

Guildford borough Climate Change, Sustainable Design, Construction and Energy Supplementary Planning Document (SPD)

Consultation Statement

September 2020



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1. Introduction

- 1.1 We have prepared this Consultation Statement has under Regulation 12 of the Town and Country Planning (Local Development) (England) Regulations 2012.
- 1.2 Under Regulation 12(a) we must prepare a consultation statement before we adopt a Supplementary Planning Document (SPD). The consultation statement must set out:
- the persons whom the authority consulted when preparing the SPD;
 - a summary of the main issues raised by those persons; and
 - how we addressed those issues in the SPD.
- 1.3 The Climate Change, Sustainable Design, Construction and Energy SPD ('the SPD') provides guidance and clarification for policies in the Local Plan: Strategy and Sites 2015-2034 that deal with climate change adaptation and mitigation, sustainable design and construction, and sustainable energy.

2. Preparing the draft SPD

- 2.1 We sought views on early drafts of the SPD from the individuals and groups listed below. Table 1 lists the main issues they raised.
- Guildford Borough Council New Build Development team
 - Guildford Borough Council Energy Supervisor
 - Guildford Borough Council Development Management Team Leaders
 - Guildford Borough Council Major Development team
 - Guildford Borough Council Principal Urban Design Officer
 - Guildford Borough Council Senior Conservation Officer
 - Guildford Borough Council Housing Strategy and Enabling Manager

Table 1 Responses from consultees during the initial drafting of the SPD

Issue	Action
Lack of clarity about when planning applicants should submit energy and sustainability information.	Added text setting out when applicants should submit information for different types of application.
Lack of clarity about sanctions if applicants fail to submit information.	Clarified that permission could be refused if adequate information is not provided.
Need further clarity on the meaning of 'zero carbon'.	Added a definition of zero carbon and description of the steps necessary to achieve it.
Include a link to the local validation list	Link was added.
Include information on the benefits of smart energy systems.	Added information to the Sustainable Design and Construction Guide in Section 5.

3. Formal consultation on the draft SPD

- 3.1 We held a formal consultation between 28 February 2020 (midday) and 30 March 2020 (midday). We advised stakeholders (organisations, members of the public, businesses and amenity groups) whose email addresses we hold on our consultation database about the consultation. Additionally, we sought the views of the Place Making and Innovation Executive Advisory Board (EAB) and Climate Change and Innovation Board (CCIB).

- 3.2 We publicised the consultation on our website. We put the consultation document in the borough's four libraries and in the main Council office at Millmead. These arrangements followed our [Community Involvement in Planning](#), June 2013¹.
- 3.3 You can see the 31 representations that we received during the formal consultation on the following webpage: <https://guildford.inconsult.uk/consult.ti/CCSDCE20/consultationHome>

4. Finalising the SPD

- 4.1 We considered all the responses received during the consultation, the comments made by the EAB and the comments made by CCIB.
- 4.2 Appendix 1 contains a table setting out the main issues raised during the public consultation. It also sets out our response to each of the issues, the changes that we made to the SPD as a result of the issue, or explains why we didn't make any changes.
- 4.3 The main issues raised by either prescribed bodies² or key stakeholders are identified at the start of the table. Key stakeholders include statutory consultees, infrastructure providers, site promoters/developers and other community groups/organisations. The main issues raised by members of the public are in the second part of the table.
- 4.4 The Council's Executive decided to adopt the SPD in its meeting on 22 September 2020. You can see the comments from EAB and CCIB alongside our response in the Executive Report here:
<https://www2.guildford.gov.uk/councilmeetings/ieListDocuments.aspx?CIId=132&MIId=1030>.

¹ The Council has since adopted a new Statement of Community Involvement May 2020

² As listed in Regulation 4 of the Town and Country Planning (Local Development) (England) Regulations 2012

Appendix 1: Main issues raised

Comment	Response
Prescribed Bodies and Key Stakeholders	
Natural England	
<p>The topic this Supplementary Planning Document covers is unlikely to have major impacts on the natural environment. We therefore do not wish to provide specific comments. However, you should consider the following issues: biodiversity enhancements, landscape enhancement and protected species. Standing advice provided.</p>	<p>The Council intends to introduce the Local Plan: Development Management DPD which will include policies that address biodiversity and protected species. Alongside there will be a Green and Blue Infrastructure SPD that provides guidance on biodiversity matters.</p>
<p>The SPD must follow due process regarding Strategic Environmental Assessment and Habitats Regulations Assessment</p>	<p>The Council has followed due process and has produced a Strategic Environmental Assessment and Habitats Regulations Assessment determination, in line with the relevant regulations.</p>
Environment Agency	
<p>Support adapting to climate change as a key principle in the SPD. Paragraph 2.15 refers to part 5 of Policy P4: Flooding, Flood Risk and Groundwater Protection Zones (Sustainable Drainage Systems (SuDS) to manage surface water). However, it should also refer to part 2 of Policy P4 (development in flood zones 2 and 3). Part 2 requires development in flood zones 2 and 3 to demonstrate via a site-specific flood risk assessment (FRA) that the development will be safe for its lifetime, taking into account climate change, without increasing flood risk elsewhere. This is in accordance with paragraph 163 (footnote 50) of the National Planning Policy Framework (NPPF) and paragraph 30 of the Planning practice guidance (PPG).</p> <p>The required FRA should include an assessment of climate change in accordance with the new climate change level guidance which can be found on the GOV.uk website: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances.</p> <p>The Climate Change, Energy and Sustainable Development Questionnaire should be used for minor development (developments from one to nine residential units and one to 1000 square meters of non-residential floor space) and householder developments. Please note, non-major</p>	<p>The adopted Local Plan Strategy and Sites 2015-2034 (the 'Local Plan') already refers to a need for Flood Risk Assessment and refers to NPPF policy and guidance in the National Planning Practice Guidance (PPG). The PPG provides substantial guidance covering flood risk matters. Flooding and flood risk is not covered in this SPD, except where it relates directly to the climate change impacts of more frequent and severe rainfall events and associated flooding, as doing so would repeat national guidance.</p> <p>Section 5 "Wetter winters and heavy rainfall events" has been updated with a statement that when producing a Flood Risk Assessment, an allowance must be made for climate change in accordance with the guidance, and a link to the guidance is included.</p>

<p>development must still assess climate change. For information regarding minor development or development as defined in our flood risk standing advice please see the following links:</p> <ul style="list-style-type: none"> • Paragraph 40 of the PPG • Flood risk standing advice 	
<p>Paragraph 5.20 refers to planting to create a more favourable microclimate. We support the inclusion of this provided that it is native, non-invasive, species.</p>	<p>The text has been amended to refer to native and non-invasive species.</p>
<p>Historic England</p>	
<p>Historic England has no specific comments to make on the Draft Climate Change, Sustainable Design, Construction and Energy SPD as it deals with matters largely beyond its remit. There is guidance on our website that may be of assistance in developing this document or as reference material: https://historicengland.org.uk/research/current/threats/heritage-climate-changeenvironment/impacts-climate-change/</p>	<p>A section covering retrofitting has been added to Section 6. This section covers heritage matters and includes a link to Historic England guidance on retrofitting historic buildings.</p>
<p>Surrey County Council</p>	
<p>The Surrey County Council Vehicular and Cycling Guidance, referenced in paragraph 5.65, is currently being revised. Subject to cabinet member approval, the forthcoming new guidance will propose a requirement for all new developments to provide EV charging points for 100% of dwellings with parking spaces. This is a change to the current requirement for 20% provision and 20% infrastructure, and reflects a Government proposal to require this level of provision as part of the Building Regulation changes. Our transport development planning team are already requesting the installation of EV charging points for all parking spaces provided for new residential dwellings and for 20% of new commercial development.</p> <p>In light of the above, it would be helpful to us if the text in Paragraph 5.62, which states: ‘charging points should be considered,’ could be changed to: ‘will be required’.</p>	<p>A reference to the review and the new standard has been added to the section, and the text now states that the most recent guidance will apply.</p> <p>An additional sentence has been added that states “Provision of charging points is expected for specific types of development as set out in borough and county guidance (see below).” The original sentence (“charging points should be considered...”) has been left in because developments not covered by the guidance should still consider EV charging, but the reference to specific types of development has been removed to avoid conflict with the Surrey County Council standards.</p>
<p>Thames Water</p>	
<p><i>Water efficiency</i></p> <p>The Thames Water region is designated as “seriously water stressed”. Water conservation and climate change is vitally important in terms of</p>	<p>The Council already attaches a condition to permissions for new residential development that triggers the building regulation standard of</p>

<p>availability of raw water and demand for potable water. Thames Water support the mains water consumption target of 110 litres per head per day. It is our understanding that the water efficiency standards of 110 litres per person per day is only applied through the building regulations where there is a planning condition requiring this standard (as set out at paragraph 2.8 of Part G2 of the Building Regulations). It is considered that such a condition should be attached as standard to all planning approvals for new residential development.</p> <p>Proposed policy text:</p> <p>“Development must be designed to be water efficient and reduce water consumption. Refurbishments and other non-domestic development will be expected to meet BREEAM water-efficiency credits. Residential development must not exceed a maximum water use of 105 litres per head per day (excluding the allowance of up to 5 litres for external water consumption). Planning conditions will be applied to new residential development to ensure that the water efficiency standards are met.”</p>	<p>110 litres pp/pd. The SPD and Local Plan policy D2 explain that this standard is in force.</p> <p>Regarding non-residential development, current policy requires water efficiency that meets the highest national standard. The highest national standard for dwellings is currently the “optional building regulation” of 110 litres pp/pd, which is higher than the baseline national standard (125 litres), but there is no national standard better than Building Regulations for non-residential developments. The SPD must be aligned with adopted policy so cannot require a BREEAM standard as this does not constitute a national standard.</p>
<p><i>Flooding</i></p> <p>The National Planning Practice Guidance (NPPG) states that a sequential approach should be used by local planning authorities in areas known to be at risk from forms of flooding other than from river and sea, which includes "Flooding from Sewers".</p> <p>By their very nature water and sewage treatment works are located close or adjacent to rivers (to abstract water for treatment and supply or to discharge treated effluent). It is likely that these existing works will need to be upgraded or extended to provide the increase in treatment capacity required to service new development. Flood risk sustainability objectives should therefore accept that water and sewerage infrastructure development may be necessary in flood risk areas.</p> <p>Flood risk sustainability objectives should also make reference to ‘sewer flooding’ and an acceptance that flooding can occur away from the flood plain as a result of development where off site sewerage infrastructure and capacity is not in place ahead of development.</p>	<p>Flood risk and flood risk policy is a complex area. Policy P4 of the adopted Local Plan refers to NPPF flooding policy and flooding guidance in the PPG. The PPG provides substantial guidance covering flood risk matters. As a result, flooding and flood risk is not covered in detail in this SPD, except where it directly relates to climate change.</p>
<p><i>Surface water and SuDS</i></p> <p>It is the responsibility of the developer to make proper provision for drainage to ground, watercourses or surface water sewer. It is important to</p>	<p>The recommended additions relating to the value of SuDS and the need to avoid connecting surface water drainage to the public sewer have been made.</p>

reduce the quantity of surface water entering the sewerage system in order to maximise the capacity for foul sewage to reduce the risk of sewer flooding. Advocate an approach to SuDS that limits as far as possible the volume of and rate at which surface water enters the public sewer system. SuDS have the potential to play an important role in helping to ensure the sewerage network has the capacity to cater for population growth and the effects of climate change.

SuDS not only help to mitigate flooding, they can also help to: improve water quality; provide opportunities for water efficiency; provide enhanced landscape and visual features; support wildlife; and provide amenity and recreational benefits. We therefore support Policy P4 (5).

The following paragraph should be included in the SPD: "It is the responsibility of a developer to make proper provision for surface water drainage to ground, water courses or surface water sewer. It must not be allowed to drain to the foul sewer, as this is the major contributor to sewer flooding."

Paragraph 5.59 (guidance on SuDS) should be strengthened to say that the connection of surface waters to the public sewer will not be permitted without confirmation from the LLFA that the sequential approach to the disposal of surface water has been followed and all practical means explored.

Paragraphs 3.4-3.7 (information submission requirements) should include:

- LLFA (lead local flood authority) confirmation about the suitability of the SuDs
- A statement setting out how the water usage of 110 l/p/d is achieved

Consultation with the LLFA takes place as part of the planning application process. Larger schemes may engage with the LLFA for pre-application advice, which could result in informal confirmation that SuDS proposals are suitable, but this will not apply to all schemes. As a result, most developers will not be able to obtain this confirmation prior to submission, and where it can be obtained it will not constitute formal agreement from the LLFA. This change has not been made to the SPD but a reference to consulting with the LLFA has been added alongside the link to LLFA guidance on SuDS.

The SPD requires submission of a Water Efficiency Calculator for New Dwellings (Part G), for all new homes which shows how the water efficiency standard has been achieved, and the SPD asks for details of water efficiency measures in the sustainability statement for major development and in the sustainability information/questionnaire for non-

	major developments. This is provided prior to occupation of new dwellings.
Highways England	
Welcome the support for low carbon transport measures (paragraphs 5.61-8) in line with the requirements of NPPF. In addition, we note the transport demand management approach principle within paragraph 5.81, “Transport - use local materials to reduce transportation related impacts.” This will reduce the impact of transporting materials on the SRN.	This support is noted.
Guildford Society	
The SPD should include a section setting out the aspirations of the Council in terms of climate change, set out intentions to improve standards further in the future.	A foreword has been added that sets out the Council’s aspirations regarding climate change.
The SPD should set out the proposed changes to be brought in through the national Future Homes standard and that the SPD will be updated in due course to reflect that.	A foreword has been added that includes a summary of the proposed Future Homes changes and the need to update the SPD to reflect this. Links to the Future Homes consultation web page have been added.
The SPD should include a glossary to explain all the acronyms	A glossary has been added at the end of the SPD.
The energy hierarchy on page six should state “Design should passively shelter dwellings from overheating through too much solar gain, and protect from overcooling from wind etc.”	The energy hierarchy was established through adopted Local Plan policy. As a matter of policy, the SPD should be in conformity with it. The SPD covers overheating in section 5.
2.14 (summary of policy D1) should include a link to Building for Life guidance and state that BfL standard is a minimum and developments should be aiming for outstanding sustainable design.	The link to Building for Life guidance is available in the subsection of section 5 that deals with Building for Life. Policy D1 states that development is expected to “perform positively against the recommendations” in building for life. The SPD must be in conformity with the policy.
Page 9, table 1 (summary of policy requirements) - “maximise the use of the sun’s energy for heating and cooling” should additionally reference the need to avoid overheating and to capture the energy in heat sinks and batteries etc.	Table 1 summarises Local Plan policy and should remain an accurate summary of the policy. The guidance within the SPD covers overheating and use of the sun’s energy.
The CCHP appraisal section (p. 13) is likely to conflict with Future Homes and the decarbonisation of grid energy. Electric systems should be	The section has been amended to include heat networks driven by all forms of low carbon heat and power. The SPD already refers to the need for systems to cope with lower temperature water.

favoured. Heating and cooling via wet systems should cope with lower temperature water feeds.	
The SPD does not mention heat recovery systems	Heat recovery is mentioned at 4.53 where active demand reduction measures are covered. As a building service, it is most appropriately addressed in this section as the section covers efficient building services.
5.26, bullet 2 (frequently occupied rooms should have southerly aspect) should include “but with proper provision to avoid overheating.”	Text covering overheating has been added to the section.
5.26, bullet 5 (avoid deep projections overshadowing windows) should be changed to “Projections that overshadow windows should be appropriately sized to provide shading as required from mid-summer sun but ensure solar gain can be achieved in mid-winter months.”	The guidance on deep projections has been retained but qualified with the following text “Projections should be sized appropriately so that they provide shading from the sun during the hottest part of the year but allow solar gain in the colder months.”
5.26, final bullet (passive ventilation) there is a need to also promote active ventilation - fans are reliable and use little energy - particularly for Flats etc., esp. the use of heat exchangers.	This section covers low energy design rather than building services. However, the final bullet references heat exchangers as they can complement passive ventilation measures. Building services are covered in section 4 Energy Statements. Fans (e.g. extractor fans) are in common use in building services so additional guidance has not been added.
5.53 (green roofs) there needs to be standards for guttering that copes with the higher rainfall	The SPD references the need for guttering that deals with heavy rainfall events. National policy prohibits Local Planning Authorities from implementing new technical standards for buildings except for the three national technical standards covering space, access and water. The only exception to this is energy efficiency and low carbon energy because the Planning and Energy act 2008 explicitly grants powers to do so. As a result, the Council cannot implement a standard for guttering.
5.63 (schemes designed to enable future EV charging infrastructure installation) needs to be extended to cover trunking for feeds into the site concerned so grid supplies can be upgraded to cope with EV’s	The section references Surrey County Council guidance which includes standards for EV charging infrastructure. The guidance is under review so the preference is not to repeat the charging infrastructure guidance in this SPD.
The questionnaire for non-major developments should request details of energy storage systems e.g. batteries charged off-peak for EV’s	This would be considered a measure that enables sustainable lifestyles under policy D2. The questionnaire asks for details of such measures and there are a range of measures that could be implemented. Officers

	do not think it is appropriate to single out home energy storage in the questionnaire as doing so would place it above other measures.
Taylor-Wimpey	
The SPD should provide clarity on off-site offsetting, particularly for larger scale sites that provide a mix of uses in order to ensure early delivery.	The SPD sets out the types of schemes that could be considered acceptable as offsetting measures and new text has been added setting out the criteria by which offsetting proposals will be considered and to clarify that offsetting is a measure of last resort, in line with the energy hierarchy.
The SPD should refer to The Future Homes Standard and guidance within the SPD, and should be flexible to change to ensure consistently with this Standard once it introduced later this year, particularly as the Government is proposing to remove the ability of LPAs to set higher energy efficiency standards than those in Building Regulations.	<p>The Planning and Energy Act 2008 grants powers to Local Planning Authorities to set requirements for new developments for 1a) a proportion of energy to be from renewable sources, 1b) a proportion of energy to be from low carbon sources and 1c) energy efficiency standards that are better than building regulations.</p> <p>Question 4 of the future homes consultation asks whether government should commence section 43 of the Deregulation Act, which would amend part 1c of the Planning and Energy Act so that it does not apply to dwellings. If this happens, part c powers can still be applied to non-domestic buildings, and parts a and b will remain unaffected. Neither the Local Plan nor the SPD sets an energy efficiency standard for new dwellings so neither would be affected by the changes to the Act as currently proposed (the Local Plan standard is a carbon emission standard and does not set an energy efficiency standard).</p> <p>The Future Homes consultation proposes to improve the carbon emission standards for new dwellings either by 20 per cent or 31 per cent. The Council's 20 per cent reduction standard uses the 2010 building regulations (as amended in 2013) as the baseline so if building regulations standards are improved by either 20 or 31 per cent, the Council's carbon reduction standard would be equalled or bettered by Building Regulations for dwellings. The standards for non-residential buildings may not be changed, in which case the Council's standard would remain relevant for non-residential buildings.</p> <p>In any event, the Council will still need to receive the energy information set out in the SPD from applicants because decision makers will need to judge whether developments have followed the energy hierarchy in accordance with Local Plan policy.</p>

	The Council will monitor changes to the national regime and will update the SPD if necessary.
The SPD is unclear if the 'at least 20% measured against the relevant Target Emission Rate' relates to Building Regulations Part L in force at a particular date rather than as amended in the future. The SPD should be clear as to what the baseline is. Request the 20% reduction is based on the 2018 version of the Building Regulations	The baseline standards are the 2010 standards as amended in 2013. This is set out at the start of the section "Carbon emissions reduction calculation" and in the supporting text for Policy D2 in the Local Plan. The 2010 regulations were amended again in 2018, but this did not alter the carbon emission standards so does not materially alter the policy.
Carbon reduction calculation should be required at the Full/Reserved Matters stage as the exact method of carbon reduction for each building or type of buildings may not be known at the Outline stage.	The section "When should information be submitted?" sets this out. The text has been amended to make it clearer.
3.9 (accreditation in BREEAM in lieu of submitting energy and sustainability statements) for mixed use schemes it is unclear whether a Sustainability and Energy Statement for the whole site (i.e. including the residential) or just the commercial elements is required where BREEAM Outstanding or Excellent is achieved.	The reference to mixed developments has been removed.
Section 4 (content of energy statements) requires a carbon reduction calculation for each building or type of building supported by modelling outputs. This is overly onerous and difficult to confirm at the Outline stage. It is therefore requested that the carbon reduction calculation is required at the Full/Reserved Matters stage (i.e. on a phase by phase basis) as the exact method of carbon reduction for each building or type of buildings may not be known at the Outline stage. The implications of the Future Homes Standard, and the proposed amendments to the Building Regulations, should be considered.	The section 'When should information be submitted?' sets out that information should be submitted when the relevant issue is addressed. The text allows for submission of modelling at the Full or Reserved matters stage as appropriate. A foreword has been added that includes a short discussion on Future homes. The Council will consider the proposals once the government has declared its intention in its consultation statement.
4.14 ((C)CHP) states that for specified developments, (C)CHP "will be considered the most appropriate primary source of energy". This does not accord that the Local Plan Inspector found that CHP is impractical in many cases/involves pollutant emitting and carbon-generating energy production in urban areas and subsequently the policy was modified to (C)CHP being given "adequate consideration". The SPD should be more flexible on the provision of (C)CHP and a range of technologies should be considered to ensure that the most sustainable technology/technologies are incorporated on a site, as every site is different. Provision of (C)CHP should be given	The section on CCHP appraisal has been amended to broaden support for heat networks to include a wider range of technologies. It makes it clear that the lowest carbon solutions will be favoured and that there is flexibility on this basis. The text has been amended to align with the policy where it seeks "adequate consideration".

<p>“adequate consideration” rather than being assumed the “most appropriate”.</p>	
<p>Section 5 (site layout, landscaping and urban form) the guidance is overly prescriptive and onerous e.g. 5.14 states that: “To maximise solar receipts and reduce shading, taller buildings in a development <u>should</u> be located to the north of the site” (our emphasis). As drafted it is unclear if the matters listed are considerations in the development of a site layout, rather than requirements. It is requested that the draft SPD is made clear that the aspects listed in paragraphs 5.14 to 5.21 are considerations when developing proposals for a site rather than being prescriptive requirements. Good design and sustainable development must balance a range of competing factors, for example topography and place-making.</p>	<p>The opening paragraph of the sustainable design and construction guide has been amended to reference the need to consider the guidance “alongside good design, place-making and other considerations”. This makes it clear that the guidance does not override other considerations.</p>
<p>Section 5 (water efficiency, para 36) requires that for all new dwellings, complete a “water efficiency calculator for new dwellings” worksheet that accords with Part G of the building regulations’ and append it to the submitted sustainability information. This requirement should instead be considered as a planning condition that is required prior to occupation rather than part of the sustainability statement.</p>	<p>The text has been amended as proposed. It is agreed that this more closely aligns with the building control process.</p>
<p>Section 5 (waste) requires schemes with a cost over £500,000 (based on the price agreed in the tender) or schemes that would produce large amounts of waste to consider using a Site Waste Management Plan (SWMP). It would be helpful if the SPD clarified how this cost is to be derived.</p> <p>The draft SPD states that a SWMP should be drafted at the initial design stage and be reviewed and updated throughout the construction process. Paragraph 5.99 confirms a SWMP may be required through a planning condition, which TWMD would support rather than as part of the Sustainability Statement.</p>	<p>The SPD has been updated to reflect the full guidance on the price threshold provided in the Site Waste Management Plan Regulations 2008.</p> <p>It is vital that an SWMP is considered at an early stage so it can influence the concept and design to prevent waste arising, in line with the waste hierarchy. As a result, it is necessary that an initial SWMP is available at the first planning stage. As a live document, it will be updated throughout the planning and construction process and the final version would not be required until a late stage in the development. The SPD has been updated to make this clear.</p>
<p>Weyside Urban Village</p>	
<p>It may be premature to seek to adopt the SPD in advance of The Future Homes Standard. The government proposes to revoke the power for LPAs to set energy efficiency standards and wishes energy efficiency to be controlled by Building Regulations. GBC have therefore already adopted a policy in the GBLP that goes over and above the present Building</p>	<p>Question 4 of the future homes consultation asks whether government should commence section 43 of the Deregulation Act. Section 43 would amend section 1c of the Planning and Energy Act (which allows Local Planning Authorities to set energy efficiency standards) so it does not apply to dwellings. This would not affect powers to set energy efficiency</p>

<p>Regulations. Further requirements within the Draft SPD for applicants to meet so they can demonstrate compliance with this potentially sits in conflict with the proposal to remove the ability of LPAs to go over and above the Building Regulations.</p> <p>The guidance duplicates and complicates national policy and guidance and local emerging and adopted guidance.</p>	<p>standards for buildings other than dwellings, or to require proportion of energy supplied to all types of building to be from renewable and low carbon sources (sections 1a and 1b of the Act).</p> <p>Neither the Local Plan nor the SPD sets an energy efficiency standard for new dwellings so neither would be affected by the changes to the Act as they are currently proposed.</p> <p>The Council has declared a climate emergency and signalled that it does not wish to leave sustainable development solely to national policy and guidance. It is entitled to make this decision because Parliament has explicitly granted powers to set policies covering energy and efficiency in new developments, and the NPPF supports the use of local policy to encourage low carbon energy provision.</p> <p>The SPD is closely aligned with local policy and officers disagree that it complicates local policy as it provides clarity on many of the provisions in the Local Plan.</p>
<p>Para 3.5 (timing of submission information) support outline planning applications submitting information with the application to set out, for example, how the outline layout complies with the matters set out in adopted policy and the SPD. Advise a sentence is added that clarifies the level of detail being submitted should be proportionate for the level of detail within the application because whilst an outline may include a layout plan, it may not be worked up in sufficient detail to allow full consideration of all climate change and energy consumption measures.</p>	<p>Support is noted. An additional sentence has been added as suggested.</p>
<p>Paragraph 3.9 (alternative submission documents) sets out that where accreditation is achieved on certain schemes, energy statements (for major developments) will not be required. We would seek clarification as to whether a mixed used scheme securing BREEAM Excellent means no Energy or Sustainability Statements are required for the residential elements as this appears to be how the SPD is currently worded.</p>	<p>The reference to mixed schemes has been removed.</p>
<p>Providing a specific carbon reduction calculation for each building or type of building is difficult to be precise on and therefore overly onerous for outline schemes where all matters may be reserved. Specific energy technologies to be used across the site may have not been fixed. Recommend that the carbon reduction calculation and appraisal of energy technologies used are only required at the Full/Reserved Matters stage</p>	<p>The section 'When should information be submitted?' states information should be submitted when the relevant issue is addressed. The text allows for submission of modelling at the Full or Reserved matters stage as appropriate.</p>

<p>and to make reference to a phased submission of an Energy Statement on major outline schemes.</p>	<p>A foreword has been added that includes a short discussion on Future homes.</p>
<p>Paragraph 4.61 (refusal of permission if information not provided) should be revised in line with the above suggestions to include reference to outline applications.</p>	<p>The section “What happens if information is not provided?” has been amended to refer to submission at the right time, and the referenced paragraph has been amended to refer to full, outline and reserved matters applications and submission at the appropriate time.</p>
<p>Paragraphs 4.8 to 4.26 (CCHP) is prescriptive and too specific for a range of alternative technologies that may well emerge over the period of the policy to address the issue. (C)CHP would not be the best sustainable technology for the Weyside Urban Village development. During the Local Plan examination, the inspector noted that the policy “overlooks the fact that CHP is impractical in many cases and in any case involves pollutant emitting and carbon-generating energy production in urban areas” and the policy was modified to require “adequate consideration”. The SPD to be more flexible on the provision of (C)CHP and allow other technologies to be considered in the same way. Wording could be added to paragraph 4.8 stating that new developments should connect or be connection ready to any type of low carbon heat network, not just (C)CHP. The resolution of technologies to suit LPA / National targets should be the obligation rather than a specific technology.</p>	<p>The section on CCHP appraisal has been amended to more broadly support heat networks in general and to include a wider range of technologies. It makes it clear that the lowest carbon solutions will be favoured and that there is flexibility on this basis.</p> <p>The wording now aligns with the policy where it refers to “adequate consideration”.</p> <p>4.8 has been amended as suggested.</p>
<p>Section 5 (Sustainable Design and Construction Guide) has a high degree of detail within this section, much of which is supported, however there are a number of very detailed and specific points made. Section 5 should be made more explicit in terms of the content being guidance to consider rather than a requirement for sites to design by.</p> <p>Paragraph 5.14 states that ‘To maximise solar receipts and reduce shading, taller buildings in a development should be located to the north of the site’ whilst paragraph 5.21 notes that ‘the prevailing wind should be a consideration in site design as exposure to cold winds will increase heat loss and energy use’. Paragraph 5.26 states ‘Rooms that include a concentration of heat generating appliances (e.g. kitchens) or are less frequently occupied (e.g. bathrooms) should be located in the cooler part of the building, generally the north side.’</p> <p>These are just some of the very prescriptive requirements on housing internal layout within the section and presumes that at the point of policy</p>	<p>The introduction to the guide section has been amended to reference the need to consider the guidance alongside other considerations. Additional text has been added stating that local circumstances may mean that a different approach can deliver a greater sustainability benefit.</p>

<p>creation there is greater design knowledge than when the detail design of schemes to a set of Building Regulation requirements is undertaken. Recommend that at the start of Section 5, it is made more explicit that content of the section includes a wide variety of issues and principles for developing proposals to consider rather than any of them being prescriptive requirements. Good and sustainable design must balance a wide range of competing factors and there will be many sites where a number of the issues and principles listed within the SPD are either not viable or applicable.</p>	
<p>Paragraph 5.36 (water efficiency calculation) requires applications for all new dwellings to complete a “water efficiency calculator for new dwellings” worksheet. Wording should be added to this paragraph to allow outline schemes to be exempt from this requirement as this is too detailed for outline application stage.</p>	<p>The wording has been amended to require submission of the worksheet prior to occupation.</p>
<p>Paragraph 5.98 to 5.100 (Site Waste Management Plans) says that schemes with a cost over £500,000 should consider using a Site Waste Management Plan (SWMP). Emerging Policy D12 in the DM Policies document increases this to £670,000 and makes it a requirement. We would recommend that this area of the SPD is removed and the DM Policies document is used to provide the necessary expansion to Policy D2.</p>	<p>The emerging DM policies are at a very early stage and could be changed substantially before adoption. Adoption of new policies is a long process, while the SPD can be adopted fairly quickly. As a result, officers are of the view that there is benefit to retaining the references to SWMP in the SPD. The SPD can be reviewed if it conflicts with the DM policies when they are adopted.</p> <p>The SPD asks for consideration of the use of SWMP but does not mandate it.</p>
<p>Gatwick Airport Ltd</p>	
<p>Aerodrome Safeguarding is a legislative requirement for officially safeguarded aerodromes, by way of ICAO (International Civil Aviation Organisation) and EASA (European Aviation Safety Agency). Guildford Borough is within the 30km wind turbine consultation zone for Gatwick Airport and any free standing wind turbines (depending on their height) have the potential to impact on navigational aids and Instrument Flight Procedures (IFPs) utilised by the airport. Therefore we would ask that the following wording is added to the above mentioned document:</p> <p>“The Local Planning Authority will consult with the aerodrome operator and/or the operator of technical sites (eg radar stations) with regard to any free standing wind turbines. Statutory consultation responses may require that restrictions are placed on the height or location of free standing wind</p>	<p>Text has been added stating that Gatwick Airport will be consulted on proposals for free standing wind turbines and that safety of air traffic will be a consideration. It does not state that permission will be refused where the consultee is not satisfied as the Council cannot pass responsibility for deciding whether permission should be granted other bodies.</p>

<p>turbines to avoid impacts on the aerodrome through interference with navigational aids and instrument flight procedures. Proposals that cannot be mitigated to the satisfaction of the statutory consultee are considered to be a hazard to aircraft safety, and will be refused.”</p>	
<p>NATS Ltd (National Air Traffic Control)</p>	
<p>The Safeguarding Direction requires consultation with NATS for installation of wind turbines irrespective of size and location. NATS will engage with Developers and LPAs and provides standing advice.</p>	<p>Text has been added stating that the Council will consult with NATS over free standing turbine proposals and will have regard to the standing advice.</p>
<p>Council for British Archaeology</p>	
<p>The SPD lacks any reference to the historic environment, listed buildings or heritage in general. Consider drafting advice and guidance on how these assets may be retrofitted to ensure their resilience to the impact of climate change and to ensure that they are sustained for the future. There is a significant amount of research and guidance to assist this including from Historic England and the Society for the Protection of Ancient Buildings. See https://historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/ and https://historicengland.org.uk/whats-new/statements/climate-change/ for example.</p>	<p>A sub-section covering retrofitting has been added to Section 6. This sub-section includes reference to heritage issues and a link to Historic England guidance on retrofitting historic buildings.</p>
<p>Thakeham Homes</p>	
<p>The preference for CHP as an energy source is too strong in the draft, encourage a balanced approach including other technology to provide a future-proofed SPD. The draft SPD considers (C)CHP to be the most appropriate primary source of energy on large developments. Would suggest large scale Air Source Heat Pumps to be considered instead, or a low-temperature distribution system which we believe would provide a better alternative.</p>	<p>The section on CCHP appraisal has been amended to broaden support for heat networks to include a wider range of technologies (including heat networks driven by heat pumps). It makes it clear that the lowest carbon solutions will be favoured and that there is flexibility on this basis.</p>
<p>Section 4.27 provides a list of low and zero carbon energy technologies available on the market that can supply electricity and/or heat to residential and commercial buildings. We believe that there are many other technologies within this list that should be promoted significantly more, and are more appropriate to be integrated into future developments.</p>	<p>Text has been added to make it clear that the list is not exhaustive.</p>

CHP can cause overheating through high-temperature pipe runs through communal areas, and therefore would conflict with the 'climate change adaptation' points	The guidance now refers to heat networks generally as well as (C)CHP. Where a (C)CHP heat network would present an overheating risk, alternative heat network technologies will be supported. A new paragraph has been added stating that overheating risk should be taken into account in the design of heat networks and choice of technology.
CHP has a large cost burden to residents when replacement is needed, as opposed to point-of-use systems like combi boilers or electric immersion heaters.	This point is acknowledged. The government's view is that CHP is cost effective and can help reduce energy bills.
4.21 references emerging technologies such as hydrogen CHP. The timeline for the commercialisation of this technology is unknown, and yet to be adopted. As such, we would recommend Guildford Borough Council remove this from the SPD until the technology is proven and likely to go ahead.	The reference has been removed to a footnote where it is listed alongside zero carbon CHP fuels as a potential future option. It has not been removed completely as at least one company is currently moving into commercial production.
Sections 5.23-5.25 on passive solar gain, passive cooling and overheating are unnecessarily descriptive and explain principles in depth. We believe that a concise summary, focusing on the requirements, would be more beneficial.	This comment is noted. However, not all readers of the SPD will understand the principles of passive solar design, so the text has not been amended.
Orchard Road Residents' Group	
Developers often re-landscape the area around houses. The landscaping section (pp 24, 25) should require plans for planting that include the kind of recommendations being offered by Prof Kumar, international expert at the university, to put low shrubs by the kerbs to capture dangerous tyre particulates and higher trees behind to clean out CO2 emissions, and both these need to be broad leaved to be effective.	The issue of biodiversity in new developments would be better addressed through targeted green infrastructure policies and guidance. The Council is currently proposing a suite of green infrastructure policies in the new Local Plan: Development Management, and there are plans for a Green and Blue Infrastructure SPD.
Merrow Residents Association	
Concern over whether the Council's planning department has the resources and skills to implement the SPD, the power to implement standards beyond building regulations and whether developers have the competencies to implement sustainable design.	The point is noted. The SPD cannot address the resourcing of Council teams or the delivery of Council services.
Concern about conflicts between best low energy practice (Passivhaus, London Energy Transformation Initiative), what homeowners want to buy, affordability and developer's short term profit approach.	The concern about conflicts is noted. It is agreed that developments built to high energy efficiency standards can look different to traditional buildings.

<p>Modern, energy efficient developments will look radically different from existing developments due to density, modular build and offsite prefabrication and shared green spaces.</p> <p>UK building regulations and Future Homes Standard are not compatible with the tenor and direction of the SPD. Concerned that reference to Part L of the Building Regulations will lead to almost total reliance on low/zero carbon energy sources and carbon offset as the prime mechanisms of achieving the SPD objectives, rather than energy efficiency. Seriously concerned that the government's proposals for the Future Homes Standard will allow new homes to be built to lower energy efficiency standards than homes built today. Future homes does not target zero emissions or prioritise energy efficiency, which means homes will need retrofitting later on.</p> <p>Future homes will dilute Local Authority power to implement local standards.</p> <p>Future homes does not implement post-occupancy monitoring so does not address the performance gap where homes as built are much less efficient than homes as designed.</p> <p>Future homes does not address embodied carbon.</p>	<p>Concern about reference to Building Regulations is noted. The Building Regulations regime is the established, national approach to assessing technical standards in new buildings. The SPD aligns itself to the approach because all developers understand it and introducing a new approach would produce new process costs for developments.</p> <p>Concern about Future Homes is noted. We are awaiting the outcome of the government's Future Homes consultation.</p> <p>Future Homes proposes changes to how new homes are assessed which may improve compliance and reduce the performance gap. A section has been added at the end of Section 5 in the SPD to address the performance gap.</p>
<p>Comments on summary of policy D2: The policy is weak - zero carbon development should be mandatory not encouraged "Water efficiency that meets the highest national standard" has no meaning – what standard? The requirement for smaller developments to include sustainability information "proportionate" to the size of the development is unclear and difficult to police. It is not clear how the support/encouragement for low/zero carbon and decentralised energy can be implemented. Why are retail units in the town centre excluded from the carbon reduction requirement?</p>	<p>Policy D2 has been adopted through a statutory process and cannot be altered by an SPD.</p> <p>The water efficiency standard that meets the highest national standard refers (at the current time) to regulation 36(2b) of the Building Regulations 2010 (as amended). This is a building regulation that can be adopted via planning policy to supersede the standard at regulation 36(2a), reducing maximum water consumption from 125 to 110 litres per person, per day. An explanatory footnote has been added to the water efficiency section detailing the relevant regulation. Under national policy, this is the only water efficiency standard that the Council can adopt for new dwellings.</p> <p>The SPD sets out guidance on what "proportionate information" for smaller developments means. The Council is unable to require a full sustainability statement for non-major developments. Submission of the material is policed through the planning application process.</p>

	<p>Where schemes propose low/zero carbon and decentralised energy, the Council will support the proposal and this support will be weighed in the planning balance.</p> <p>Retail units in the town centre are excluded from the carbon reduction requirement because there is a specific viability issue for these units and it would not be desirable for these developments to be encouraged to move out of the town centre to less sustainable locations.</p>
<p>Concerns about the references to carbon offsetting – schemes are difficult to validate and may not be robust or provide real carbon savings. Council may not have the knowledge or skills to scrutinise proposals.</p>	<p>The SPD provides guidance on how offsetting schemes will be assessed. Additional guidance has been added.</p>
<p>The questionnaire is reasonable as a check-list against the SPD requirements, but needs some reinforcement to test the delivery of the technical solutions required. Developers may not be able to provide satisfactory answers unless they improve performance.</p> <p>Good design is likely to require some iteration and modelling the performance of different solutions. The quality and completeness of workmanship is more critical, and the era of simple reliance on the capacity and competence of building control assessment has passed. Ad-hoc reliance on GBC building inspectors is wholly inappropriate.</p> <p>Suggest the following questions:</p> <ul style="list-style-type: none"> • Are the members of your design team that influence the energy and sustainability aspects of your design in-house staff or sub-contractors? • Provide the names and credentials of the key staff taking responsibility for the energy and sustainability aspects of your design. • Are the members of your design team that influence the energy and sustainability aspects of your design in-house staff or sub-contractors? • Provide the names and credentials of the key staff taking responsibility for the energy and sustainability aspects of your design. 	<p>The SPD makes it clear that the questionnaire should be considered at the early stage of design and should help to steer schemes towards improved performance and sustainability.</p> <p>Comments about good design are noted. Comments about the building control system are noted.</p> <p>Officers have considered the proposed questions. The aims of the questions are to ensure that development proposals benefit from the right design expertise and improve the level of workmanship in construction, which officers agree are critical issues for addressing construction standards and the performance gap. However, the proposed questions are not effective for a planning document because planning decision makers can only consider the development proposals before them and not the identities of the people carrying out the work. As a result, the questions have not been incorporated.</p> <p>The questionnaire asks for the names and position/job title of the person filling out the questionnaire and the person producing the energy information. It is normal practice for the name and position/job title of the person who produced an Energy Statement or a Sustainability Statement to be included in those documents. Text has been added to the start of sections 4 and 5 to make it clear this information should be provided.</p>
<p>Guildford Residents' Association</p>	

<p>There is no analysis of which low carbon technologies are suitable for the environment within Guildford. There is a tick box list of technology without considering the pros and cons within the Guildford context.</p>	<p>The SPD leaves consideration of suitability of low carbon technologies to the applicant and the planning application stage. Low carbon technology is a fast moving area and the pros and cons of each are likely to change as the technology develops.</p>
<p>The SPD should include a requirement to achieve much stronger integration between low carbon technology and landscape impact and character. More attention should be given to the scope for and impact of wind energy. Wind energy is inappropriate in AONB, especially given impact of associated access roads, but may be appropriate along some parts of the route of the A3. Solar panels should be integrated into design from outset to conceal from views, particularly given Guildford's topography and highly prized views. Glare from conspicuous poorly designed panels would detract from many views and street scenes, including views from the AONB.</p>	<p>Low carbon energy developments can be inappropriate in landscape terms and appropriateness will be considered on a case-by-case basis. The document will be read alongside all other relevant planning documents. Important landscapes and views are protected by the NPPF and local policy, the planning system is generally strong on the assessment of landscape impacts and there is landscape guidance available nationally. As a result, it is not considered necessary to add further guidance into this SPD.</p> <p>The comments about appropriate locations and design for low carbon technology are noted.</p>
<p>Biofuel pellets – need more emphasis on ensuring compatibility with air quality and residential amenity given air quality issues in parts of borough.</p>	<p>A reference to potential negative impacts on local air quality has been added to the section “Low and zero carbon energy appraisal”</p>
<p>3.5 (outline application submission requirements) should include reference to SUDS layout at Outline stage.</p>	<p>An outline application may not be detailed enough to address the layout of SuDS.</p>
<p>5.10 (fabric first) after “schemes should be designed to require less energy for heating and lighting by ensuring that they make best use of the surrounding environment”. Impact on landscape and amenity should also be factored in at this stage to achieve well-integrated design.</p>	<p>This is a design matter that will be addressed through policies and guidance that focus on design. The introduction to the “Sustainable design and construction guide” has been amended to make it clear that the guidance is not prescriptive and should be considered alongside “alongside good design, place-making and other considerations”.</p>
<p>5.37 (rainwater harvesting) rainwater harvesting should be expected not just set out as something that can be done.</p>	<p>At present, there is no adopted policy that requires rainwater harvesting. The SPD must be aligned with adopted policy. However, it is a simple and cost effective measure so it is expected that developers will find it an attractive option to demonstrate that water efficiency measures have been incorporated.</p>
<p>5.40 (greywater re-use) This section is far too half hearted.</p>	<p>As above, the SPD must be aligned with adopted policy, which does not require grey-water reuse systems in new developments. Greywater reuse systems are powered and frequently use chemicals so are less attractive in sustainability terms than other water efficiency measures.</p>

<p>5.42 (climate change adaptation) We support this approach. GBC needs to enforce it. Object to development on flood plains - poor access arrangements in times of flood.</p>	<p>Support is noted. Development on flood plains is restricted by national and local policy, and there is a large amount of guidance in the PPG.</p>
<p>5.45 (urban heat island) this section is far too vague on implementation. Major implications for urban design and development densities. Far stronger encouragement of green space, trees, water features and well-designed gaps between buildings is required to avert overheating as the climate changes.</p> <p>Urban trees will be less resilient due to more extreme weather events (e.g. drought, wind). Trees will need greater root zone protection than is often made available within the urban fabric. The longevity of any trees planted in new developments is questionable because insufficient space is allowed for trees to mature and prosper.</p>	<p>The Council is currently producing the Local Plan: Development Management document which will include detailed design and biodiversity policies. The Council also intends to produce a Green and Blue Infrastructure SPD which will set out guidance on provision of green space, planting of trees and use of water features (with regard to climate change) and could set out detailed guidance on things like root protection and climate resilience for planting.</p> <p>Officers consider that it would be most appropriate to put keep guidance on biodiversity and green and blue infrastructure together in one SPD. A reference to the future Green and Blue Infrastructure SPD has been added to the section.</p>
<p>5.48 (passive cooling) the requirement that air conditioning will only be allowed if passive cooling is inadequate is of little value unless some requirement is given that the building has been designed to achieve a high standard of passive cooling and ventilation.</p>	<p>The text has been amended to clarify that passive cooling measures must be fully explored before deciding that they would not be adequate.</p>
<p>5.49 (climate change resilient materials) the reference to glazing systems that minimise heat loss and excessive solar gain is far too vague, especially given the current emphasis on winter heat loss at the expense of excessive summer heat gain.</p>	<p>Text has been added to clarify that glazing should avoid overheating through excessive solar gain in the warmer months.</p>
<p>5.53 (green roofs) should cover “brown roofs”; which are being promoted as a cheaper alternative. These should be strongly discouraged due to the negative design and landscape impact of a felted flat roof without the sustainability and amenity benefits of a planted green roof. Brown roofs do not soften the impact on views as well as green roofs.</p>	<p>It is not appropriate to proscribe brown roofs as there may be situations where they are the best option, or only option for a biodiverse roof.</p> <p>Green roofs perform better in terms of slowing water down, so it seems appropriate to refer to green roofs in this section (wetter winters and heavy rainfall events) rather than also referring to brown roofs.</p>
<p>5.54 (permeable surfaces) is much too weak to promote the shift to permeable surfaces in future design as standard. Necessary in Guildford due to the fast flowing steep, developed hillsides that deposit water quickly in the river corridor. This paragraph should also include an expectation that permeable surfaces will be retained and maintained to avoid surfaces losing permeability or being replaced by hard surfaces e.g. for vehicle parking.</p>	<p>The text has been amended to state that new hard surfaces will normally need to be of permeable materials and retained for the life of the development, secured through a planning condition and particularly on hillsides.</p> <p>The SPD must be aligned with adopted policy, which does not explicitly require the use of permeable surfaces. If such a policy is introduced</p>

	through the Local Plan: Development Management, the SPD can be amended to make the guidance stronger.
5.60 (measures that enable sustainable lifestyles) The section should include vehicle space and layout requirements for EV and hydrogen vehicles and promote layout and design to accommodate and encourage car club vehicles.	A section covering car clubs has been added which includes designing schemes to accommodate such. The SPD references EV and parking guidance from Surrey County Council. The Council is producing a parking SPD which would be the most suitable document to address vehicle space requirements if further guidance is needed.
5.62 (provision of charging points) provision should be a requirement not simply considered, especially for car club vehicles, delivery and trade vehicles and for spaces separated from the curtilage of properties	Additional text has been added to clarify that provision of charging points is required for specific types of development as set out in borough and county guidance. Reference to charging infrastructure for car club vehicles has been included.
5.63 (infrastructure for future provision of charge points) does not go far enough. This whole section needs a step change in ambition and expectation, speed up provision. Future proofing should also relate to hydrogen powered vehicle requirements.	The SPD refers to Surrey County Council guidance on EV charging infrastructure. This guidance is currently being reviewed and may be strengthened. The Council is currently producing the Local Plan: Development Management document which may include a policy on EV infrastructure provision. The SPD must be aligned with current adopted policy.
5.72 (space for recycling) should be expanded to ensure well designed space is available for separating materials for both recycling and re-use, within rooms and outside properties. Limited separation at present leads to low grade recyclable material.	The section has been expanded and now addresses the need to separate recyclable materials and sets criteria for considering whether storage space is adequate.
Development layout should provide space for community composting facilities and for larger developments small bio digesters with energy capture.	A reference to community composting facilities has been added to the community food growing section. Bio-digesters are an energy technology, which is covered in the energy section. The SPD does not prescribe specific energy technologies.
5.73 (food growing) should be expanded to include access to green space and soil for a range of benefits (health, wellbeing, climate change adaptation).	Access to open space is covered by policy ID4 of the Local Plan, for which this SPD does not provide guidance. The Council has proposed a suite of policies to cover access to Green Space in the Local Plan: Development Management and intends to produce a Green and Blue Infrastructure SPD to provide further guidance. This could set out the wider social and environmental benefits of open space.

<p>5.79 (prioritise sustainable aggregates) should include an assurance that no primary material has been sourced from a protected area (National Park or AONB).</p>	<p>Minerals extraction policy is the remit of Surrey County Council and national government. Such a requirement would mean applicants would need to produce evidence of location of origin for minerals, which may not be reasonable.</p>
<p>5.97 (resources, materials and waste) should ensure the desire to avoid transporting waste from a site is not used to justify burying or mounding of waste material on construction sites. There are numerous examples of spoil mounds and buried waste across Guildford which destroy the natural profile of Guildford’s landscape as developers reprofile the land on prominent ridge top sites. Landform is a non-renewable natural asset.</p>	<p>Where the creation of mounds would constitute an engineering operation, it would need planning permission and harm to the landscape would be considered as part of the planning process. Where it would not require planning permission, planning policy and guidance cannot have an effect.</p>
<p>Royal Society for the Protection of Birds</p>	
<p>The Council should look at climate and ecological emergencies as one and the same, with opportunities to address both issues collectively; natural solutions to address climate change are welcomed and should be encouraged. It is critical that measures taken such as tree planting are done so with the right tree in the right place, and that tree-planting decisions made do not undermine other sensitive habitats such as heathland or chalk grassland, nor the restoration opportunities for those sensitive habitats. Surrey Nature Partnership has set out guidance.</p>	<p>The Council is currently considering a suite of biodiversity policies in the emerging Local Plan: Development Management document and is proposing to produce a Green and Blue Infrastructure SPD. The Council’s work is coordinated with the Surrey Nature Partnership. It is agreed that the climate and biodiversity emergencies are linked. However, this SPD focuses on climate change and sustainable design and construction.</p>
<p>Holy Trinity Amenity Group</p>	
<p>The need to address climate change is urgent and the SPD is too weak. It should be more concise and positive. It should provide detailed requirements to clarify the very broad-brush statements of the Borough Plan. It appears to mainly contain non-enforceable advice, e.g. guidance on how to fill in forms.</p>	<p>Amendments have been considered where consultation comments raise specific issues with the document. The SPD provides guidance for adopted policy and the toughening of standards or provisions would generally require changes to policy. SPDs are a material consideration in planning decisions and the guidance they provide can be used to assess planning applications.</p>
<p>Tackle profligacy in use of materials and energy, both in development and in building life, and developments that discourage sustainable transport, particularly walking.</p>	<p>The SPD addresses the efficient use of materials and includes guidance to promote energy efficiency. Sustainable transport is covered in the amended section “Measures that enable sustainable lifestyles” and will be addressed further through future transport policy and guidance.</p>

Cover building form/type: large detached dwellings are less sustainable than small terraced housing.	This is covered in the section "Site layout, landscaping and urban form"
State that the SPD is a material consideration in planning decisions.	This is stated in the introduction and in section 5
Reinstate a minimum density requirement as required by central government. The previous 30dph was not unreasonable, but 25dph might be more acceptable for our area and a maximum limit of 40dph for urban areas and a higher limit for the designated town centre. The NPPF allows LPAs to introduce minimum densities and since the national minimum was lost in 2010 we have seen some very low- density developments, particularly mansions built following demolition of valuable modest family houses.	This is beyond the scope of the SPD.
Limit new house size to 200sqm floorspace to reduce energy and materials consumption.	This is beyond the scope of the SPD.
Limit pavement crossovers to one per dwelling	This is beyond the scope of the SPD.
Stop shared space roads while their use is paused by central government. Pedestrians often find these hostile.	This is beyond the scope of the SPD.
Include specific requirements for tree planting; for example, a requirement to plant an approved tree for a certain area of green space.	The Council is currently considering a suite of biodiversity policies in the emerging Local Plan: Development Management document and is proposing to produce a Green and Blue Infrastructure SPD. These documents will address the issues raised.
Include conditions on demolition and construction practice: working hours, burning rubbish, dust, use of radios, noise, emissions from diesel plant, C&D plans, transport plans, use of public street by workers/parking, notification of disruption to neighbours, offloading materials, timing of deliveries, land stability, meetings between managers and neighbours, signage.	The SPD covers demolition and construction where it relates to materials efficiency. The other matters are beyond the scope of the SPD and many are not possible to regulate through the land use planning system.
Introduce more stringent conditions on energy use in large dwellings. Energy use in the Building Regs is currently only based on unit of floor space. Specific limits could be set for terraced, semi-detached, detached, and apartment blocks.	Energy efficiency standards cannot be set through an SPD and would need to be set through policy. Government is currently consulting on proposals that would prevent councils setting energy efficiency standards for new dwellings.

Set limit for increase of size by incremental extensions, perhaps a third of the original floorspace. Extensions rarely create a building as material / energy efficient as it should be.	Limiting the size of an extension is beyond the scope of this SPD. Policy D2 applies the energy hierarchy to all developments, including extensions. However, extensions do not usually need to undergo energy modelling so this is difficult to monitor.
Window area in any elevation should not exceed 25% (?) of elevation area	This is highly prescriptive and likely unenforceable. Some modern, innovative and sustainable designs use areas of glass in excess of 25%.
Require a calculation of embodied energy for new builds and make this a factor in determination. When the scheme involves demolition of an existing building the loss of embodied energy must be considered a major factor.	The SPD provides guidance on embodied carbon in section 5. However, there is no embodied carbon requirement in policy so the weight this can be afforded is limited. The Council is considering an embodied carbon policy in the Local Plan: Development Management.
Require cycle storage/parking to be provided	The Council requires cycle parking in line with Surrey County Council guidance. This is set out in section 5.
Require outdoor paved area for washing drying, storing bins, bicycle cleaning, to be provided	Drying areas and bin storage are covered in section 5 “Measures that enable sustainable lifestyles for building occupants”. It would be overly prescriptive to require all developments to provide an outdoor paved area.
Landscaping / gardens to provide wildlife friendly planting	This is beyond the scope of the SPD. The Council is considering a suite of biodiversity policies in the emerging Local Plan: Development Management document and is proposing to produce a Green and Blue Infrastructure SPD.
Prohibit demolition of house in good condition/with many years of use left	It is not possible to place a blanket prohibition on demolition of all houses that are usable. However, a section covering retrofitting has been added to section 6 setting out the benefits of retaining existing buildings.
Remove repetition of policies from the 2019 Borough Plan. This is bad practice for any standard as it means that in the future all documents have to be updated at the same time.	It is important to link the SPD to adopted policy in order to ensure that the SPD carries weight. All standards are implemented through the policies, not the SPD. SPDs will need to be updated when new policies are adopted.
Refuse permission for heated swimming pools	This is beyond the scope of the SPD. Such a provision would be ineffective as planning permission is not needed to add a heating system to an unheated pool. Additionally, some pool heating systems use renewable energy (e.g. solar thermal) to heat water.

Guildford Environmental Forum

Guildford Borough should be transitioning to a net zero carbon economy as soon as practically possible. The country only has a certain carbon budget before irrecoverable damage happens to our climate and therefore our society. The carbon reduction targets within the document do not go far or fast enough to address the scale of the emergency, and therefore we would urge the council to have far more ambitious targets. However, we do understand this element of the policy flows from the Local Plan process and therefore influences the scope for change at this point in time. We urge the council to update policy to make it fit for purpose at the earliest opportunity and request that GBC takes every opportunity through other planning routes to integrate the need to create a sustainable community with one that is net zero carbon in the timescales needed to mitigate the climate emergency.

Since the Local Plan process started, Guildford Borough Council has declared a climate emergency which acknowledges the scale and urgency of the issue. Recommend that a foreword is inserted into the documents setting out the following:

1. GBC has declared a climate emergency and is responding to this emergency with a road map to achieve a net zero carbon future.
2. GBC will be championing the importance of a net zero carbon community because it is in the long term interests of the residents.
3. The future versions of this policy document will have substantially higher targets which will align to achieving a net zero community for the Borough.
4. GBC is passionate about creating sustainable communities and believes that low to zero carbon development is important both to the Borough and its residents. The Council has an aspiration that all development be net zero carbon and it would therefore welcome discussions as to how development can be future proofed to become net zero carbon.
5. GBC aspires to achieve lower carbon emissions than those set out in this policy between now and the next Local Plan review, when the policy will be updated.

A foreword has been added to the document which covers some of the suggested topics. Some of the proposed text describes Council positions that cannot be adopted through this SPD.

<p>GEF understands that this SPD supports Local Plan Policy D2 and therefore the focus of the document is around energy and carbon management. However, GEF believes that GBC's climate change mitigation needs to cover all sources of carbon emissions and not just those related to buildings. 40-50% of the emissions come from transport and it is therefore important that all carbon emission sources are captured and monitored.</p>	<p>It is agreed that transport emissions are significant and must be addressed. The Council, as the Local Planning Authority, has adopted and emerging policies that address emissions from transport where they relate to new development.</p>
<p>Chapter 3 (summary of information required by decision maker) should be strengthened:</p> <ol style="list-style-type: none"> 1. Any development should either be net zero carbon or need to show how a future homeowner can make their home net zero carbon to allow future proofing of the proposed housing stock and not jeopardise the legal obligation to a net zero carbon society. 2. Any development needs to produce a carbon footprint for future residents/businesses, including all the emissions and encompassing any transportation requirements. This should include strategies for residents to reduce their carbon footprint. This approach would support the aspirations of Policy Local Plan policy ID3. 	<p>Chapter 3 summarises adopted policy so must reflect the content of the Local Plan.</p> <p>However, the section on building and design has been amended to add a reference to the need for buildings to become net zero carbon in future and for designs to enable future retrofit.</p> <p>This SPD does not provide guidance for policy ID3. Guidance on transport policy would best be provided in a dedicated SPD.</p> <p>Policy does not require developments to produce a carbon footprint reduction strategy for future residents, so putting such a requirement in an SPD would likely be unenforceable. Such a policy would need to be tested for reasonableness through the statutory examination process before it can enter into force.</p>
<p>Chapter 4 (energy statements) has a disproportionate focus on CHP. While beneficial, it needs a renewable source to be sustainable. The SPD does not identify likely sources of renewable heat and therefore delivery will be limited. The document could be better balanced to reflect other renewable technologies.</p>	<p>The section on CCHP appraisal has been amended to broaden support for heat networks to include a wider range of technologies, including renewable sources.</p> <p>Section 4 'significant sources of heat' includes a description of the types of building and natural features that can become sources of heat. Identifying specific buildings and features would be a disproportionate amount of work for this SPD and delay adoption of it.</p> <p>The Council is producing an Energy Framework which will include detailed heat network feasibility work which may identify specific heat producing buildings and features. In the meantime, appropriate buildings and features can be identified through the planning application process.</p>
<p>Chapter 5 (sustainability statements) some of the wider sustainability statements should relate more closely to some of the other key Local Plan policies such as D1 and ID3 and supporting documentation regarding</p>	<p>The point about holistic guidance is noted and agreed. However, broadening the guidance to cover more policies or more elements of other policies would be beyond the scope of this SPD. Planning</p>

urban design guidance and residential guidance to deliver a holistic view on sustainability.	documents are read together and should not repeat one another. Further SPDs will be produced covering other topics.
Chapter 5 (climate change adaptation) the SPD should refer to a link to the latest published guidance on rainfall and flood risk; this will be updated in the next few months so this approach will extend the useful life of this section.	We assume this is a reference to Environment Agency guidance or the flood risk guidance in the PPG. A link to the Environment Agency guidance has been added to section 5. National policy and guidance, as set out in the PPG, is already considered as part of the planning process so it is not considered necessary to repeat the guidance in this SPD.
Blackwell Park	
Section 5 (sustainable design and construction guide): Delivering sustainable new communities and commercial growth is complex and care must be taken that any individual sustainability outcome does not impact negatively on other parts of the development. Consideration should be given, therefore, to the social and economic impacts of defining technology within the guidance in the SPD.	It is agreed that developments should be considered holistically. The SPD will be read alongside national and local policy and guidance when planning decisions are made. The introduction to the guide in section 5 has been amended to make it clear the guidance should be read alongside other considerations.
The environmental benefits of CHP and district heating may be reduced as a result of the decrease in electricity related greenhouse gas emissions. This is reflected in the planned changes to Part L. The changes should be reflected in the guidance.	The section on (C)CHP appraisal has been updated to reflect the proposed changes to emission factors. The guidance now refers to a broad range of heat network technologies.
The guidance to install electric vehicle charging will have a significant impact on the availability and costs of delivering power infrastructure to new developments. Due to the new peak load established by EV charging infrastructure, network operators are requiring new developments to reinforce the grid at a cost to development. This could leave some new developments unviable. To address this, alternative options for charging infrastructure should be sought and greater flexibility be provided in the SPD, given that the technology may change over the period of delivery.	The SPD refers to Surrey County Council EV standards. The SPD is guidance and as such is a material consideration in planning decisions. Where county standards can be shown to be unviable or unfeasible planning decisions can take that into account.
Guildford Bike User Group (G-BUG)	
Limited reference to cycling. The only explicit mention is provision of cycle parking. Cycle parking should be secure, and the anticipated increase in use of electric bikes should be catered for with access to suitable charging points. For larger developments, the document should set out the contribution they could make to modal shift to more sustainable forms of transport. Larger developments should include infrastructure within the site	Further guidance for cycling and cycle share schemes (including e-bike schemes) has been added to the section “Measures that enable sustainable lifestyles”. Provision of low carbon transport infrastructure is covered by policy ID3, which this SPD does not provide guidance for. However, the new text

<p>and make a financial contribution towards improving cycling connectivity to their development, including where appropriate the Sustainable Movement Corridor. Developments should also, where appropriate, include provision of docking stations for hire bikes, as proposed for the Guildford bike share scheme.</p>	<p>refers to space for bike hubs. The Council may decide to produce a transport SPD.</p>
<p>Members of the public</p>	
<p>Greywater and/or rainwater re-use should be mandatory</p>	<p>Such a requirement would need to be introduced through policy. The SPD is guidance for adopted policy and must be aligned with adopted policy.</p>
<p>The water standard of 110 litres per person per day is not ambitious enough</p>	<p>National policy prohibits the adoption of technical standards except three nationally described standards (for water, internal space and accessibility). The only water efficiency standard we are permitted to adopt is the national optional standard of 110 litres per person per day for new dwellings at regulation 36(2b) of the Building Regulations 2010 (as amended).</p>
<p>Provision of charging points with any vehicle parking space should be mandatory</p>	<p>Such a requirement would need to be introduced through policy. The SPD is guidance for adopted policy and must be aligned with adopted policy. The SPD refers to Surrey County Council (SCC) guidance.</p>
<p>Alongside cycle parking, new developments should provide cycle routes to connect directly to shops, schools and existing cycle routes to Guildford town centre.</p> <p>All new developments that include a road should also include a dedicated footpath and a dedicated two-directional cycle lane that is physically separated from the road and the footpath.</p>	<p>This is outside the scope of an SPD</p> <p>Some developments can only deliver measures within the site boundary. Larger developments may be able to provide contributions to Surrey County Council for the provision of cycle infrastructure on public highways or alternatively deliver such improvements under licence to Surrey County Council, but this is considered on a case-by-case basis in consultation with Surrey County Council.</p> <p>A requirement for a two-directional cycle lane in any new development that includes a road would need to be introduced through policy and the technical guidance on such would better be addressed through a dedicated SPD. This may not be appropriate for some developments that include a road (e.g. a 10 dwelling cul de sac). The Strategic Development Framework SPD sets out guidance covering cycleways in Local Plan strategic developments.</p> <p>The section now entitled ‘public and shared transport’ has been amended to include “developments that include new roads should</p>

	ensure that the roads are designed to provide safe and attractive walking and cycling routes.”
The 20% carbon emissions reduction target isn't in line with the net carbon zero by 2050 legislation so GBC should use the SPD as an opportunity to improve on the 20%	The SPD is guidance for adopted policy and must be aligned with it. A higher carbon reduction standard would need to be introduced through policy.
There should be no support for fossil-fuel based CHP. This should be renewable only to avoid supporting the ongoing extraction industry and supply chains for fossil fuels and instead support the development of renewable industries and supply chains.	The section on CCHP appraisal has been amended to broaden support for heat networks to include a wider range of technologies. It makes it clear that the lowest carbon solutions will be favoured and that there is flexibility on this basis. There may be situations where a high-efficiency gas CHP heat network may be the best available option and this can be established on a case-by-case basis, taking account of the opportunity to replace the gas engine at the end of its life with an engine using a different fuel source.
It is not clear why retail developments in Guildford town centre are excluded from the 20% carbon reduction requirement and not other retail developments.	Retail units in the town centre are excluded from the carbon reduction requirement because there is a specific viability issue for these units and it would not be desirable to encourage such developments out of the town centre to less sustainable locations.
The measures within the SPD do not appear to have been costed. What is the cost to public or private funding?	The measures in the SPD are aligned with the provisions in Local Plan policy. The Local Plan was subject to a full viability assessment and a public examination where viability was considered. The plan as a whole was found to be viable. The 20 per cent carbon reduction requirement was subject to its own viability study that established the costs for different types of building. These costs were factored into the Local Plan viability assessment.
Do not promote wind turbines or solar farms as these destroy vistas. Wind turbines generate low frequency noise which jeopardises health.	The SPD does not single out and promote specific technologies.
The water efficiency standard of 110 litres per person per day is too stringent.	The standard has been developed nationally and is intended for use in areas under water stress, like Guildford Borough. It is not agreed that the standard is too stringent. Water efficiency design measures enable people to live comfortably while using less water and guidance on reducing water consumption is available from a number of sources.
The SPD omits/lacks emphasis on reducing the risk of flooding in Guildford. The chance of severe flooding in and around Guildford has	Development in flood plains is restricted by national and local policy. In flood risk areas the national approach is to avoid allowing vulnerable

increased – three occurrences in the last 10 years – and should be taken into account. Adaptations such as building on stilts or sealing ground floors should be used. No development in flood plains.	developments rather than adapting buildings to cope with flooding. There is extensive guidance on the approach to development and flood risk in the PPG which we do not think the SPD should replicate.
Page 7, 2.15 (policy P4 description): the words “unless it would be inappropriate” should be removed.	The words are an accurate summary of policy P4 which states “Priority will be given to incorporating SuDS (Sustainable Drainage Systems) to manage surface water drainage, unless it can be demonstrated that they are not appropriate.”
Page 8, Policy P4 (5) (policy summary): The words “unless it can be demonstrated that they are not appropriate” should be removed and “that due care to any underlying streams and/or water courses must take place (e.g. they must not be blocked)” should be added. Also, “if building in an area where the risk of flooding is greater than 1 in a 100, properties should be built on stilts or with the ground floor fully and adequately sealed”.	The text quotes adopted policy. The policy cannot be amended without a Local Plan examination and the summary of the policy must reflect its contents.
Page 10, 3.5 (information submission requirements) should require layouts to show where existing streams and water courses, etc (both above and below ground) flow.	This could be a suitable matter for the future Green and Blue Infrastructure SPD.
Page 24, 5.20 (use of planting in site design) the words “and reduce the risk of flooding” should be added after the word “microclimate” in the 1st sentence.	The words “and help to manage flood risk” have been added.
Page 25 (site layout, landscaping and urban form) it should be stated that green space/land must be included in all development plans to aid rain water run-off (i.e. any site must not be completely paved over).	Open space is required through policies other than those that the SPD provides guidance for. A reference to flood risk has been added to the specified section. The section “Wetter winters and heavy rainfall events” in “Climate Change Adaptation” also refers to the benefits of natural spaces to control flooding.
Page 27, 5.33 (reducing water use) add “Make use of non-potable water for toilets”.	The entry “systems for greywater reuse” has been added to the list. This includes using non-potable water for toilets.
Page 29, 5.54 (permeable surfaces) add the words “or grass” after “permeable surfaces”.	“natural or” has been added before permeable surfaces. This covers grass and other types of vegetation.
Page 30, 5.61 (low carbon transport) should refer to “multiple” or “sufficient” provision of EV charging points, rather than just provision.	The word “sufficient” has been added.

<p>Page 41 (map of district heat priority areas) shouldn't the heat map cover the whole of Guildford, not just the South?</p>	<p>The map shows all the heat priority areas. The methodology for identifying the heat priority areas can be seen in the Renewable Energy Mapping Study. The heat priority areas cover the areas and buildings with the heat supply/demand characteristics and densities that are likely to make heat networks feasible. The parts of Guildford outside the heat priority areas do not meet this criteria. A reference to the study has been added as a footnote in section "Heat networks and Combined Cooling Heating and Power ((C)CHP) appraisal"</p>
<p>Climate Change Questionnaire: In question 5, the aspect of potential flood risk (e.g. Flood zone 3) should be covered/asked.</p>	<p>Flooding is covered in detail through flooding policy at the national and local level. There are established processes to address flooding as part of a planning application so adding a flooding question to the questionnaire would provide no additional benefit.</p>
<p>Wind turbines are 87% steel which requires mining, transportation, smelting, fabrication and subsequent transport and erection and maintenance. These processes use large amounts of energy. In many cases the turbines are stationary either due to no wind, or lack of electricity need. This is not cost effective.</p>	<p>The SPD does not specifically promote wind turbines. Studies of life cycle carbon emissions from both onshore and offshore wind turbines show that the amount of carbon produced per kWh is very low and that the emissions savings over coal and gas energy are significant. Onshore solar and wind are currently among the cheapest energy technologies.</p>
<p>Electric vehicles require electricity. Much of our electricity is generated in either nuclear or carbon emitting power stations. Both of which are deemed to be environmentally unfriendly.</p>	<p>The UK's electricity grid is decarbonising rapidly and the carbon emissions from powering EVs will fall as this process continues. The environmental impact of nuclear power is outside the scope of this SPD.</p>
<p>The aspirations and measures in the SPD contradict the Local Plan. Development of greenfield sites will have a detrimental impact on climate change as the grass and trees currently on the sites sequester carbon from the atmosphere, whereas new developments will produce carbon emissions.</p>	<p>Sites are allocated for development through the Local Plan. This SPD does not play a role in site allocations.</p>
<p>Climate change does not exist/is unproven.</p>	<p>National policy and legislation require the Council to take the issue of climate change seriously and to address it through planning policy.</p>