementing SuDS on a drainage catchment level in accordance with the Mayor's Healthy Streets initiative. Furthermore, making space for water within accessible multifunctional spaces and deculverting watercourses will enhance the blue and green network of open spaces along river corridors across Merton.

- 8.6.10 The requirement to utilise SuDS in all development, including those in low flood risk areas, is in view of the fact that surface water from one area of a drainage catchment may contribute towards enhanced flood risk in another area of that catchment. Drainage catchments are indicated in Merton's SFRA. In addition, flood events are expected to become more frequent and more significant in the future as the U.K.'s climate changes and this requirement will go some way to adapting to this change. Merton's Level 2 SFRA and Surface Water Management Plan can be used to guide which SuDS will be the most suitable based on site specific considerations.
- 8.6.11 Details submitted to the council to demonstrate compliance with this policy should follow the design principles within the National SuDS Standards and the current SuDS manual and guidance identified within the council's SFRA or Local Flood Risk Management Strategy;
- 8.6.12 The Council, as the Local Planning Authority and the Lead Local Flood Authority, is required to ensure that SuDS are implemented in all major developments. The requirement to utilise SuDS in all development, including those in low risk areas, is in view of the fact that surface water from one area of a catchment may contribute towards enhanced flood risk in another area of that catchment. In addition, flood events are expected to become more frequent and more significant in the future as the U.K.'s climate changes and this requirement will go some way to adapting to this change. The installation of SuDS, such as green roofs, can have several additional benefits: increasing biodiversity and urban cooling, providing additional open space in built-up areas and improvements to water quality. Flood Risk Assessments will highlight site specific issues and help inform the best solutions to reduce flood risk and improve water management for that particular site. The Level 2 SFRA and Surface Water Management Plan can be used to guide which SuDS will be the most suitable based on site specific considerations.



Flood Zones

- Flood Zone 3
Functional Flood Plain
1 in 100 of Greater Annual Probability of Flooding
- Flood Zone 2
Medium probability
Between 1 in 100 in 1000 Annual Probability of Flooding



Policy F8.7

How to manage flood risk

The council will adapt to climate change by ensuring that development across the borough reduces and mitigates the risk of flooding and incorporates Sustainable Drainage Systems (SuDS) and water efficiency measures.

All development proposals must take account of the advice and recommendations within the council's Strategic Flood Risk Assessment Local Flood Risk Management Strategy and Surface Water Management Plan The council will achieve this by ensuring that:

- a) All new development at high or medium risk of surface water flooding, all new development in Flood Zones 2 and 3 and major developments in Flood Zone 1 as required in the National Planning Policy Framework will be required to provide a site specific Flood Risk Assessment (FRA);
- b) the FRA must appropriately assess the risk of flooding from all relevant sources, in particular surface water, groundwater, reservoir, river, and sewer flooding and where there is a risk of flooding, appropriate flood risk mitigation measures must be incorporated into the scheme;
- c) As part of the FRA, the applicant must provide evidence of the application of the Sequential Test and where required, the Exception test. At the site specific level, applicants must use the sequential approach within the development sites boundary to inform site layout by locating the most vulnerable elements of a development in the lowest risk areas within that site.
- d) For all major developments in Flood Zone 3 and 2 or major developments at high or medium risk of surface water flooding, a Flood Warning and Emergency Plan will be required.

- e) All major applications must include a 'Surface Water Drainage Strategy', which must include water efficiency measures to minimise water consumption such as rainwater harvesting or grey water recycling and SuDS to manage surface water runoff, provide biodiversity, amenity and water quality benefits. Details should be provided which address the maintenance requirements of the drainage system for the lifetime of the development which they serve.
- f) Minor applications, including prior approvals, basements, refurbishment and change of use, must appropriately demonstrate the development's surface water drainage arrangements, including measures to reduce runoff and provide sufficient detail of the proposed drainage layout giving priority to the use of SuDS and water efficiency measures;
- g) Hard surfaces within development sites must be permeable to help reduce surface water runoff rates. Developments that seek to increase impermeable surfaces within a site, including small areas such as front gardens, will be resisted;
- h) All new developments are required to take into account of the latest climate change allowances as part of the Flood Risk Assessment and/or Surface Water Drainage Strategy;
- i) Where development is proposed in the Environment Agency's Groundwater Source Protection Zones 1 or 2, measures must be taken to ensure the protection of groundwater supplies;
- j) All riparian development must be set back from watercourses, including both main rivers and ordinary watercourses and must retain the stability, integrity and maintenance access requirements to all flood defences.
- k) Developments must demonstrate that the local water supply and public sewerage networks have adequate capacity both on and off-site to serve the development where there is a capacity problem and improvements in off-site infrastructure are not programmed.

Justification

- 8.7.1 The protection of people, properties and infrastructure from the risk of flooding from all sources is of great importance to the council. The flood risk and sustainable drainage development policy is supported by Merton's Strategic Flood Risk Assessment, Local Flood Risk Management Strategy and Surface Water Management Plan.
- 8.7.2 Merton is affected by a number of different sources of flood risk, primarily surface water flooding which has been the cause of recent flood events in the borough in the summer storms of 2017, 2016 and most significantly in 2007. The borough is also affected by fluvial (or river), surface water, ordinary watercourse, sewer, reservoir and groundwater flooding. The SFRA Level 1 gives an overview of flooding from all sources across the borough.
- 8.7.3 The Environment Agency's Flood Map for Surface Water alongside Merton's SFRA, LFRMS and SWMP and historical flooding records of the borough, indicate that several areas including Colliers Wood, West Barnes and Raynes Park and Summerstown are affected by multiple flood risk sources.
- 8.7.4 In order to create job opportunities; deliver homes and essential infrastructure it may be necessary to meet the demands of predicted population growth and for future economic growth to secure improvements in areas such as the Colliers Wood part of Merton's Opportunity Area and other sites within the Wandle Valley, it will be necessary to develop on sites within medium to high flood risk zones; subject to meeting the requirements of the NPPF's Sequential and Exceptions test.
- 8.7.5 In accordance with our basement and subterranean policy, the council will only permit basement and underground development that do not cause harm to the built and natural environment, local amenity; result in increased flood risk or lead to ground instability. For basement and subterranean proposals, please refer also to basement and subterranean policy within this Local Plan and to Merton's Basement and subterranean Supplementary Planning Document 2017

Flood Risk Assessments (FRAs)

- 8.7.6 Developers must consider flood risk from all sources as part of an FRA and ensure they are utilising the most appropriate and up-to-date information in assessing the risk of flooding from all sources to the development site. Discussions should be held with each of the flood risk

management authorities when considering measures to mitigate flooding from different flood sources within development proposals. Conditions or planning obligations will be used as appropriate to secure flood risk mitigation and sustainable drainage measures.

8.7.7 A site specific flood risk assessment will be required for all development within high or medium surface water risk areas and for all development in fluvial Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving:

-) sites of 1 hectare or more; land which has been identified by the Environment Agency or LLFA as having critical drainage problems;
-) land identified in a strategic flood risk assessment as being at increased flood risk in future;
-) land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use

8.7.8 All submitted Flood Risk Assessments (FRA) will be required to be in line with national policy and guidance and demonstrate having regard to Merton's Strategic Flood Risk Assessment, Local Flood Risk Management Strategy and Surface Water Management Plans and provide detailed information on the requirements for assessing and managing flood risk in development and how to produce site specific Flood Risk Assessments. All FRA's must be based on the most up to date flood risk information and data, therefore, pre-application consultation should be undertaken with all risk management authorities including the Environment Agency and Thames Water.

8.7.9 Site-specific Flood Risk Assessments should address the management of surface run-off, the amount of impermeable surfaces resulting from the development, and the potential for increased flood risk both on-site and elsewhere within the catchment.

8.7.10 Adapting to the likely effects of climate change also includes ensuring that development is located away from areas considered to be at high risk of flooding, incorporating sustainable drainage wherever possible, ensuring the borough's green and blue infrastructure network is maintained, which also contributes to ensuring that biodiversity can adapt to a changing climate, as well as protecting our water resources and water quality.

8.7.11 Making allowances for climate change in your flood risk assessment will help to minimise vulnerability and provide resilience to flooding and coastal change in the future. The council recommends that all applicants refer to the latest climate change allowance criteria as published by Defra and supporting guidance by the Environment Agency.

Sequential Test and Exception Test

- 8.7.12 The NPPF requires inappropriate development to be steered away from areas of high risk of flooding to lower areas of risk, but where development is necessary, there is a need to ensure that it is safe and would not increase flood risk elsewhere.
- 8.7.13 The council will only consider developments in Flood Zone 3a only, if the Sequential Test has been undertaken in accordance with the NPPF and its supporting guidance. The Sequential Test will not be required for minor developments or if it's a Local Plan site allocation or a change of use. The Sequential Test will be required in all other cases.
- 8.7.14 If, following this test, it is not possible, consistent with wider sustainability objectives for a development to be located in flood zones with a lower probability of flooding, the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.
- 8.7.15 The use of multi-functional open spaces, including areas of public realm can provide valuable spaces for recreation, amenity and biodiversity benefits and can provide an effective means of flood risk management through making space for water, as well as providing connected green spaces with consequent social and wider environmental benefits;

Sustainable Drainage

- 8.7.16 A Sustainable Drainage System (SuDS) is a drainage and landscaping scheme which utilises a 'management train' of various drainage techniques used in series to mimic as closely as possible the natural site's processes, thereby mitigating and enhancing the development's impact on flood risk, water quality and biodiversity and amenity value. Merton has published further detail on SuDS within its SuDS Design and Evaluation Guide, which is an emerging SPD.
- 8.7.17 SuDS cover a whole range of approaches to surface water management. Successful SuDS design requires the drainage to be carefully integrated into the site layout and landscape at the conceptual stage, while taking account of the original greenfield drainage patterns. A greenfield run-off rate is one that reflects the natural rate of water run-off if it was undeveloped. Early engagement with the LLFA and incorporating SuDS at the outset of the scheme is the most effective way to achieve the desired objectives of SuDS and a successful scheme. Development should aim to achieve greenfield run-off rates. Developments on brownfield sites should seek to reduce the volume and rate of run-off leaving the site to the

standards set within the London Plan. SuDS designs that integrate the features into the overall site design rather than buried drainage measures such as tank, generally result in more cost-effective solutions.

8.7.18 To reduce the volume and rate of run-off from heavy rainfall the council will expect developments to utilise water efficiency measures and sustainable drainage systems (SuDS), such as green and blue roofs, rain gardens, bioretention planters, permeable paving and all other forms of green and blue infrastructure in line with Merton's emerging SuDS SPD, the London Plan drainage hierarchy and National SuDS Standards. Developers must demonstrate the maintenance, operation and long-term management and adoption of SuDS through a SuDS Management Plan that must be submitted as part of their drainage strategy.

8.7.19 Development sites that discharge water into the public sewer will be required to provide confirmation from the local water company, Thames Water Utilities Ltd., that the local public sewer has adequate capacity to serve the new development and existing surrounding developments. It is advised that this is carried out early in the design and planning process and confirmation submitted as part of drainage strategy.

Water infrastructure

8.7.20 The council 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-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 problem and no improvements are programmed by the water company, the council will require the developer to fund appropriate improvements which must be completed prior to occupation of the development.

Basements

8.7.21 The Basement policy within this Local Plan is to be read alongside the flood risk and sustainable drainage policy. Any basement schemes which include habitable rooms and other uses where flooding could threaten the safety of people, especially when sleeping, will not be accepted in areas prone to flooding, including surface water flooding and in certain circumstances the use of basements may be restricted to non-habitable uses. Positively pumped devices should be installed to protect basements from the risk of sewer flooding. Basement applications must ensure the basement is safe from flooding and does not increase risk to and from the site.

Sustainable drainage



Policy F8.8

Sustainable drainage systems (SuDS)

The council will require all developments to reduce the risk of flooding by:

- a) Ensuring all new developments including all basement and subterranean developments have to consider Sustainable Drainage Systems (SuDS) and demonstrate sustainable approaches to the management of surface water in line with the emerging National SuDS standards.
- b) Seeking mitigating measures against the impact of flooding from all sources; and surface water run-off through the inclusion of SuDS including green roofs rainwater harvesting and other innovative technologies where appropriate.
- c) Ensuring developers demonstrate the maintenance and long term management of SuDS through a SuDS Management Plan to be submitted as part of the planning process.
- d) Requiring developers, where feasible, to incorporate soft landscaping, appropriate planting (including trees) and permeable surfaces into all new developments including non-residential developments.

For development proposals associated with existing homes, the council requires:

- e) The retention of soft landscaping and permeable surfaces in gardens and the reduction, or at least not the increase in, the amount of impermeable surface associated with existing homes new driveways or parking areas associated with non-residential developments and those located in gardens to be made of permeable material in line with permitted development rights
- f) Requiring any development or re-development that impacts on a heritage asset or its setting (including conservation areas) has to consider Sustainable Drainage Systems (SuDS) and demonstrate within a Heritage Statement, the approach taken to ensure

that there is no adverse impact on the character and appearance of the asset and that there is no long term deterioration to the building's fabric or fittings.

- g) Seeking a reduction in surface water discharge to greenfield run-off rates wherever feasible.
- h) Where greenfield run-off rates are not feasible, this will need to be demonstrated by the applicant, and in such instances the minimum requirement is to achieve at least a 50% attenuation of the site's surface water runoff at peak times based on the levels existing prior to the development.

Justification

8.8.1 Surface water flooding occurs when high intensity rainfall generates runoff which flows over the surface of the ground and ponds in low lying areas, before the runoff enters any watercourse or sewer. It is usually associated with high intensity rainfall events and can be exacerbated when the soil is saturated and natural drainage channels or artificial drainage systems have insufficient capacity to cope with the additional flow.

8.8.2 In order to reduce the risk of surface water flooding in the borough it is important to ensure that all sites must consider and implement the principles of SuDS over and above what would be covered by national policy.

8.8.3 It is important to ensure that new developments sites located within the Strategic Flood Risk Assessment identified area of 'increased risk of surface water ponding' implement surface water attenuation. The council recommends that this policy is read in conjunction with the local plan policies: flood risk management and the Merton Sustainable Drainage (SuDS) Design and Evaluation Supplementary Planning Document (SPD).

SuDS design

8.8.4 The satisfactory performance of SuDS depends on good design and adequate maintenance, and the provision for adoption and maintenance must be made from the outset. Measures will be sought to minimise the potential for flooding and surface water run off and include SuDS, green roofs, grey water re-use and rainwater harvesting ensure these are considered in major developments and high water use developments in accordance with the London Plan.

- 8.8.5 As well as controlling surface water run-off at source to reduce the risk of flooding, SuDS can protect and improve water quality in receiving water courses, provide habitat creation opportunities, enhance the design of the development by providing amenity areas and landscape settings, and encourage natural groundwater recharge. Opportunities should be sought for the inclusion of SuDS which provide wider environmental benefits as part of the planning process.
- 8.8.6 The Flood and Water Management Act 2010 applies to any construction work that is done by way of, in connection with or in preparation for the creation of a building or other structure, including anything that covers land (such as a patio or other surface), that will affect the ability of land to absorb rainwater. All new buildings, roads and other paving, whatever the size, type or scale of the project, will be affected, as well as alterations that have drainage implications.
- 8.8.7 Therefore where planning permission is required the developer will need to submit
-) Appropriate design layout including consideration to the location of the development;
 -) Construction of the development; and,
 -) Maintenance of SUDS.

Green roofs and walls

- 8.8.8 The design and operational needs of a green roof or wall should not place undue stress on water supply and other natural resources. Extensive green roofs, which are suitable for flat and pitched roofs and also for retrofitting, with low maintenance and no requirement for irrigation once established, are particularly encouraged. All green and brown roof systems should use a high percentage of recycled products.
- 8.8.9 The provision of green roofs does not negate the need to make adequate open space provision on the ground. Any proposals for accessible green roofs need to be designed for security and safety and not adversely affect neighbouring properties.
- 8.8.10 The use of green roofs and green walls in smaller developments, renovations, conversions, extensions and retrofitting is encouraged and supported, where opportunities arise. Conditions will be used where appropriate to secure the proper installation, maintenance and responsibility for green roofs and walls.

Areas at risk of surface water flooding – Strategic Flood Risk Assessment 2018

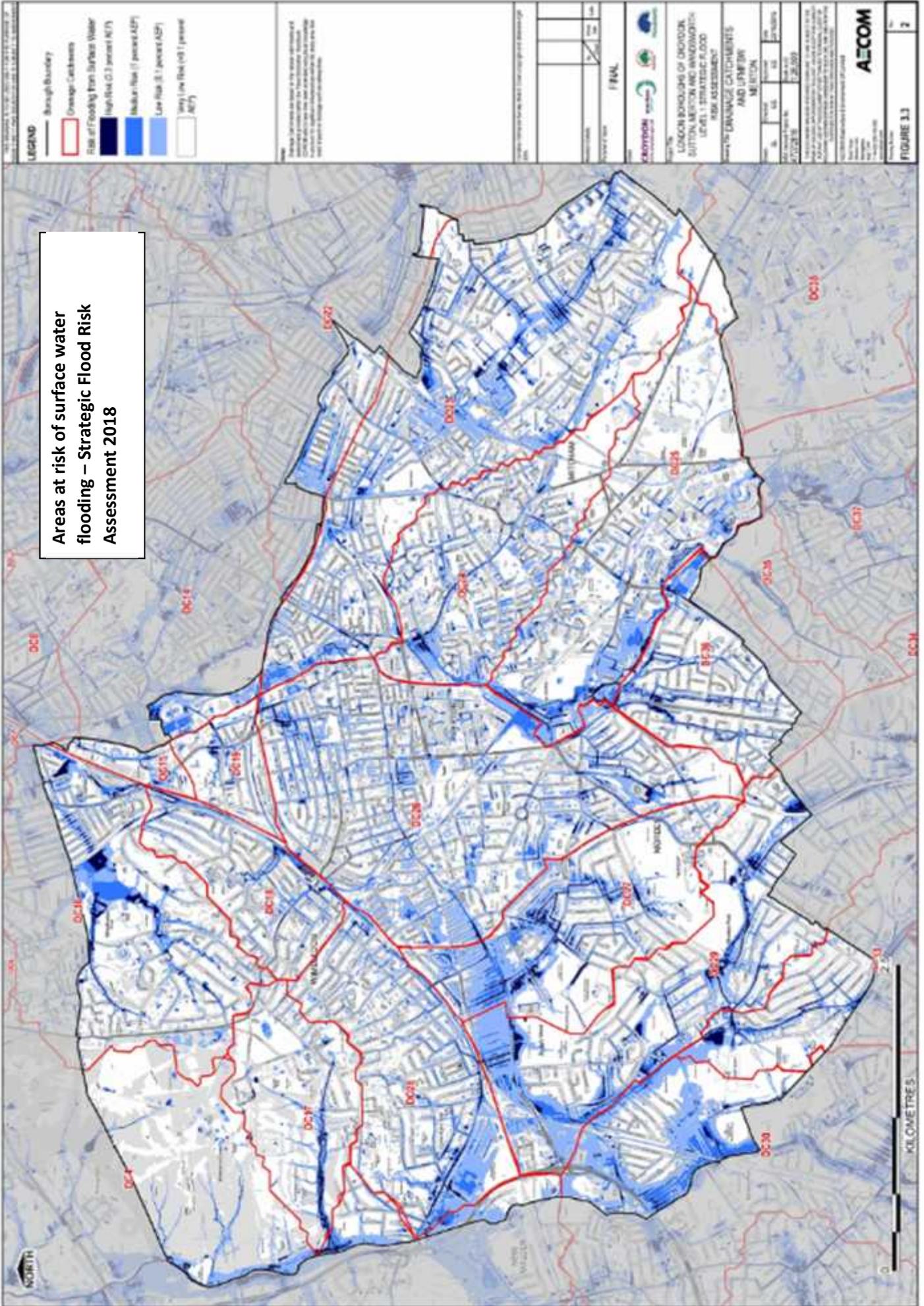


FIGURE 3.1

Policy P.8.9

Improving air quality and minimising pollution

Merton Council will seek to ensure that local environmental impacts of all new development proposals do not lead to detrimental effects on the health, safety and the amenity of existing and new users or occupiers of the development site, or the surrounding land. These potential impacts can include, but are not limited to, air pollution, noise and vibration, light pollution, odours and fumes, as well as land contamination.

Where necessary, the council will set planning conditions to reduce local environmental impacts and protect amenity on adjacent land uses to acceptable levels.

Air Quality

- a) In line with Draft London Plan policy SI1, developments subject to an Environmental Impact Assessment should propose methods of achieving an Air Quality Positive approach through the new development.
- b) All other developments should secure at least 'Air Quality Neutral'.
- c) To consider the impact of introducing new developments in areas already subject to poor air quality, the following will be required:
 - i. An air quality impact assessment, including where necessary, modelled data;
 - ii. Mitigation measures to reduce the development's impact upon air quality including the type of equipment installed, thermal insulation and ducting abatement technology;
 - iii. Measures installed in the new development to protect the occupiers of new developments from existing sources of pollution;
 - iv. Strict mitigation for developments to be used by sensitive receptors such as schools, hospitals and care homes in areas of existing poor air quality; this also applies to proposals close to developments used by sensitive receptors.

Noise and vibration

- d) New noise generating developments should be appropriately located so as to minimise their impacts on noise sensitive land uses and noise-sensitive developments should be located away from noise priority locations and noise generating land uses
- e) New development which would have a significant effect on existing or future occupiers or the local amenity due to noise or vibration will not be permitted unless the potential noise problems can be overcome by suitable mitigation measures.
- f) Where a noise-sensitive development is seeking planning permission to locate in an already noisy area (e.g. a town centre or near a busy road), the new noise-sensitive development will be responsible for mitigating impacts from existing noise-generating activities in line with the Agent of Change principle set in the National Planning Policy Framework and the Draft London Plan Policy D12.
- g) The council will support good acoustic design and use of new appropriate technologies to minimise noise levels.
- h) Development proposals will be expected to:
 - i. Provide a noise assessment of any new plant and equipment and its impact upon both receptors and the general background noise levels;
 - ii. Provide mitigation measures where noise needs to be controlled and managed;
 - iii. Agree to time limits and restrictions for activities where noise cannot be sufficiently mitigated;
 - iv. use good acoustic design within their development
 - v. That where applicable suitable mitigation measures will be sought by planning obligation or condition.

Light pollution

- i) The council will support well-designed artificial lighting that maximises positive features and minimises its impact on local amenity.

- j) Merton Council will seek to ensure that artificial lighting in new developments does not lead to unacceptable impacts by requiring the following, where necessary:
 - i. an assessment of any new lighting and its impact upon any receptors
 - ii. mitigation measures, including the type and positioning of light sources
 - iii. promotion of good lighting design and use of new technologies

Odours and fume control

- k) Merton Council will seek to ensure that any potential impacts relating to odour and fumes from commercial activities are adequately mitigated by requiring the following:
 - i. an impact assessment where necessary;
 - ii. the type and nature of filtration to be used;
 - iii. the height and position of any chimney or outlet;
 - iv. promotion and use of new abatement technologies;

Land contamination

- l) Merton Council promotes the remediation of contaminated land where development comes forward. The council will support proposals that reinstate such land into safe, productive use following a site investigation, assessment, and where necessary site remediation and verification.

Managing pollution from construction and demolition

- m) Merton Council will seek to manage and limit environmental disturbances during construction and demolition as well as during excavations and construction of basements and subterranean developments.
- n) To deliver this the council requires the submission of Construction Management Statements (CMS) for the following types of developments:
 - i. all major developments;
 - ii. any basement and subterranean developments;
 - iii. developments of sites in confined locations or near sensitive receptors; or
 - iv. if substantial demolition/excavation works are proposed.

- o) Where applicable and considered necessary, the council may seek a bespoke charge specific to the proposal to cover the cost of monitoring the CMS
- p) For major development, applicants should demonstrate how they have considered Merton's Air Quality Action Plan, Merton's Air Quality Supplementary Planning Document, Merton's emerging Non-Road Mobile Machinery (NRMM) Practical Guide, Dust Controls and Logistics Planning from the earliest stage in the design and construction methodology of their development

Justification

- 8.9.1 The council will require developers to explore ways to minimise any harmful and adverse environmental impacts of development, including during construction and demolition.
- 8.9.2 The design and layout of new development should endeavour to minimise conflict between different land uses, taking account of users and occupiers of new and existing developments. Therefore any noise and pollutant polluting activities or features such a plant equipment should be located away from sensitive areas, where possible to ensure that there are no detrimental impacts on living conditions, health and wellbeing or local amenity..
- 8.9.3 Additionally, where there are already significant adverse effects on the environment or amenity due to pollution, sensitive uses should be steered away from such areas. However, given the limited availability of land for development in the borough, this will not always be possible. Therefore, new developments, including changes of use, should mitigate and reduce any adverse impacts resulting from air and light pollution, noise, vibration and dust to acceptable levels.
- 8.9.4 Operations that are likely to give rise to noise, dust, vibration, odour or other pollutants are also controlled by the licensing regulations implemented by the council's Environmental Health Team and the Environment Agency.
- 8.9.5 We advise that applicants to discuss proposals with potential adverse impacts on air, land, light pollution, noise and water at the early stages of the planning application process with the council's Environmental Health Team.

Air quality

- 8.9.6 The council is delivering improvements to air quality through its Air Quality Action Plan and through a wide range of measures set out in this Local Plan, from the promotion of active travel, efforts to minimise single occupancy vehicle journeys, encouraging electric vehicles

and supporting landscaping and planting. This policy focuses on the requirements for assessing air quality at the planning application stage.

- 8.9.7 To meet the aims of the National Air Quality Objectives and the Mayor of London's Air Quality Strategy, the council has designated the entire borough of Merton as an Air Quality Management Area. Therefore, development that may result in an adverse impact on air quality including during construction, may require an Air Quality Impact Assessment in order for the council to consider any possible pollution impact linked to development proposals.
- 8.9.8 Necessary mitigation measures will be secured through negotiation on a scheme, or through the use of planning obligations or conditions where appropriate. Further guidance and more information on the council's air quality aims and priorities can be found in Merton's Air Quality Action Plan (AQAP) and Merton's Air Quality SPD.

Noise and vibration

- 8.9.9 Continuous noise disturbance can be associated with health problems. The main source of ambient noise in Merton is road traffic. However other activities such as construction, busy high streets, or a greater vibrant night time economy may also impact noise levels. Therefore it is important that new development assists in reducing potential exposure. Developers will need to demonstrate that the development has been designed to reduce the impacts of noise on existing and new occupiers.
- 8.9.10 For a long time, the responsibility for managing and mitigating the impact of noise on neighbouring residents and businesses has been placed on the business or activity making the noise, regardless of how long the noise-generating business or activity has been operating in the area. In many cases, this has led to newly-arrived residents complaining about noise from existing businesses, sometimes forcing the businesses to close down.
- 8.9.11 The Agent of Change principle, set out in Draft London Plan Policy D12 and the National Planning Policy Framework, places the responsibility for mitigating the impact of noise firmly on the new development. This means that where new developments are proposed close to existing noise-generating uses, applicants will need to design them in a more sensitive way to protect the new occupiers, such as new residents, businesses, schools and religious institutions, from noise impacts. This could include paying for soundproofing for the existing noise-generating uses, such as an existing music venue. The Agent of Change principle works both ways. If a new noise-generating use is proposed close to existing noise-sensitive uses, such as residential development or businesses, the onus is on the new use to ensure its building or activity is designed to protect existing users or residents from noise impacts.

8.9.12 Noise-generating cultural venues such as theatres, concert halls, pubs and live music venues should be protected. This requires a sensitive approach to managing change in the surrounding area. Adjacent development and land uses should be brought forward and designed in ways which ensure established cultural venues remain viable and can continue in their present form without the prospect of licensing restrictions or the threat of closure due to noise complaints from neighbours.

8.9.13 Housing and other noise-sensitive development proposed near to an existing noise-generating use should include necessary acoustic design measures. This will ensure new development has effective sound insulation to mitigate and minimise potential noise impact or neighbour amenity issues. Mitigation measures should be explored at an early stage in the design process, with necessary and appropriate provisions secured through planning obligations.

8.9.14 Noise from construction during building of developments will be managed through use of planning conditions.

Light pollution

8.9.15 As set out in the design policies, well designed lighting can enhance the street scene and public realm, extend the usable hours of sports and other facilities and improve the feeling of safety and fear of crime.

8.9.16 As set out in this policy, the council will support well-designed artificial lighting that maximises the positive aspects and and minimises its impact on local amenity

Odours and Fume Control

8.9.17 Some commercial activities can have an impact upon the local environment; these impacts can include such things as odours, fumes, dust and steam. As part of the development process the council requires that steps are taken to ensure that any impact is considered carefully and that mitigation is in place to manage these types of emissions.

8.9.18 Applicants will be required to apply the Department for Environment, Food and Rural Affairs' (DEFRA) Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems.

Land Contamination

8.9.19 Industrial activity, waste disposal, accidental spillages and transportation can cause contamination of land. Often this contamination is associated with industrial processes or

activities which are now not active, such as former printworks and other activities that were part of the Wandle Valley's industrial heritage.

- 8.9.20 In accordance with the requirements of the Environmental Protection Act (EPA) 1990, the council keeps a Contaminated Land Register of sites in the Merton. The council will require developers to undertake a site investigation of any possible contamination of sites. The investigation is required to establish the nature and extent of the contamination prior to determining the application.
- 8.9.21 Where development is proposed on a site that is known or reasonably believed to be contaminated, the need to carry out remediation or monitoring and to ensure adequate disposal of contaminated soil will be secured by means of planning conditions. The council will consult and seek advice from Environment Agency when considering applications on contaminated land.
- 8.9.22 The redevelopment of previously developed land (or 'brownfield') sites for beneficial uses, many of which are potentially affected by contamination, provides an opportunity to deal with the potential risks posed by contamination to human health and the natural environment.
- 8.9.23 Contamination sensitive development would typically include developments that potentially put people in direct contact with contamination; such as a new homes, parks and open space or school uses.
- 8.9.24 Development should not be permitted unless effective measures are taken to treat or control any contamination in order to:
-) Expose occupiers of the development and surrounding area to unacceptable risk;
 -) Threaten the structural integrity of any building on or in the surrounding area;
 -) Contaminate any watercourse, water body or aquifer; and,
 -) Cause the contamination of adjoining land or allow the contamination to continue.
- 8.9.25 Hazardous Gas Installations also affects parts of Merton. The council is required to consult the Health and Safety Executive (HSE) on planning applications using methodology and software known as PADHI, which is available online. The HSE provide advice on safety grounds as to whether or not planning permission should be granted. The council will not approve any application that the HSE has recommended that permission should not be granted. Information on whether a site is affected by this requirement is available from the council.

Construction and demolition

- 8.9.26 There is a need to ensure that occupiers are protected from environmental disturbances during the construction and demolition phase of major developments, and in particular during excavating and construction of subterranean developments such as basements.
- 8.9.27 The council requires the submission of Construction Management Statements (CMS) for the types of developments as set out in the basement policy in this Local Plan. In addition Merton's Basement and Subterranean SPD 2017 sets out guidance to ensure that problems relating to excavation and constructions of basements, such as highway/parking impacts, noise, dust, vibration and disturbance to neighbours, are avoided.
- 8.9.28 To manage the environmental impacts and ensure that the Construction Management Statements are adhered to, the council will seek a charge to the applicant/developer to cover the cost of monitoring the CMS. Where an applicant/developer uses the council's Building Control services, a discount may be applied to this charge.
- 8.9.29 The council may also require a management plan that sets out how developers monitor dust, noise and vibration, and where necessary take the appropriate action if issues arise. It will also be necessary to control the hours of operation for noisy site works and the processes that would need to be followed in order to work outside these hours when and if required.
- 8.9.30 In line with the transport policies in this Local Plan, the council may also require a Construction Logistics Plan (CLP) in areas that are subject to high traffic congestion to ensure that vehicles entering the site do not adversely impact on local traffic.
- 8.9.31 As part of the council's commitment to better air quality, the council will also request, through planning conditions, that the current regulations relating to Non Road Mobile Machinery (NRMM) is imposed where necessary.

8.10

Climate change



Strategic Policy CC8.10

Supporting a more sustainable and resilient environment

To make Merton a more environmentally sustainable place, taking the lead in tackling climate change, acting to reduce resource use, and increasing local resilience to the impacts of a changing climate.

We will do this by:

- a) Promoting more effective approach to new development design and construction, minimising carbon emissions and supporting the transition towards a low carbon economy;
- b) Seeking to develop new, innovative and sustainable approaches to local energy generation ensuring a coordinated and effective approach to the challenges of carbon reduction, air quality and noise;
- c) Consuming fewer resources, ensuring more effective resource use and reducing waste by supporting the principles of the circular economy;
- d) Recognising and adapting to Merton's changing climate and working with partners to manage the new challenges and opportunities that this will present;
- e) Promoting healthy lifestyles that encourage approaches to a low carbon and sustainable

Justification

8.10.1 The UK has a statutory requirement to meet the carbon emissions reductions targets of the Climate Change Act (2008), requiring an 80% reduction in emissions by 2050 (based on 1990 levels. In addition, the Mayor of London is committed to London becoming a zero carbon city by 2050.

8.10.2 A zero carbon target for major residential has been in place in London since 2016, and this was extended to include major non-residential development in 2019. In order to meet the challenging emissions reduction targets, activity will be required at all levels, including at the local scale from new and existing buildings.

8.10.3 This policy should be read alongside Chapter 8 Green Infrastructure and Natural Environment of the London Plan. These policies are intended to work together to support London's aspiration of becoming a zero carbon city.

Policy CC8.11

Reducing energy use and carbon emissions

The council will require all proposed developments within the borough to demonstrate that they have made the fullest contribution to minimising energy use and carbon dioxide emissions from construction and operation, in accordance with the Mayor of London's Energy Hierarchy

We will do this by:

- a) Reducing energy demand and carbon dioxide emissions in accordance with the following energy hierarchy, and evidence and justifications must be provided in order to demonstrate how the emissions savings have been maximised at each level of the hierarchy and justification and evidence provided for why more saving cannot be achieved at each level of the hierarchy.
 -) Be lean: reducing energy needs
 -) Be clean: exploit local energy sources and supply energy efficiently and cleanly
 -) Be green: generate, store and use renewable energy on site
- b) Meeting the carbon reduction and energy performance requirements as set out in table 1,

Scale of development	Minimum fabric efficiency target*	Total on-site emission reduction target*	Total emissions reduction target*
New build residential development with 10 units or more	10%	35%	100%
New build residential development with fewer than 10 units	5%	19%	19%
New build non-residential >1000m2 gross internal area	15%	35%	100%
Minor Non-domestic >500m2 gross internal area	15%	35%	35%

* Denotes improvement on Part L 2013

Justification:

- 8.11.1 With some 60-65% of carbon emissions within Merton being generated from building stock, the sustainable design of new buildings, and refurbishment of existing buildings are crucial in helping Merton to meet carbon emissions reduction targets and in ensuring that new development does not result in a legacy of poor performance that will require remedial action in the future.
- 8.11.2 The Mayor of London's energy hierarchy should inform the design, construction and operation of all new buildings and evidence must be submitted to demonstrate how emissions savings have been maximised at each level of the energy hierarchy.
- 8.11.3 New major development proposals in Merton must demonstrate that they have sought to achieve as close as possible to zero carbon through a combination of energy efficient design, clean energy supply, and on-site renewable and low carbon energy generation measures. The use of cash in lieu contribution for any remaining emissions shortfall is the last step in this process and will only be considered where adherence to the energy hierarchy approach can be fully demonstrated.
- 8.11.4 Where the developer contends that on-site performance standards cannot be achieved due to impacts on embodied carbon; Merton will consider this a failure of design process rather than a legitimate argument for viability.
- 8.11.5 Any development that fails to achieve the necessary on-site fabric efficiency performance and emissions reductions targets must provide full evidence and justification as to why the scheme is unable to comply. Where the developer contends the policy requirements in relation to viability of a particular proposal, the onus would lie with the developer to demonstrate what can viably be achieved through the submission of a viability assessment. We may seek payments from applications for the cost of independent viability assessment(s).
- 8.11.6 Proportionally, Merton receives a large number of minor development applications; of which a large degree involves conversions to create new dwellings. While individually these developments do not represent a large source of carbon emissions, their cumulative impact will significantly affect Merton's ability to achieve national, London-wide and local emissions reduction targets.

8.11.7 New development, conversions and refurbishment of all sizes should therefore seek new, innovative and more robust approaches to achieving a higher proportion of their emissions reductions on site.

8.11.8 Merton will apply a presumption in favour of sustainable development where full adherence to the energy hierarchy and on-site emissions reductions has been demonstrated.

Policy CC8.12

Sustainable design and construction

The Council will seek high standards of sustainable design and construction from new developments, conversions and refurbishments to ensure that all development make effective use of resources and materials, minimise water use, and assist in meeting local and national CO₂ reduction targets.

We will do this by:

Domestic developments:

- a) Requiring all conversions and changes of use of existing buildings resulting in the creation of a new dwelling(s) to demonstrate that a 'whole house' retrofit approach has been taken and a minimum improvement of 70 points has been achieved against the dwelling's original SAP score.
- b) Requiring all conversions and changes to the use of existing buildings resulting in the creation of **five or more** new dwelling(s) to achieve a minimum BREEAM Domestic Refurbishment rating of 'Excellent' or equivalent;
- c) Requiring all new-build, converted and refurbished residential development to meet a minimum internal water efficiency standard of 105 litres/person/day, as set out in Building Regulations Part G;

Non-domestic developments:

- d) Requiring all new build non-residential development of 500m² and above to achieve a minimum of BREEAM 'Excellent' standard or equivalent, *and* meet carbon emission reduction targets in line with Policy CC8.11;
- e) Requiring all conversions and changes of use to non-residential uses with an internal floor area of 500m² and above to achieve a minimum of BREEAM Non-domestic Refurbishment and Fit-out 'Very Good' standard or equivalent;
- f) Requiring all new-build, converted and refurbished non-residential development to achieve a minimum 12.5% improvement over baseline building water consumption;

- g) Requiring major developments and high water use developments to include water saving measures, such as rainwater harvesting, smart metering and greywater including retrofitting to achieve lower water consumption rates.

All developments:

- h) Requiring all development proposals to be designed to deliver holistic and multi-functional sustainability benefits, inclusive of biodiversity, flood prevention, improved air quality and micro-climate.

Justification

- 8.12.1 The highest standards of sustainable design and construction should be applied to improve the environmental performance of new development. Development proposals should demonstrate that sustainable design standards are integral to the proposal, including its construction and operation, and ensure that they are considered at the beginning of the design process.
- 8.12.2 The principles of sustainable design and construction are designed to be holistic and are more wide ranging than energy performance alone. Development proposals should demonstrate environmental improvements using the comparison of quantifiable measures, where possible, and qualitative appraisal, where appropriate.
- 8.12.3 Proportionally, Merton receives a large number of minor development applications; of which a large degree involves conversions to create new dwellings. The BREEAM Domestic Refurbishment standard provides a recognised scheme and methodology by which conversions and refurbishments can demonstrate their adherence to sustainable design and construction methodologies. Merton recognises that the cost of BREEAM Domestic Refurbishment may be onerous for single dwelling applications and has therefore set a minimum requirement of five or more units for refurbishment before this standard is required. Smaller refurbishment proposals will still need to meet minimum performance standards, but are able to demonstrate this through details on installed measures and improvements in the Standard Assessment Procedure (SAP) score, rather than via the BREEAM process.

- 8.12.4 New development, conversions and refurbishment of all sizes should seek new, innovative and more robust approaches to achieving a high standard of sustainable design and construction. Merton will apply a presumption in favour of sustainable development where high standards of sustainable design and construction have been demonstrated.
- 8.12.5 The UK climate makes it easy to think of water as a plentiful resource; this couldn't be further from the truth. According to Waterwise, the UK has less available water per person than most other European countries. London is drier than Istanbul, and the south-east of England has less water available per person than the Sudan and Syria. London has lower rainfall than the national average while having an extremely high population density.
- 8.12.6 This combination of limited water resources and high demand has resulted in London being declared an area of serious water stress. This trend is very likely to be exacerbated by future changes in climate.
- 8.12.7 The council is committed to ensuring that all developments and re-developments minimises water consumption by incorporating water saving measures and equipment to reduce water.
- 8.12.8 Developments in areas of conservation or involving heritage assets need to provide careful consideration of how sustainable energy measures may be incorporated without adversely impacting on the character, function and preservation of a specific area or asset, in accordance with the Design policies in this Local Plan. In such circumstances, development proposals should not presume that a viable sustainable solution cannot be provided. Where necessary, Merton will determine whether the provision of sustainability measures causes any adverse impact with the asset or area, and will prioritise safeguarding of the asset, as appropriate.

Policy CC8.13

Maximising local energy generation

The council will require all new development proposals to demonstrate that they have maximised on-site energy production through the deployment of appropriately selected, sized and sited renewable/low carbon technologies.

All development proposals must indicate:

- a) How they have made the best potential use of roof spaces to maximise local renewable electricity and/or heat generation.
- b) How appropriate (i.e. flat) roof spaces have been utilised to maximise the delivery of multi-functional benefits (e.g. co-location of renewable energy and green, brown or blue infrastructure).
- c) How all domestic development proposals have considered the use of solar PV in conjunction with on-site battery storage.
- d) How all major development proposals located within identified heat network opportunity areas have utilised decentralised energy, or are enabled for connection to current or future district heat networks, unless it is demonstrated that it is not technically feasible to do so.

Justification

8.13.1 The use of low and zero carbon energy infrastructure presents a significant opportunity for developments to reduce carbon dioxide emissions and contribute to the secure supply of energy, while avoiding negative impacts on local air quality.

8.13.2 With the introduction of zero carbon emission requirements, and associated cash in lieu contributions, there is an incentive for developments to seek to reduce more of their carbon emissions on-site beyond the minimum performance requirements.

Renewable energy:

- 8.13.3 Historically, Merton has led the way in addressing climate change through the planning system. In 2003, after lobbying central government, Merton's new UDP was able to introduce a new planning policy, which subsequently became known as the 'Merton Rule'. This policy required all new non-residential developments of over 1,000 square metres to incorporate renewable energy generation equipment to provide at least 10% of predicted energy requirements, where this was viable.
- 8.13.4 The Merton Rule allowed development proposals to achieve carbon reductions through renewables where the technology best fit the local character of the area so as to avoid negatively impacting on the amenity of the local environment. Through this measure, Merton played a key role in ensuring that renewable energy policies became embedded into the mainstream.
- 8.13.5 More recent government policies have supported and expanded the scope for the use of renewable and low carbon micro-generation technologies (e.g. solar photovoltaic panels, solar thermal and air source heat pumps), within the UK.
- 8.13.6 The use of such technologies is now a viable, cost-effective and practical approach to ensuring developments can achieve their on-site carbon emissions requirements. Furthermore, advancements in energy storage technology have meant that energy storage at individual domestic level is now a viable solution to complement and enhance the use of renewable energy generation technologies.
- 8.13.7 All developments that utilise appropriately sized solar photovoltaic systems in tandem with on-site battery storage may account for the associated carbon benefits by recouping the 20% of solar photovoltaic output traditionally discounted under the standard assessment procedure (SAP) for measuring the energy rating of residential dwellings as 'distribution loss'. This additional carbon saving may be calculated using the below equation and then discounted from any carbon emissions shortfall for the wider development as a whole.

Carbon savings from battery storage:

$$\text{kWh/Yr} = \text{kWp} \times \text{S} \times \text{ZPV} \times 0.2$$

kWh: Carbon savings from battery storage in kilowatt hours per year

kWp: Size of photovoltaic system in Kilowatt peak

S: Annual solar radiation kWh/m² (see SAP)

ZPV: Over-shading factor (see SAP)

8.13.8 Developments in areas of conservation or involving heritage assets need to provide careful consideration of how sustainable energy measures may be incorporated without adversely impacting on the character, function and preservation of a specific area or asset, in accordance with the policies on design in this Local Plan. In such circumstances, development proposals should not presume that a viable sustainable solution cannot be provided. Where necessary, Merton will determine whether the provision of sustainability measures causes any adverse impact with the asset or area, and will prioritise safeguarding of the asset, as appropriate.

Decentralised energy:

8.13.9 The use of decentralised energy infrastructure will play a significant part in reducing emissions from buildings and the Mayor has set a target for London to generate 25 per cent of its heat and power requirements through the use of local decentralised energy systems by 2025.

8.13.10 Decentralised energy, such as Combined Heat and Power (CHP), makes more efficient use of primary energy by utilising generated heat that would otherwise be wasted. This heat is often distributed using a network of underground pipes.

8.13.11 Regeneration projects and new major development proposals will be expected to comply with draft London Plan policies on decentralised energy networks and decentralised energy.

8.13.12 Two distinct heat network opportunity areas have been identified through Merton heat-mapping and feasibility study undertaken by AECOM in 2017/18. This identified two viable opportunity areas for district heating within Merton, linked to two major regeneration schemes: Morden town centre and South Wimbledon (High

Path estate). Merton will require all proposed major development and regeneration schemes within identified heat network opportunity areas to fully explore and utilise decentralised energy, subject to technical and financial viability.

8.13.13 Due to the predicted future decarbonisation of the UK's electricity grid, gas CHP is only expected to provide carbon emissions savings up to circa 2032. Merton will therefore consider applications for decentralised energy infrastructure on a case-by-case basis to ensure that the technology remains a viable solution for delivering on-site carbon emissions savings.

8.13.14 Merton will apply a presumption in favour of development for applications that seek to fully utilise local energy generation potential, and those that promote new and innovative approaches to supplying clean energy on site.

Policy CC8.14

Adaptable development for a changing climate

The council will require all new development proposals to demonstrate that they are well designed, fully adaptable and resilient to the impacts of a changing climate, and will not exacerbate any climate change impacts elsewhere.

This will be achieved by:

- a) Minimising internal heat gain and the risk of overheating through effective design and passive design measures (e.g. design, layout and orientation) and the strategic use of green and blue infrastructure across all developments.

- b) Demonstrating how major development proposals will minimise the risk of overheating and reduce demand for active cooling in accordance with the following cooling hierarchy:
 - i. Minimise internal heat generation
 - ii. Reduce the amount of heat entering a building
 - iii. Manage the heat within buildings
 - iv. Provide passive ventilation
 - v. Provide mechanical ventilation
 - vi. Provide active cooling systems

- c) Ensuring development mitigates the risk of flooding both to and from the development for its lifetime and incorporates Sustainable Drainage Systems (SuDS) and water efficiency measures.

Justification

8.14.1 The impacts of climate change mean that London is likely to experience more frequent and severe extreme weather events; including higher average temperatures and higher seasonal and extreme rainfall.

- 8.14.2 Within London, the challenges of overheating are intensified by the urban heat island effect – caused by the absorption and retention of heat in built-up urban areas. Issues of overheating can be exacerbated by modern sustainable design, including improved air tightness. Development proposals should therefore be designed to mitigate the impacts of a changing climate so as to mitigate the likelihood and impacts of overheating.
- 8.14.3 Developments should prioritise passive design measures to promote cooling (e.g. design, layout and orientation) ahead of active forms of ventilation (e.g. air conditioning) so as to limit intensive energy use and waste heat production. Passive ventilation strategies cannot be considered in isolation of potentially negative external environmental factors such as air quality or noise. Energy strategies that rely on passive ventilation should clearly demonstrate that occupants will not be adversely affected by air and noise pollution during periods of warmer weather.
- 8.14.4 Thames Water has modelled the impact of London's projected population growth and climate change on its drains and sewers to understand their ability to cope with these future challenges. The modelling shows that for a relatively common rainfall event in 2020 (one that would be expected on average once every other year), some areas of London, would not have sufficient drainage or sewerage capacity to manage the expected flows, leading to an increasing risk of surface water and sewer flooding.
- 8.14.5 The council will seek to direct development away from areas at the highest risk of flooding, or, where development is required in areas at risk of flooding, the council will ensure it is safe for the lifetime of development, without increasing flood risk elsewhere. Development proposals should ensure that they have taken full account of flood risk and sought to utilise sustainable drainage measures, where appropriate, in accordance with the policies in this plan on flood risk and sustainable drainage.

Policy CC8.15

Circular economic principles

The council will require all new development proposals to reduce waste and support the principles of the circular economy in promoting a sustainable approach to new development and minimising residual waste.

This will be achieved by:

All development:

- a) Reducing on-site carbon emissions through specifying renewable, re-useable and sustainable materials and resources.
- b) Minimising waste by utilising waste streams as a source of secondary resources by identifying opportunities for the retention and reuse of existing materials on site (e.g. re-using demolition material on site).
- c) Encouraging resource efficiency and reduce embodied carbon emissions through sourcing and prioritising materials that can be maintained across the development lifetime, are designed for extended future use, and can be repaired and renewed in-use.
- d) Specifying the use of sustainable materials, where new materials are required, in accordance with BRE Green Guide to Specification standards:
 - i. 80% of each material type and construction build-up that includes concrete must achieve a minimum rating of C
 - ii. 80% of all other material types and construction build-ups (external wall, roofs, windows etc.) should achieve a minimum rating of A

Single dwelling replacement:

Any proposal seeking to demolish an existing, structurally-sound dwelling house to create a new dwelling house in its place will also be required to demonstrate that they have exceeded the minimum sustainability requirements outlined Policy CC8.9.

This will be achieved by:

- e) Limiting *total* CO₂ emissions arising from the operation of the dwelling in line with major domestic development requirements under Policy CC8.10 (i.e. zero carbon standard)
- f) Maximising the use of local clean energy generation (Policy CC 8.12)

Basement / subterranean development:

Any proposal for subterranean development, including basements, must seek to minimise their environmental impact during construction, and in-use, through the use of

This will be achieved by:

- g) Limiting *total on-site* CO₂ emissions arising from the operation of the dwelling in line with major domestic development requirements under Policy CC8.11 (i.e. 35% improvement on Part L)
- h) Maximising the use of local clean energy generation (Policy CC.8.12)

Justification

8.15.1 A circular economy is one that seeks to promote waste minimisation by moving from a more traditional linear model of resource use, consumption and disposal to one that promotes long-term sustained use, reuse and recycling.

8.15.2 Merton is supportive of the move towards a more circular economy. As such, circular economy principles should be embedded across all facets of the development lifecycle - from concept and design to build-out, occupation use, in order to increase resource efficiency, minimise operational and embodied carbon emissions, and minimise residual waste.

- 8.15.3 Where new materials are required, development proposals should seek to specify the use of sustainable materials, in accordance with those highlighted in the Building Research Establishment's (BRE) Green Guide to Specification. Where materials are not specified to this standard, the development must robustly demonstrate the reasons why.
- 8.15.4 Historically, Merton has received a large number of applications for the substantial or total demolition of a single dwelling house and rebuild as a single dwelling. Such proposals are typically driven by design, intensification or lifestyle rather than on the grounds of structural instability.
- 8.15.5 All such proposals outside of structural instability are considered a highly inefficient use of resources and materials and contrary to the principles of sustainable development and the circular economy.
- 8.15.6 Even where proposals are deemed to result in an improvement of 'in use' energy consumption, the embodied carbon footprint of whole scale demolition and rebuild means that any environmental benefits are unlikely to be realised in the long term.
- 8.15.7 Careful and considered use of natural and renewable resources, promoting sustainable construction and minimising energy use are key considerations in securing a sustainable, low carbon future for Merton. On this basis, demolition and redevelopment proposals of a single dwelling house are required to enhance the environmental performance of the new development beyond the minimum requirements detailed in Policy CC8.11 and should fully demonstrate that the development has been designed and delivered in accordance with the principles of a circular economy.
- 8.15.8 This policy will apply in cases where a substantial amount, but not all, of the original single dwelling house is demolished and rebuilt as a single dwelling (for example, where the original façade is required to be retained). If the project is required to adhere to the part of building regulations relating to new build (as opposed to refurbishment), currently known as Building Regulations Part L approved document A (New Build) then the council would expect this policy to be applied.
- 8.15.9 Proposal for basement developments should also be designed in accordance with circular economy principles due to the increased resource and carbon use in the

construction, heating and lighting of basement developments than the equivalent above ground development. The council will expect proposals for basement developments to demonstrate that the development has sought to minimise their environment impact through utilising sustainable design and construction and circular economy principles, and achieving emissions reduction targets beyond the minimum requirements detailed in Policy CC8.10.