

The EA submitted a number of representations to the Publication Local Plan Consultation (January 2022). This Statement of Common Ground seeks to establish areas of agreement between the London Borough of Wandsworth and Environment Agency and also proposes resulting minor changes to the Submission Local Plan prior to public examination. This Inspector is asked to consider these changes, which are acceptable to both parties. A track changed version of Policy LP 12 Water and Flooding has been included for reference of the proposed changes.

Text proposed to be inserted in *italicised and underlined*

Text proposed to be removed in ~~strikethrough~~

Reps from Environment Agency	Para/Policy no.	Council Response	Proposed Change	Environment Agency Response	Agreed?
Policy LP12					
<p>Part A</p> <p>Part A states that ‘All planning applications will need to clearly demonstrate that the proposals avoid, minimise, or reduce contributing to all sources of flooding...’.</p> <p>The term ‘minimise’ is weak wording and suggests that some increase in flood risk is acceptable. This is contrary to NPPF which states that ‘development should be made safe for its lifetime without increasing flood risk elsewhere’. We strongly recommend removing the word ‘minimise’ from this policy wording. We welcome that since the Regulation 18 consultation, the policy has been updated to include that developments should ‘reduce’ flood risk. This could help encourage proposals to provide betterment in terms of flood risk from the existing situation. For example, by raising finished floor levels that are currently below the flood level or by providing additional flood storage rather than just ensuring it is not reduced. We note that finished floor level requirements and compensation requirements are detailed in later parts of the policy. It may be prudent to reconsider what this part of the policy is trying to achieve.</p>	Part A	<p>Comment noted. The paragraph is considered sound, however, to ensure it is clear that it reflects the intention of the NPPF changes should be made to Policy LP12.A. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate.</p>	<p>Amend Policy LP12 A to read:</p> <p>‘All planning applications will need to clearly demonstrate that the proposals avoid, minimise, or reduce contributing to all sources of flooding, including fluvial, tidal, surface water, groundwater, flooding from sewers, take account of climate change (including predicted future changes), and would not increase flood risk elsewhere.’</p>	We agree to the officers recommended change.	Agreed
LP 12 Part B					
<p>Part B states that ‘The Sequential Test is considered to have been passed, and a Flood Risk Assessment will not be required, if the</p>	LP 12 Part B	Comments noted.	Amend the 2nd sentence of Policy LP12 B to read:	We agree to the officers recommended change.	Agreed

<p>proposal is not a major development or at least one of the following applies...’.</p> <p>Paragraph 167 of the NPPF states that ‘Where appropriate, applications should be supported by a site-specific flood-risk assessment’.</p> <p>Footnote 55 states that ‘A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use’. Therefore, even if a site is considered to have passed the Sequential Test, a Flood Risk Assessment (FRA) is still required. It is needed to demonstrate the development is ‘safe for its lifetime without increasing flood risk elsewhere’ in line with Paragraph 159 of the NPPF, and to demonstrate that it complies with the criteria set out in Paragraph 167 of the NPPF. The FRA should also demonstrate whether the site has passed the Sequential and/or the Exception Test, where applicable. An FRA is still required even if a site is not subject to the Sequential or Exception Test, as set out in Paragraph 168 of the NPPF. If this wording was kept in the Local Plan we would find it unsound as it does not comply with National Planning Policy.</p>		<p>The policy is considered sound, however as a flood risk assessment would still be required to address other matters in the event that a sequential test is passed. Therefore to clarify, as suggested by the Environment Agency, the Council agrees that it could amend the wording to remove the part of the sentence that states that a Flood Risk Assessment is not required</p>	<p>The Sequential Test is considered to have been passed, and a Flood Risk Assessment will not be required, is not a major development or at least one of the following applies <u>if the proposal meets one of the following criteria:</u></p>		
<p>Part B4 states that the Sequential Test will be considered to be passed if development is ‘minor development, conversions and change of use’.</p> <p>We strongly recommend you clarify which definition of ‘minor development’ you are referring to here to avoid confusion for applicants. Given the context of part B4, we believe you are referring to minor development in relation to flood risk. This is defined in Section 1b ‘Interpretation of Table’ of Schedule 4 ‘Consultations before the grant of permission’ of the Town and Country Planning</p>	<p>LP12 B.4</p>	<p>Comment noted. The paragraph is considered sound, however, to ensure greater clarity over the definition of minor development to avoid confusion for applicants, changes could be made to Policy LP12.B.4.</p> <p>The Council also could amend the wording so the Sequential Test is not limited in its application to windfall major development and to clarify the term ‘minor development’ in accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2015.</p>	<p>Amend Policy LP12 B. 4. to read:</p> <p>Minor development*, conversions and change of use <u>(except changes of use to a caravan, camping or chalet site, or to a mobile home or park home site).</u></p> <p>Insert footnote to Policy LP12 to read:</p> <p><u>*Minor development is defined in Section 1b ‘Interpretation of Table’ of Schedule 4 ‘Consultations before the grant of permission’ of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (The Town and Country Planning (Development Management Procedure) (England) Order 2015 (legislation.gov.uk)) and in Paragraph: 046 Reference ID: 7-</u></p>	<p>We agree with the officers recommended change.</p>	<p>Agreed</p>

<p>(Development Management Procedure) (England) Order 2015 (The Town and Country Planning (Development Management Procedure) (England) Order 2015 (legislation.gov.uk)) and in Paragraph: 046 Reference ID: 7-046-20140306 of the Planning Practice Guidance (Flood risk and coastal change - GOV.UK (www.gov.uk)). We strongly recommend you add this definition, or a link to it, to the policy, perhaps as a footnote.</p> <p>If you are referring to 'minor development' in terms of development providing nine units or less, then we would not support this policy. This is because the policy would then exclude almost all development, except windfall major development, from undergoing the Sequential Test. This would severely limit the application and benefits of the Sequential Test which ensures development is located in areas of lowest flood risk and is an important step in delivering sustainable development.</p>			<p><u>046-20140306 of the Planning Practice Guidance (Flood risk and coastal change).</u></p>		
<p>Part B5 states that 'For development sites falling outside of these areas, the default area of search for the Sequential Test to be applied will be the borough administrative area, unless justification is provided for a smaller area as described in the Strategic Flood Risk Assessment'.</p> <p>This appears to be guidance on how to apply the Sequential Test rather than the fifth criteria for determining whether the Sequential Test is considered to be passed or not. Therefore, we recommend that the formatting is updated to reflect this. We recommend removing the '5.' bullet point and setting the paragraph back to be in line with the opening paragraph of part B.</p> <p>Recommended action: update the formatting for part B5 of Policy LP 12 as suggested above.</p>	<p>LP12. B.5</p>	<p>Comment noted. The paragraph is considered sound, however, to ensure greater clarity that this is not guidance but criteria whether the sequential test has been passed, formatting could be changed to paragraph LP12. B.5 and moved to the main paragraph underneath the heading 'The application of Sequential Test'</p>	<p>Delete Policy LP12 B. 5 and move within new paragraph E to read:</p> <p>The application of Sequential Test</p> <p>A. Future development in Zone 3a and Zone 2 will only be considered if the 'Sequential Test' has been applied and the Exceptions Test passed in accordance with national planning policy and guidance. <i>For development sites falling outside of the areas below, the default area of search for the Sequential Test to be applied will be the borough administrative area, unless justification is provided for a smaller area as described in the Strategic Flood Risk Assessments.</i> The Sequential Test is considered to have been passed and a flood risk will not be required, if the proposal is not a major development or at least one of the following applies <u>if the proposal meets one of the following criteria:</u></p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22.</p>	<p>Agreed</p>
<p>The Sequential Test is an important tool to determine which sites are appropriate to be developed in relation to flood risk. Once a site has been chosen, after passing the Sequential Test where appropriate, it is also important to consider a sequential approach to the layout of</p>	<p>Part B – Sequential Test</p>	<p>Comments noted. The policy is considered to be sound as reference to site specific consideration of the layout of development is contained in LP12 C: 'Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' as set out in</p>	<p>No change considered necessary.</p>	<p>Whilst we would encourage incorporating the phrase 'sequential approach' we understand that you feel this is incorporated elsewhere within the policy. Therefore, we agree to the officers recommendation of no change considered necessary.</p>	<p>Agreed</p>

<p>the site itself. This is supported by Paragraph 167a of the NPPF which states that 'within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location'. For example, this ensures that if a site is partially within Flood Zone 3 and partially within Flood Zone 2 then residential development should be located in the lower flood risk area and any playing fields/public open space should be located in the higher flood risk area. We recommend that you encourage a sequential approach to the layout of sites within this policy.</p> <p>Recommended action: We recommend that you add, perhaps into or after Part B of Policy LP 12, wording that encourages a sequential approach to be considered in the layout of the site.</p>		<p>national policy guidance, and where required, the 'Exception Test'.</p>			
LP 12 Part C					
<p>Part C</p> <p>Part C discusses the application of the Sequential Test; the Exception Test; safe access/egress and Flood Emergency Plans; providing additional flood storage and/or attenuation; and floodplain storage compensation.</p> <p>All this different information is discussed in one long paragraph. We strongly recommend separating these different requirements into different paragraphs.</p> <p>Recommended action: We recommend that you separate out the different issues covered by Part C of Policy LP 12 into separate paragraphs.</p>	<p>Part C</p>	<p>Comment noted.</p> <p>The policy is considered sound, however, it is agreed that the technical nature of this part of the policy could necessitate an amendment to clarify the requirements and is proposed with additional amendments as described in response to other EA comments as made.</p> <p>Part C could be modified into separate paragraphs under the heading 'Flood Risk Management' Also, under the same heading, a new part 'D' is proposed to be added as part of the separate paragraphs to address the EA's concerns on surface water, fluvial / undefended tidal flood storage.</p>	<p>Policy LP12 C. is proposed to be moved as new paragraphs under 'Flood Risk Management' and, split with modifications also addressed as part of other EA comments to read:</p> <p><u><i>C. B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' unless already passed under part E below, as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).</i></u></p> <p><u><i>C. In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.</i></u></p> <p><u><i>D. Where a Flood Risk Assessment is required, applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:</i></u></p> <p><u><i>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</i></u></p>	<p>We agree to the officers recommended change.</p> <p>We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	<p>Agreed</p>

			<p><u>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</u></p> <p><u>3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</u></p> <p>on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority.</p>		
<p>Part C (Sequential and Exceptions Test) - Part C states 'Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA)'.</p> <p>Part B of Policy LP 12 has already set out when the council considers developments must undergo the Sequential Test. Therefore, it is confusing to also mention the application of the Sequential Test in Part C. Furthermore, it is potentially contradictory as it states the Sequential Test should be applied as 'set out in national policy guidance' but you already consider some sites to have passed the test subject to criteria in Part B.</p> <p>Recommended action: remove repetition about applying the Sequential Test.</p>	Part C (Sequential and Exceptions Test)	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The sentence is considered to be sound as part B criteria 1-5 reference the circumstances where the sequential test has been passed and the first sentence of part C states that the sequential test will be applied in general terms. It is agreed that clarification could be provided to acknowledge that Part B sets out the circumstances where the Sequential Test is considered to have been passed.</p> <p>.</p>	<p>Amend Policy LP12 C as follows:</p> <p>D. Development will be guided to areas of lower risk, both on-site, and by applying the 'Sequential Test' <u>unless already passed under part E below</u>, as set out in national policy guidance, and where required, the 'Exception Test'.</p>	We agree to the officers recommended change and the final formatting laid out on Page 22.	Agreed
<p>We welcome that this section of Part C clarifies that the Exceptions Test should be carried out in accordance with national policy guidance. We also welcome that it confirms that inappropriate development and land uses will</p>	Part C	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The Local Plan is considered sound, however for greater clarity changes are proposed to move Part C.</p>	<p>Policy LP12 C. is proposed to be moved as new paragraphs under 'Flood Risk Management' and, split with modifications also addressed as part of other EA comments to read:</p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22. We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	Agreed.

<p>be refused in accordance with the listed guidance. This wording should be kept.</p> <p>In terms of the location/formatting of this text, we recommend it is kept after the current Part B as a separate lettered bullet point. The Exception Test related wording could become the new 'C.' bullet point. The bold heading could be updated from 'The application of the Sequential Test' to 'The application of the Sequential and Exception Tests' to incorporate lettered bullet point B and the new Exception Test bullet point C.</p> <p>Recommended action: create a separate lettered bullet point (potentially the new bullet point C) which discusses the Exception Test requirements.</p>			<p><u>C. B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' unless already passed under part E below, as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).</u></p> <p><u>C. In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.</u></p> <p><u>D. Where a Flood Risk Assessment is required, applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:</u></p> <p><u>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</u></p> <p><u>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</u></p> <p><u>3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</u></p> <p>on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority.</p>		
<p>Part C (Safe access/egress and Flood Emergency Plans) – Part C states 'In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe</p>	<p>Part C (Safe access/egress and Flood and Emergency Plans)</p>	<p>Comment noted. The Local Plan is considered sound, however, for greater clarity changes are proposed to move Part C.</p>	<p>Policy LP12 C. is proposed to be moved as new paragraphs under 'Flood Risk Management' and, split with modifications also addressed as part of other EA comments to read:</p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22. We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	<p>Agreed.</p>

<p>access/egress cannot be achieved, a Flood Emergency Plan must be submitted’.</p> <p>The Environment Agency is not responsible for commenting on safe access/egress, safe refuge or Emergency Planning. We strongly recommend you discuss these requirements and associated formatting with your Emergency Planning Team.</p> <p>Although we cannot comment on the content/requirements for Emergency Planning, we do have a recommendation in terms of the formatting of this section. We recommend that the Emergency Planning aspects of the current Part C of Policy LP 12 are separated out into its own separate lettered bullet point. This could be moved to after ‘Table 15.1 Flood Zones – Development Restrictions’ or after ‘Table 15.2 Requirements for Basements in Flood Zones’. It could also have its own bold heading, such as ‘Emergency Planning’.</p> <p>Recommended action: create a separate lettered bullet which discusses the safe access/egress, safe refuge and Emergency Plan requirements (currently set out in Part C of Policy LP 12). Consider, with your Emergency Planning Team, where this new bullet point should be located within the policy and whether the wording and requirements reflect what will be required in practice.</p>			<p><u>C. B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' unless already passed under part E below, as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).</u></p> <p><u>C. In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.</u></p> <p><u>D. Where a Flood Risk Assessment is required, applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:</u></p> <p><u>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</u></p> <p><u>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</u></p> <p><u>3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</u></p> <p>on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority.</p>		
<p>Part C (Flood storage compensation & surface water attenuation) – Part C states ‘Where a Flood Risk Assessment is required, on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in</p>	<p>Para 5.30</p>	<p>Comment agreed. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The Local Plan is considered sound, however, it is agreed that the technical nature of this part of the policy could necessitate an amendment to clarify</p>	<p>Policy LP12 C. is proposed to be moved as new paragraphs under ‘Flood Risk Management’ and, split with modifications also addressed as part of other EA comments to read:</p> <p><u>C. B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential</u></p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22.</p> <p>We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	<p>Agreed.</p>

<p>a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority’.</p> <p>This part of the policy is discussing two things for two different sources of flood risk: for surface water flooding and for fluvial flooding it is requesting that additional flood storage/attenuation is provided; and for fluvial/tidal flooding (and potentially surface water flooding) it is requesting that there is no loss of existing flood storage. We support the intent behind this wording for fluvial/tidal flooding but have the following recommendations in relation to the location/formatting and the specific wording/content of this part of Part C of Policy LP 12.</p> <p>We would like to remind you that the Environment Agency is not responsible for managing surface water flooding and recommend that you discuss the contents in relation to this with the Lead Local Flood Authority (LLFA) officers.</p> <p>No loss of flood storage requirements – Firstly, we have the following recommendations in relation to part C’s intent to ensure no fluvial/tidal flood storage is lost because of development. Part C states ‘The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority’.</p> <p>Development must ensure appropriate flood storage compensation is provided for the fluvial and undefended tidal floodplain. The undefended tidal floodplain is riverward of the flood defences.</p> <p>For the fluvial floodplain, any loss of flood storage within the fluvial 1 in 100 inclusive of climate change flood extent (for example through an increase in built footprint or change of ground levels) must be compensated for on a level-for-level and volume-for-volume basis.</p>		<p>the requirements and is proposed with additional amendments as described in response to other EA comments as made. Also, under the same heading, a new part 'D' is proposed to be added as part of the separate paragraphs to address the EA's concerns on surface water, fluvial / undefended tidal flood storage.</p>	<p>Test' <i>unless already passed under part E below</i>, as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).</p> <p><u>C.</u> In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.</p> <p><u>D.</u> Where a Flood Risk Assessment is required, <i>applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:</i></p> <ol style="list-style-type: none"> <u>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</u> <u>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</u> <u>3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</u> <p>on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with</p>		
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<p>For the undefended tidal floodplain, to ensure there is no loss of flood storage there should be no increase in built footprint or raising of ground levels as level-for-level and volume-for-volume flood storage compensation is not achievable in this location. If water compatible structures, such as pontoons or slipways, are proposed, they should be designed to minimise the loss of flood storage i.e. by being floodable, hollow structures rather than solid structures.</p> <p>Recommended action: please see below (in blue) our proposed wording and formatting regarding fluvial/tidal flood storage in Policy LP 12. “Fluvial and undefended tidal flood storage</p> <p>E. Applicants will be required to demonstrate that their proposal does not increase, and reduces, fluvial and/or tidal flood risk elsewhere by ensuring that:</p> <p>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</p> <p>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</p> <p>3. Additional flood storage must be provided on top of ensuring no loss of fluvial and/or undefended tidal flood storage.”</p>			<p>the advice of the Environment Agency and Lead Local Flood Authority.</p>		
<p>Additional flood storage - Next, we have the following recommendations in relation to Part C’s intent to provide additional flood storage. Part C states ‘Where a Flood Risk Assessment is required, on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required’.</p>	<p>Part C – Additional Flood Storage</p>	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The Plan is considered sound, however, for greater clarity changes are proposed to move Part C.</p>	<p>Policy LP12 C. is proposed to be moved as new paragraphs under ‘Flood Risk Management’ and, split with modifications also addressed as part of other EA comments to read:</p> <p>€. <u>B.</u> Development will be guided to areas of lower risk, both on-site and by applying the ‘Sequential Test’ <i>unless already passed under part E below</i>, as set out in national policy</p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22. We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	<p>Agreed.</p>

<p>The word 'attenuation' is usually used to describe managing surface water flooding. For example, for surface water flood risk alleviation, onsite attenuation is used to manage surface water and to mitigate increased runoff rates and volumes. This same mechanism, however, will not compensate for, or create additional storage for, fluvial or tidal flooding. For fluvial flooding, additional storage would have to be provided on a level for level and volume for volume basis or by reducing the built footprint. In undefended tidal areas, additional storage would have to be provided by reducing the built footprint, or in more extreme cases, by setting back the flood defence landward. As 'on-site attenuation solutions' are not a form of providing additional flood storage for fluvial or undefended tidal flooding, we recommend this wording is updated to incorporate these other forms of flooding.</p> <p>Recommended action: please see below (in blue) our proposed wording and formatting regarding fluvial/tidal flood storage in Policy LP 12. We recommend this wording, or similar, is added to Policy LP 12 after the two tables or after the Sustainable Drainage (E, F & G) section, prior to the Flood Defences (H) section. Please note this wording is draft and would need additional clarifications regarding the additional storage provision (see additional comments below).</p> <p>"Fluvial and undefended tidal flood storage</p> <p>E. Applicants will be required to demonstrate that their proposal does not increase, and reduces, fluvial and/or tidal flood risk elsewhere by ensuring that:</p> <p>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</p> <p>2. In undefended tidal areas there is no increase in built footprint or raising of ground</p>			<p>guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).</p> <p><u>C.</u> In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.</p> <p><u>D.</u> Where a Flood Risk Assessment is required, <u>applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:</u></p> <p><u>1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.</u></p> <p><u>2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</u></p> <p><u>3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</u></p> <p>on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority.</p>		
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<p>levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.</p> <p>3. Additional flood storage must be provided on top of ensuring no loss of fluvial and/or undefended tidal flood storage.”</p>					
<p>We welcome that since the Regulation 18 consultation the wording has been updated to remove ‘where feasible’ in relation to securing additional flood storage through development. However, we note that even without this wording, the policy is ambiguous as to how much additional storage must be provided on each site and would therefore potentially struggle to deliver additional storage.</p> <p>To strengthen the policy, it would benefit from detailing how much additional flood storage each site should provide. This could be by requesting a certain percentage increase in flood storage, or a percentage reduction of built footprint on sites. This is similar to the 10% Biodiversity Net Gain (BNG) requirements set out in the Environment Bill. However, the implications and practicalities of this would need to be clearly thought out before including it as a policy requirement. For example, the BNG requirements are supported by the DEFRA metric tool to calculate increases. Similarly, guidance would need to be provided for how sites calculate percentage increases in flood storage.</p> <p>We would like to note, however, that many sites’ constraints often restrict the overprovision of storage. In our experience, sites often struggle to demonstrate no loss of flood storage, let alone provide additional storage. This may be due to the size of the plots or their chosen designs or viability assessments. Therefore, if the council truly seeks to secure additional flood storage, then stronger policy wording, and potentially supplementary guidance or supporting text, must be implemented.</p> <p>If the wording is to be maintained as ‘where feasible’ to allow more flexibility for sites, then</p>		<p>Comment noted. There is currently no mechanism to justify what percentage increase in flood storage would be appropriate and this is something that Council may review in the future. It is considered that, as part of the FRA, applicants could review options for additional storage and include this where feasible. It is acknowledged that it may not be possible for applicants to include additional storage so the further wording regarding feasibility is considered appropriate.</p>	<p>No change considered necessary.</p>	<p>We understand the difficulties in determining a specific increase in flood storage for sites in the Local Plan as each site is unique and has its own constraints. We therefore agree with the officer’s recommendation of no change considered necessary.</p>	<p>Agreed</p>

<p>an explanation should be provided to define 'feasible' and we recommend setting criteria and a process for determining whether a site must provide it. Alternatively, the wording 'Unless exceptional circumstances are demonstrated for not doing so, additional flood storage must be provided on top of ensuring no loss of fluvial and/or undefended tidal flood storage' could be implemented. This would assign responsibility to the applicant to demonstrate whether additional storage or not is achievable.</p> <p>Please note that our suggested wording above (E3) is draft wording and has not incorporated solutions to the issues we have raised above. These issues should be considered prior to finalising the additional fluvial and tidal flood storage policy wording.</p> <p>Recommended action: We recommend you consider stronger policy wording for requiring additional fluvial and undefended tidal flood storage to be provided on site. Depending on the decision, supporting text may need to be added to the Local Plan.</p>					
<p>Additionally, for the Environment Agency to maintain a consistent position across all areas, we will only be able to assess whether a site has demonstrated that there is no loss in flood storage. We will not be able to assess whether a site has demonstrated additional flood storage. You should consider how this policy will be assessed in practice e.g. whether case officers have the expertise required to assess flood storage calculations within an FRA.</p> <p>Recommended action: We recommend you consider how whether additional flood storage has been delivered on site will be reviewed at the decision-making process. This should feed into decisions about how to word the policy.</p>		<p>Comment noted. As part of the Council's LLLFA remit the Lead Local Flood Authority are able to review additional flood storage options and feasibility as part of the assessment of a drainage scheme for all sources of flooding so wording on how additional storage might be delivered on site is not required. The applicants FRA would be expected to contain the details to justify the additional flood storage which would be scrutinised by the LLFA.</p>	<p>No change considered necessary.</p>	<p>Please note that our comments regarding an increase in flood storage are in relation to fluvial and tidal flood risk only. The Lead Local Flood Authority are not responsible for these sources of flood risk. We agree with the officer's recommendation that no change is agreed.</p>	<p>Agreed</p>
<p>Table 15.1 Flood Zones – Development Restrictions</p>					
<p>Table 15.1 Flood Zones – Development Restrictions</p>	<p>Table 15.1 Flood Zones –</p>	<p>Comment noted. Regarding the comment requesting further wording on what is sought for 'net flood risk reduction', the</p>	<p>No change considered necessary.</p>	<p>We agree with the officer's recommendation that no change is considered necessary.</p>	<p>Agreed</p>

<p>The Flood Zone 3b section of Table 15.1 states that ‘redevelopment of existing developed sites will only be supported if...a net flood risk reduction is proposed’. In our Regulation 18 response we asked you to confirm what net flood risk reduction you are seeking. For example, increased flood storage, reduction in vulnerability, reduction of users etc. In our recent Duty to Cooperate meeting (held on 22.02.2022) you highlighted that you have decided to maintain this wording to give flexibility depending on the site. We support this stance, but recommend that you add some supporting text highlighting examples of different flood risk reduction options.</p> <p>Recommended action: We recommend you add supporting text to expand on what you are seeking for ‘net flood risk reduction’.</p>	<p>Development Restrictions</p>	<p>Council considers that the applicant’s FRA would detail the nuances of possible net flood risk reduction and depends on the circumstances of the site. Therefore, it is the Council’s preference to keep the existing wording unchanged.</p>			
<p>We note that the wording ‘to provide safe refuge and depending on location...’ comes before the finished floor level requirements. The Environment Agency is not responsible for assessing safe refuge or other emergency planning matters. Please discuss with your Emergency Planning Team whether any additional requirements should be incorporated with respect to safe refuge, safe access and egress and emergency plans. The Environment Agency recommends this finished floor level wording to the council for their policies as these requirements will ensure that developments are safe for their lifetime, in line with Paragraph 159 of the NPPF.</p> <p>Also, we note that the wording ‘... and depending on location...’ comes before the finished floor level requirements. We recommend that this is removed, as it would not be required if our proposed wording below (in blue) is adopted for detailing the finished floor level requirements.</p> <p>Recommended action: We recommend you update the wording preceding the finished floor level requirements. Please see our proposed wording (in blue) below.</p> <p>Table 15.1 Flood Zones – Development Restrictions, Flood Zone 3a and Flood Zone 2:</p>	<p>Table 15.1 Flood Zones</p>	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The Local Plan is considered sound, however to clarify that developments will remain safe for their lifetime, it is proposed that the text of Table 15.1 could be amended for flood zones 2 and 3a.</p>	<p>Amend Policy LP12 Table 15.1, Zone 3a to read:</p> <p>To provide safe refuge, and depending on location, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 inclusive of an allowance for climate change flood level. In areas of defended tidal flood risk, as a minimum, all sleeping accommodation must be located on finished floor levels above the appropriate extreme water level as advised by the Environment Agency. Safe access and egress at a Low Hazard rating is required.</p> <p>Amend Policy LP12 Table 15.1, Zone 2 to read:</p> <p>To provide safe refuge, and depending on location, finished floor levels for less and more vulnerable development must be raised to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 inclusive of an allowance for climate change flood level. In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 inclusive of an allowance for climate</p>	<p>We agree with the officers recommendation.</p> <p>The Environment Agency is not responsible for commenting on Safe access and egress. We recommend you discuss these aspects with your Emergency Planning Officer.</p>	<p>Agreed</p>

<p>'In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 inclusive of an allowance for climate change flood level. In areas of defended tidal flood risk, as a minimum, all sleeping accommodation must be located on finished floor levels above the appropriate extreme water level as advised by the Environment Agency'.</p>			<p><u>change flood level. In areas of defended tidal flood risk, as a minimum, all sleeping accommodation must be located on finished floor levels above the appropriate extreme water level as advised by the Environment Agency. Safe access and egress at a Low Hazard rating is required.</u></p>		
<p>Table 15.2 Requirements for Basements in Flood Zones</p> <p>This table sets out basement requirements in relation to different 'breach hazards'. We understand this is an existing policy within the Richmond Local Plan (2018). As this is in relation to basements affected by 'breach hazards' then this relates to defended tidal flood risk areas only. Any additions to this table regarding fluvial flood risk should not be included in the current table, or the table should be amended to reflect fluvial and tidal breach flooding.</p> <p>The different requirements depending on different breach hazards were designed by the council and are stronger than the Environment Agency approach. Therefore, we recommend you discuss internally what you require for basements in breach hazard areas and then amend the policy to reflect this.</p> <p>To clarify, the Environment Agency position on basements is as follows:</p> <p>For areas affected by fluvial flooding – self-contained residential basements and bedrooms at basement levels are not permitted. In these locations, it should be a requirement that all basements must have access threshold levels set to a minimum of 300mm above the 1 in 100 inclusive of climate change flood level. All basements must also have internal staircases to access floors set at a minimum of 300mm above the 1 in 100 inclusive of climate change flood level.</p>	<p>Table 15.2</p>	<p>Comment noted. The Council's stance allows bedrooms at basement level where the SFRA has demonstrated that the development passes the Exceptions Test and are located in areas of low or no breach hazard. The policy requires that appropriate access threshold levels and internal staircasing must be demonstrated as advised by the Environment Agency or that a permanent barrier is in place to prevent flooding from entering and sleeping accommodation. It is considered that Council has the evidence to do this as a result of the breach hazard modelling of the SFRA.</p> <p>The Local Plan is considered sound however, it is acknowledged that the fluvial flooding references are currently considered under the same heading as the areas of breach hazard – i.e low if no breach hazard, which could be confusing as references to fluvial flooding requirements are already contained in table 15.1. It is therefore proposed that table 15.2 could be modified to delete references to fluvial flooding requirements as they are already covered in table 15.1.</p>	<p>Amend table 15.2 row 2 column 2 (Flood Zone 3a) to read:</p> <ul style="list-style-type: none"> New basements: <ul style="list-style-type: none"> If the Exception Test (where applicable) is passed, basements may be permitted for residential use where they are not self-contained, or, in locations at risk of fluvial flooding, are not used for bedrooms. <p>Amend table 15.2 row 2 column 2 (Flood Zone 3a) to read:</p> <p>If a basement, basement extension or conversion is acceptable in principle in terms of its location, it must:</p> <ul style="list-style-type: none"> have safe access threshold levels and internal staircases provided to access floors to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. <p>Amend table 15.2 row 2 column 2 (Flood Zone 2) to read:</p> <ul style="list-style-type: none"> New Basements: <ul style="list-style-type: none"> If the Exception Test (where applicable) is passed, basements may be permitted for residential use where they are not self-contained, or, in locations at risk of fluvial flooding, are not used for bedrooms. Existing Basements: <ul style="list-style-type: none"> Basement extensions, conversions or additions maybe permitted for existing developments where they are not self-contained, or, in locations at risk of fluvial flooding, are not used for bedrooms. 	<p>We agree with the officer's recommended changes.</p>	<p>Agreed.</p>

<p>For areas tidal defended areas - no self-contained residential basements should be permitted. All access threshold levels must be set at or above the appropriate extreme water level as advised by the Environment Agency. They must also have internal staircases to access floors set at or above the appropriate extreme water level as advised by the Environment Agency. Your policy does not allow any bedrooms at basement level. Whilst we support this stance, it is stronger than our own stance of allowing basement bedrooms in tidal defended areas as long as there is an internal staircase access and threshold levels set above the flood level.</p> <p>Recommended action: We strongly recommend that you either remove references to fluvial flooding from Table 15.2 Requirements for Basements in Flood Zones, or, update the table title and headings to incorporate fluvial and undefended tidal (breach hazards).</p>			<p>Amend Table 15. row 2, column 1 (flood zone 3a) to read:</p> <p>Flood Zone 3a <i>(Tidal)</i></p> <p>Amend Table 15.2 row 3, column 1 (flood zone2) to read:</p> <p>Flood Zone 2 <i>(Tidal)</i></p> <p>For consistency with the information set out regarding existing basements in flood zone 2 it is proposed to add the following wording to row 2 column 2 (flood zone 3a) following the New basements bullet points and paragraph:</p> <p>In areas of Extreme, Significant and Moderate Breach Hazard (as set out in the Council's SFRA):</p> <ul style="list-style-type: none"> • <u>Existing basements:</u> <ul style="list-style-type: none"> • <u>No basement extensions, conversions or additions for 'Highly Vulnerable' uses.</u> • <u>'More Vulnerable' uses will only be considered if a site-specific Flood Risk Assessment demonstrates that the risk to life can be managed.</u> <p>In areas of Low or No Breach Hazard (as set out in the Council's SFRA):</p> <ul style="list-style-type: none"> • <u>Existing basements:</u> • <u>Basement extensions, conversions or additions may be permitted for existing developments where they are not self-contained.</u> <p>It is also proposed to modify table 15.1 to allow for the consistency of these proposed changes to be accommodated.</p> <p>Amend Table 15.1 row 3, column 2 (Zone 3a) to read:</p> <p>Self-contained residential basements will not be permitted, in locations at risk of fluvial, or tidal defended flooding.</p> <p>Bedrooms at basement level will not be permitted in fluvial flood risk areas subject to <u>with the exception of</u> the requirements set out in Table 15.2.</p>		
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			<p>Amend Table 15.1 row 4, column 2 (Zone 2) to read:</p> <p>Self-contained residential basements will not be permitted in locations at risk of fluvial, or tidal defended flooding.</p> <p>Bedrooms at basement level will not be permitted in fluvial flood risk areas subject to <i>with the exception of</i> the requirements set out in Table 15.2.</p> <p>Additionally, for clarification and consistency it is proposed to remove the words 'Tidal/Fluvial' from table 15.1 as follows: Zone 3a (Tidal/Fluvial)</p>		
Part E					
<p>Part E</p> <p>Part E3 states applicants will have to demonstrate that 'There should be no loss of flood storage in areas affected by fluvial flooding and any increase in built footprint within the fluvial 1 in 100 (inclusive of climate change allowance) flood extent must be compensated for on a level for level, volume for volume basis'.</p> <p>We welcome that this has been added in response to our Regulation 18 comments, where previously flood storage compensation was not mentioned at all in Policy PL 12. However, if our proposed wording above (blue E: Fluvial and undefended tidal flood storage) is adopted, then this can be removed from the 'Sustainable Drainage' Part E section.</p> <p>If our proposed wording is not adopted, we would recommend keeping Part E3 – with undefended tidal flood storage wording added – but separating it from the 'Sustainable Drainage' (Parts E, F and G) section. This is because the term 'sustainable drainage' is usually associated to surface water management and therefore it is confusing to contain information about fluvial and undefended tidal flooding here.</p>	Part E.3	<p>Comments noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. LP12 E3 (3) is proposed to be deleted. Additional wording has been added regarding the consideration of the loss of surface water flood storage in proposed new part 'D' of LP12 under 'Flood Risk Management'.</p>	<p>Delete LP12 E3 (3) as follows: There should be no loss of flood storage in areas affected by fluvial flooding and any increase in built footprint within the fluvial 1 in 100 (inclusive of climate change allowance) flood extent must be compensated for on a level for level, volume for volume basis.</p> <p>Add the following wording to new part 'D' of LP12 under 'Flood Risk Management'. <u><i>Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.</i></u></p>	<p>We agree to the officers recommended change and the final formatting laid out on Page 22. We strongly recommend that you discuss the changes to the surface water flood risk aspects of this policy with the Lead Local Flood Authority Officer as this is outside of our remit.</p>	Agreed.

<p>Recommended action: We recommend that Part E3 is removed, subject to our proposed wording on 'fluvial and undefended tidal flood storage' being incorporated.</p> <p>If our suggested policy wording regarding additional fluvial and undefended tidal flood storage is adopted (blue E parts 1,2,3) then the requirement for additional surface water attenuation (contained within existing Part C) may need to be incorporated into this part of the policy. We strongly recommend discussing this wording with the LLFA.</p> <p>Recommended action: consider adding the wording for additional surface water attenuation requirements, in discussion with the LLFA.</p>					
Part H					
<p>Part H</p> <p>Part H3 states 'That any physical structures are set back from river banks and existing flood defence infrastructure unless it can be clearly demonstrated that the effectiveness of such infrastructure would not be compromised (the distances being 16 metres for the tidal Thames and 8 metres for other rivers including those culverted)'.</p> <p>We welcome that the set back requirements have been incorporated into Policy LP 12 following our Regulation 18 response. However, set back from flood defences would be required even if evidence was submitted to demonstrate that building closer to the defences would not impact their effectiveness. This is because the space is required for future flood risk management. Sufficient space is required where defences may need emergency works, maintenance and upgrading to ensure this can be carried out in a cost effective way, as supported by Policy LP12 Part H2. In some recent cases, developers have offered extremely minimal set backs from flood defences and demonstrated that certain technological strategies mean the defences can still be maintained and upgraded. These</p>	Part H.3	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The paragraph is considered sound, however, to ensure greater clarity a proposed change to LP12 H 3 is suggested.</p>	<p>Amend Policy LP12 H (3) to read: <u>All development should be set back 16 metres from the landward side of tidal flood defences, and 8m from the top bank of all other main rivers (including from the outer edge of culverted main rivers)'. That any physical structures are set back from river banks and existing flood defence infrastructure unless it can be clearly demonstrated that the effectiveness of such infrastructure would not be compromised (the distances being 16 metres for the tidal Thames and 8 metres for other rivers including those culverted).</u></p>	<p>We agree with the officers recommended changes. Thank you for updating this policy.</p>	<p>Agreed.</p>

<p>technological solutions are often high cost. The larger the set back the more strategies are available for future maintenance and upgrading in a cost effective way.</p> <p>This is also supported by the London Plan (2021) Policy SI 12 Flood risk management part F which states ‘Development proposals adjacent to flood defences will be required to protect the integrity of flood defences and allow access for future maintenance and upgrading. Unless exceptional circumstances are demonstrated for not doing so, development proposals</p> <p>should be set back from flood defences to allow for any foreseeable future maintenance and upgrades in a sustainable and cost-effective way’.</p> <p>This is further supported by the NPPF (2021) paragraph 161b which states that plans should manage flood risk and the future impacts of climate change by ‘safeguarding land from development that is required, or likely to be required, for current or future flood management’.</p> <p>We note that this set back requirement also ties into the council’s other aims where you seek space next to the river for public walkways (including the Thames Path) and cycle paths for more active and sustainable travel. This is set out in Policy LP 52 Public Transport and Infrastructure part B, where you promote at least 6 metre wide paths for the Thames and at least 3 metre wide for the Wandle. Policy LP 49 Sustainable transport further promotes this and encourages ‘green and blue infrastructure [to be] improved to create more attractive neighbourhoods for people’ (Part B5). Supporting text paragraph 21.49 of Policy LP 59</p> <p>Riverside uses, including river-dependent, river-related and adjacent uses states ‘New development will be expected to provide high-quality public realm that is safe and attractive and should, wherever possible, improve access and provide opportunities for the public to enjoy the rivers’. Having a wider buffer zone</p>					
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<p>adjacent to rivers would allow space for these improvements to be made and deliver wider placemaking outcomes as well as protecting flood defences.</p> <p>Furthermore, the set back is required for enhancements to the biodiversity of rivers which is another aim for the council. Please see our biodiversity section for further information.</p> <p>We also recommend reviewing the Thames Estuary 2100 Plan (available here: Thames Estuary TE2100 Plan - GOV.UK (www.gov.uk)) for further information about the importance of leaving space to manage flood defences.</p> <p>We note that the Richmond Local Plan (2018) Policy LP 21 Part D3 has specified the 8m and 16m set back requirements in its existing policies. We hope this can alleviate any of your concerns with adopting this wording.</p> <p>Therefore, we recommend that the wording of Policy LP12 Part H3 is updated. We recommend the following wording: 'All development should be set back 16 metres from the landward side of tidal flood defences, and 8m from the top bank of all other main rivers (including from the outer edge of culverted main rivers)'.</p> <p>Recommended action: We strongly recommend that you update the wording for Policy LP 12 Part H3 as above.</p>					
<p>Part 7 states 'Culverting of water courses and building over culverts will be resisted unless it can be clearly demonstrated that such approaches are necessary in order to achieve the delivery of development. Deculverting is encouraged where possible'.</p> <p>We do not support this wording. The Environment Agency would object to any development that proposes building on top of an existing culvert or that proposes additional culverting of a main river.</p>	Part H.7	<p>Comment noted. Upon further assessment the Council considers that a proposed change to the Local Plan could be appropriate. The Local Plan is considered sound, however the word 'support' rather than 'permitted' is considered to be more appropriate in this context.</p>	<p>Delete part 7 of LP12 H and add wording to read: <u>The culverting of watercourses and building over culverts will not be supported. Deculverting and the naturalisation of watercourses is encouraged where possible.</u></p> <p>Culverting of water courses and building over culverts will be resisted unless it can be clearly demonstrated that such approaches are necessary in order to achieve the delivery of development. Deculverting is encouraged where possible.</p>	<p>We agree with the officers recommended changes. Thank you for updating this policy.</p>	Agreed.

<p>Firstly, allowing building on top of a culvert would be contradictory to part H3 of Policy LP 12 that requires set back. It would also restrict access to the culvert and space should it be needed for future maintenance, upgrading or emergency works and could therefore increase flood risk elsewhere in the future. It also contradicts Policy LP60 Part C which currently states 'The culverting of river channels and watercourse will not be permitted, and the naturalisation of river channels and watercourses will be sought as part of development proposals where appropriate and feasible'.</p> <p>Also, culverting a watercourse would be contrary to policies seeking the protection and enhancement of blue infrastructure and biodiversity and would not be acceptable in any situation. It would also be contrary to the Water Framework Directive (2003) which seeks to enhance and prevent further deterioration of water bodies.</p> <p>We would find this policy unsound should this wording, allowing the culverting and building over culverts in some situations, remain in the plan as it is against the London Plan (2021) Policy SI 12 Flood risk management; the NPPF (2021) Paragraphs 159 and 161; the Water Framework Directive (2003) and supporting biodiversity policies.</p> <p>We strongly recommend that the wording of Policy LP 12 Part H7 is returned to the Regulation 18 version with some amendments. We recommend the following wording: 'The culverting of watercourses and building over culverts will not be permitted. Deculverting and the naturalisation of watercourses is encouraged where possible'.</p> <p>Recommended action: We strongly recommend you update the wording to Policy LP 12 Part H7 as above.</p>					
Part I					

<p>Part I</p> <p>We welcome that Part I addresses that multiple benefits can be achieved by addressing flood mitigation opportunities into the design of the scheme.</p>		<p>Support noted.</p>	<p>No change required.</p>	<p>We agree with the officers recommendation that no change is required.</p>	<p>Agreed.</p>
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LP12 Water and Flooding

Flood Risk Management

- A. All planning applications will need to clearly demonstrate that the proposals avoid, *minimise*, or reduce contributing to all sources of flooding, including fluvial, tidal, surface water, groundwater, flooding from sewers, take account of climate change (including predicted future changes), and would not increase flood risk elsewhere.
- B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' unless already passed under part E below, as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA).
- C. In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.
- D. Where a Flood Risk Assessment is required, applicants will be required to demonstrate that their proposal does not increase, and reduces surface water, fluvial and/or tidal flood risk elsewhere by ensuring that:
 - 1. Any loss of fluvial flood storage within the 1 in 100 plus appropriate climate change allowance flood extent must be compensated for on a level for level, volume for volume basis. Proposals must demonstrate that fluvial flood flow routes are not impeded.
 - 2. In undefended tidal areas there is no increase in built footprint or raising of ground levels. Where water compatible structures are acceptable, such as pontoons or slipways, they must be designed to minimise the loss of flood storage i.e. floodable, hollow structures.
 - 3. Unless exceptional circumstances are demonstrated for not doing so, opportunities to provide additional flood storage must be considered and be designed into the development, in addition to ensuring no loss of surface water, fluvial and/or undefended tidal flood storage.

The application of Sequential Test

- A.E. Future development in Zone 3a and Zone 2 will only be considered if the 'Sequential Test' has been applied and the Exceptions Test passed in accordance with national planning policy and guidance. For development sites falling outside of the areas below, the default area of search for the Sequential Test to be applied will be the borough administrative area, unless justification is provided for a smaller area as described in the Strategic Flood Risk Assessments. The Sequential Test is considered to have been passed, and a Flood Risk Assessment will not be required, if the proposal is not a major development or at least one of the following applies if the proposal meets one of the following criteria:
 - 1. The application site is located within an Area Strategy area as identified in this Local Plan; including within a 400m buffer around the Town Centre based strategies*:
 - a. Vauxhall Nine Elms Battersea Opportunity Area (including Battersea Design and Technology quarter)
 - b. Roehampton Regeneration Area
 - c. The Wandle Valley
 - d. Wandsworth's Riverside
 - e. Balham*
 - f. Clapham Junction and York Road/Winstanley Regeneration Area*
 - g. Putney*
 - h. Tooting*
 - i. Wandsworth Town, including the Wandle Delta sub-area*
 - 2. The application site is a Local Plan Site Allocation, unless the proposed use is not in accordance with the allocations of the Local Plan.
 - 3. Redevelopment of an existing single residential property or its ancillary uses.
 - 4. Minor development*, conversions and change of use (except changes of use to a caravan, camping or chalet site, or to a mobile home or park home site.)

For development sites falling outside of these areas, the default area of search for the Sequential Test to be applied will be the borough administrative area, unless justification is provided for a smaller area as described in the Strategic Flood Risk Assessment.

- B. Development will be guided to areas of lower risk, both on-site and by applying the 'Sequential Test' as set out in national policy guidance, and where required, the 'Exception Test'. Inappropriate developments and land uses will be refused in accordance with national policy and guidance, and the Council's Strategic Flood Risk Assessment (SFRA). In flood zones 2 and 3, all planning applications (or other relevant applications) on sites of 10 or more dwellings or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted. Where a Flood Risk Assessment is required, on-site attenuation solutions to alleviate fluvial and/or surface water flooding over and above floodplain compensation is required. The consideration of potential increases in flood risk off-site where development would result in a loss of floodplain storage is also required with suitable mitigation proposed in accordance with the advice of the Environment Agency and Lead Local Flood Authority.

Table 15.1 - Flood Zones - Development Restrictions

Flood Zone	Land uses and development - restrictions	Sequential Test	Exception Test	Flood Risk Assessment
Zone 3b	The functional floodplain as identified in the Council's SFRA will be protected by not permitting any form of development on undeveloped sites unless it: <ul style="list-style-type: none"> • is for Water Compatible development; • is for essential infrastructure which has to be located in a flood risk area and no alternative locations are available and it can be demonstrated that the development would be operational and safe, result in no net loss of flood storage, not impede water flows, not increase flood risk elsewhere and where possible would reduce flood risk overall. 	Required for essential infrastructure	Required for essential infrastructure	Required for all development proposals

	<p>Redevelopment of existing developed sites will only be supported if there is no intensification of the land use and a net flood risk reduction is proposed; any restoration of the functional floodplain will be supported.</p> <p>Proposals for a change of use or conversion to a use with a higher vulnerability classification will not be permitted.</p> <p>To provide safe refuge, and depending on location, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. Safe access and egress at a Low Hazard rating is required.</p>			
Zone 3a (Tidal/Fluvial)	<p>Land uses are restricted to:</p> <ul style="list-style-type: none"> • Essential Infrastructure; • Water Compatible; • Less Vulnerable; and • More Vulnerable development <p>Highly Vulnerable developments will not be permitted.</p> <p>To provide safe refuge, and depending on location, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300m above the 1 in 100 inclusive of an allowance for climate change flood level. In areas of defended tidal flood risk, as a minimum, all sleeping accommodation must be located on finished floor levels above the appropriate extreme water level as advised by the Environment Agency. -Safe access and egress at a Low Hazard rating is required.</p> <p>Self-contained residential basements will not be permitted in locations at risk of fluvial, or tidal defended flooding.</p> <p>Bedrooms at basement level will not be permitted in fluvial flood risk areas subject to with the exception of the requirements set out in Table 15.2</p>	Required for all developments unless exceptions outlined in the supporting text apply	Required for more vulnerable development	Required for all development proposals
Flood Zone 2	<p>No land use restrictions.</p> <p>To provide safe refuge, and depending on location, finished floor levels for less and more vulnerable development must be raised to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. In areas of fluvial flood risk, finished floor levels for all development must be raised to a minimum of 300mm above the 1 in 100 inclusive of an allowance for climate change flood level. In areas of defended tidal flood risk, as a minimum, all sleeping accommodation must be located on finished floor levels above the appropriate extreme water level as advised by the Environment Agency. Safe access and egress at a Low Hazard rating is required.</p>	Required for all developments unless exceptions outlined in the supporting text apply	Required for highly vulnerable development	Required for all development proposals unless for change of use from water compatible to less vulnerable

	<p>self-contained residential basements will not be permitted in locations at risk of fluvial, or tidal defended flooding.</p> <p>Bedrooms at basement level will not be permitted with the exception of in fluvial flood risk areas subject to the requirements set out in Table 15.2</p>			
Flood Zone 1	<p>No land use restrictions.</p> <p>Where development over 1 ha is proposed or there is evidence of flooding from another localised source opportunities should be sought to:</p> <ul style="list-style-type: none"> • Ensure that the management of surface water runoff from the site is considered early in the site planning and design process; • Ensure that proposals achieve an overall reduction in the level of flood risk to the surrounding area, through the appropriate application of sustainable drainage techniques. 	Not applicable	Not applicable	<p>A sustainable Drainage Statement is required for all major development.</p> <p>Where development over 1 ha is proposed or for all other development proposals where there is evidence of a risk from other sources of flooding, including surface water, groundwater and sewer flooding.</p>

Basements and Subterranean Developments

G.F. Basements within flood affected areas of the borough represent a particularly high risk to life as they may be subject to very rapid inundation. Applicants will have to demonstrate that their proposal complies with the following:

Table 15.2 – Requirements for Basements in Flood Zones

Flood Zone 3b	Basements, basement extensions, conversions of basements to a higher vulnerability classification or self-contained units will not be permitted.
Flood Zone 3a (Tidal)	<p>In areas of Extreme, Significant and Moderate Breach Hazard (as set out in the Council's SFRA):</p> <ul style="list-style-type: none"> • New basements: <ul style="list-style-type: none"> ○ Restricted to Less Vulnerable / Water Compatible use only. ○ 'More Vulnerable' uses will only be considered if a site-specific Flood Risk Assessment demonstrates that the risk to life can be managed. Bedrooms at basement levels will not be permitted. ○ 'Highly Vulnerable' uses such as self-contained basements/bedrooms will not be permitted. • Existing basements: <ul style="list-style-type: none"> ○ <u>No basement extensions, conversions or additions for 'Highly Vulnerable' uses.</u> ○ <u>'More Vulnerable' uses will only be considered if a site-specific Flood Risk Assessment demonstrates that the risk to life can be managed.</u> <p>In areas of Low or No Breach Hazard (as set out in the Council's SFRA):</p> <ul style="list-style-type: none"> • New basements: <ul style="list-style-type: none"> ○ If the Exception Test (where applicable) is passed, basements may be permitted for residential use where they are not self-contained or, in locations at risk of fluvial flooding, are not used for bedrooms. • Existing basements: <ul style="list-style-type: none"> ○ <u>Basement extensions, conversions or additions may be permitted for existing developments where they are not self-contained</u> <p>If a basement, basement extension or conversion is acceptable in principle in terms of its location, it must:</p> <ul style="list-style-type: none"> • have safe access threshold levels and internal staircases provided to access floors to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. The only exception to this is for basement development within areas of defended tidal flood risk, where the applicant has demonstrated that a permanent fixed barrier is in place to prevent floodwater from entering any sleeping accommodation that is located below the extreme water level in accordance with the hazard advice above. Flood resistant and resilient design techniques must be adopted. <p>In areas at risk of surface water flooding, basements, basement extensions and basement conversions must be protected by appropriate mitigation such as raising floor level thresholds, providing storage for surface water or other SuDS proposal. Basements will not be permitted in areas of high surface water risk without appropriate mitigation.</p>
Flood Zone 2 (Tidal)	<p>In areas of Extreme, Significant and Moderate Breach Hazard (as set out in the Council's SFRA):</p> <ul style="list-style-type: none"> • New Basements: <ul style="list-style-type: none"> ○ If the Exception Test (where applicable) is passed, basements may be permitted for residential use where they are not self-contained or, in locations at risk of fluvial flooding, are not used for bedrooms. • Existing Basements: <ul style="list-style-type: none"> ○ Basement extensions, conversions or additions may be permitted for existing developments where they are not self-contained or, in locations at risk of fluvial flooding, are not used for bedrooms. <p>If a basement, basement extension or conversion is acceptable in principle in terms of its location, it must:</p> <ul style="list-style-type: none"> • have safe access threshold levels and internal staircases provided to access floors to a minimum of 300mm above the 1 in 100 fluvial level inclusive of an allowance for climate change, or an appropriate extreme water level as advised by the Environment Agency for defended tidal areas. The only exception to this is for basement development within areas of defended tidal flood risk, where the applicant has demonstrated that a permanent fixed barrier is in place to prevent floodwater from entering any sleeping accommodation that is located below the extreme water level in accordance with the hazard advice above. Flood resistant and resilient design techniques must be adopted.

	In areas at risk of surface water flooding, basements, basement extensions and basement conversions must be protected by appropriate mitigation such as raising floor level thresholds, providing storage for surface water or other SuDS proposal. Basements will not be permitted in areas of high surface water risk without appropriate mitigation.
Flood Zone 1	In areas at risk of surface water flooding, basements, basement extensions and basement conversions must be protected by appropriate mitigation such as raising floor level thresholds, providing storage for surface water or other SuDS proposal.

Sustainable Drainage

D.G. The Council will require the use of Sustainable Drainage Systems (SuDS) in all development proposals. Applicants will have to demonstrate that:

1. A reduction in surface water discharge to greenfield run-off rates will be achieved unless it is clearly demonstrated that this is technically unfeasible.
2. Where it has been clearly demonstrated that greenfield run-off rates are not technically feasible, at least a 50% attenuation will be required, with an objective of achieving 100% attenuation of the existing (undeveloped) site's surface water runoff at peak times based on the levels existing prior to the commencement of development.
3. There should be no loss of flood storage in areas affected by fluvial flooding and any increase in built footprint within the fluvial 1 in 100 (inclusive of climate change allowance) flood extent must be compensated for on a level for level, volume for volume basis.
4. Where minor development is proposed, schemes should not affect floodplain storage or flow routes through the incorporation of mitigation measures in line with the Construction Industry Research and Information Association's guidance on SuDS.

E.H. The Council will require, where necessary, financial contributions through a S106 planning obligation towards flood protection measures and SuDS in accordance with the Council's Planning Obligations SPD or successor document.

F.I. Applicants must demonstrate that surface water must be drained to ground water courses or a surface water sewer and not to the foul water sewer.

Flood Defences


G.J. Applicants will be required to demonstrate, where relevant, that their proposal complies with the following:

1. That the effectiveness, stability and integrity of flood defences, river banks and other formal and informal flood defence infrastructure will not be compromised.
2. Ensures that the proposal does not prevent essential maintenance and upgrading of any formal or informal flood defence infrastructure to be carried out in the future in a cost-effective manner in agreement with the Environment Agency.
3. All development should be set back 16 metres from the landward side of tidal flood defences, and 8m from the top bank of all other main rivers (including from the outer edge of culverted main rivers) That any physical structures are set back from river banks and existing flood defence infrastructure unless it can be clearly demonstrated that the effectiveness of such infrastructure would not be compromised (the distances being 16 metres for the tidal Thames and 8 metres for other rivers including those culverted).
4. Has taken into account the requirements of the Environment Agency's Thames Estuary 2100 Plan, and demonstrates how current and future requirements for flood defences have been incorporated into the development, including the need to raise flood defences to the required levels whilst enhancing the riverside environment in accordance with the Thames Estuary 2100 Plan.
5. Would not result in the removal of formal or informal flood defences unless this forms part of an agreed flood risk management strategy adopted or approved by the Environment Agency.
6. That the opportunities to undertake river restoration and enhancement and implement natural flood management measures as part of a development to make space for water have been assessed and where technically feasible incorporated into the proposal. Enhancement of existing assets, such as through de-culverting, the using bio-engineered river walls, and raising bridge soffits to take into account climate change should be accommodated in development proposals where technically feasible.
7. The culverting of watercourses and building over culverts will not be supported. Deculverting and the naturalisation of watercourses is encouraged where possible. Culverting of water courses and building over culverts will be resisted unless it can be clearly demonstrated that such approaches are necessary in order to achieve the delivery of development. Deculverting is encouraged where possible.

Multifunctional Benefits

H.K. In addressing flood mitigation opportunities to bring other benefits including recreational, habitat creation to support biodiversity and urban greening will be encouraged.

**Minor development is defined in Section 1b 'Interpretation of Table' of Schedule 4 'Consultations before the grant of permission' of the Town and Country Planning (Development Management Procedure)(England) Order 2015 (The Town and Country Planning (Development Management Procedure)(England) Order 2015 (legislation.gov.uk) and in Paragraph: 046 Reference ID: 7-046-20140306 of the Planning Practice Guidance (Flood risk and coastal change).*

Signed on Behalf of the London Borough of Wandsworth		
Name and Position	Signature	Date
Andrea Kitzberger-Smith Spatial Planning and Design Team Manager		03/08/2022

Signed on Behalf of the Environment Agency		
Name and Position	Signature	Date
James Togher South London Sustainable Places Team Leader, Environment Agency	James Togher	08/08/2022

