Sequential and Exception Test
City Plan Part Two Update

November 2019
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Background

Brighton & Hove City Council is preparing the City Plan Part 2. As part of this process the council has prepared an evidence base which will support the policies and allocations in the document. This Sequential Test and Exception Test is part of the evidence base and informed by the SFRA Update (October 2018). The findings of the SFRA along with other factors were taken into account with the site selection process for the draft CPP2.

Introduction

Brighton and Hove City Council is committed to delivering sustainable high quality development that is designed to mitigate and adapt to the effects of climate change. While Brighton and Hove is a coastal authority, the relatively steep topography and high ground levels, in comparison to sea levels, mean that flood risk from the sea is generally low and constrained to relatively small areas which are Portslade (including the eastern arm of Shoreham Harbour) and Brighton Marina. There are also no rivers in the Brighton and Hove area and therefore no fluvial flood risk. The Risk of Flooding from Rivers and the Sea mapping set, prepared by the Environment Agency therefore indicates the risk of flooding from these sources to be relatively low.

Flooding has however affected Brighton and Hove repeatedly over the past 20 years, with surface and groundwater flooding being the key sources of flooding. There is a significant surface water flood risk across Brighton and Hove. It is therefore essential that future development takes into account and does not increase the risk of surface water or groundwater flooding. The council’s Strategic Flood Risk Assessment Update (2018)\(^1\) details the extent of flood risk in the city and also provides an overview of historic flooding in Brighton & Hove.

Policy Context

The National Planning Policy Framework\(^2\) applies a Sequential Test and an Exception Test to the development of land which could be affected by flooding. The aim of the sequential test is to as far as reasonably possible, steer new development to areas with the lowest risk of flooding taking into account of climate change and the vulnerability of future uses to flood risk. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment provides the basis for applying the test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.

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\(^1\) Brighton & Hove City Council Level 1 and Level2 Strategic Flood Risk Assessment Update 2018

\(^2\) NPPF 2018 – section 14 paragraphs 158-159
If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test\textsuperscript{3} should be applied. For the exception test to be passed it should be demonstrated that:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Both elements of the exception test should be satisfied for development to be allocated or permitted.

The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance. Within each flood zone, surface water and other sources of flooding also need to be taken into account in applying the sequential approach to the location of development.

\textbf{Brighton & Hove City Plan Part 1}

The City Plan Part 1 was adopted in March 2016. The City Plan Part 1 sets out the strategy for accommodating growth in the city to 2030. It also identifies the development needs for the city over the plan period.

The Council’s overarching spatial strategy for the city to 2030 set out in the City Plan Part 1 is to direct future development to eight broad areas of the city where identified capacity exists to accommodate significant levels of development. These areas are identified as ‘Development Areas’ and this approach to accommodating development was considered in the 2012 SFRA\textsuperscript{4} which informed the preparation of the City Plan Part 1. All except one of these areas are in the existing urban area of Brighton & Hove.

Within these Development Areas, the City Plan Part 1 identifies strategic allocations where the amounts/ types of development are identified and allocated see table 1 below:

\begin{footnotesize}
\begin{itemize}
\item[\textsuperscript{3}] NPPF 2018 –section 14 paragraphs 160-161
\item[\textsuperscript{4}] \url{https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/downloads/ldf/Strategic_Flood_Risk_Assessment_Jan_2012.pdf}
\end{itemize}
\end{footnotesize}
Table 1 Summary of Development Proposals in the adopted City Plan Part 1

<table>
<thead>
<tr>
<th></th>
<th>New Homes</th>
<th>New Employment Floorspace (sq m)</th>
<th>New Retail floorspace (sq m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA1 Brighton Centre and Churchill Square</td>
<td>20</td>
<td></td>
<td>Minimum 20,000 comparison goods</td>
</tr>
<tr>
<td>DA2 Brighton Marina</td>
<td>1940</td>
<td>2,000</td>
<td>5,000</td>
</tr>
<tr>
<td>DA3 Lewes Road</td>
<td>875</td>
<td>15,600</td>
<td></td>
</tr>
<tr>
<td>DA4 New England Quarter and London Road</td>
<td>1130</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>DA5 Eastern Road and Edward Street</td>
<td>515</td>
<td>18,200 – 23,200</td>
<td></td>
</tr>
<tr>
<td>DA6 Hove Station</td>
<td>525</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>DA7 Toad’s Hole Valley</td>
<td>700</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>DA8 Shoreham Harbour</td>
<td>300</td>
<td>7,500</td>
<td></td>
</tr>
<tr>
<td>Rest of the City:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Within the built up area</td>
<td>4130</td>
<td></td>
<td>11,257&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>b) Within the urban fringe</td>
<td>1060</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small site development&lt;sup&gt;6&lt;/sup&gt;</td>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13210</strong></td>
<td><strong>100,500 to 105,500</strong></td>
<td><strong>25,000</strong></td>
</tr>
</tbody>
</table>

<sup>5</sup> Includes extant planning permissions not included within Development Area floorspace figures and potential of 6,500 sq m of employment floorspace at Patcham Court Farm (see CP3)

<sup>6</sup> Development from small identified sites estimated to be 765 units pre-plan adoption and small windfall development across the plan period is 1,250 units
City Plan Part 1 Sequential Test and Exception Test

A Sequential Test and Exception Test [https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/downloads/pdf/cp_Sequential_and_Exception_Test.pdf](https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/downloads/pdf/cp_Sequential_and_Exception_Test.pdf) was carried out for the City Plan Part 1. A sequential Test was required as two Development Areas were found to be wholly or partly in Flood Zone 2 and 3a:

- DA2 Brighton Marina, Gas Works and Block Rock Area
- DA8 Shoreham Harbour

A Sequential Test was undertaken and all the proposed Development Areas passed the Sequential Test.

An Exception test was required for those sites found to be wholly or partly in Flood Zone 2 and 3a (DA2 Brighton Marina, Gas Works and Black Rock Area and DA8 Shoreham Harbour). The Sequential and Exception Test concluded that:

…it is considered that the wider sustainability benefits of development at both locations outweigh the flood risks. Site specific FRAs produced to support proposals will ensure that development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere. It is therefore considered appropriate to allocate both sites in the Brighton & Hove City Plan.

During the course of the City Plan Part 1 examination the Urban Fringe was reconsidered as a broad area of opportunity for housing with an allowance of 1,200 homes. An update to Sequential and Exceptions Test was undertaken which also took into account changes in quantums of development in the Development Areas: [https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/Sequential%20%26%20Exceptions%20Update%20July%202014%20FINAL_0.pdf](https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/Sequential%20%26%20Exceptions%20Update%20July%202014%20FINAL_0.pdf)

The update came to similar conclusions that the sequential and exception test had been addressed and passed.

Subject to modifications the City Plan Part One was found sound and adopted in 2016.

The adopted City Plan Part One also contains the strategic city wide policy regarding flooding. Policy CP11 Managing Flood Risk states that: ‘The council will seek to manage and reduce flood risk and any potential adverse effects on people or property in Brighton & Hove, in accordance with the findings of the Strategic Flood Risk Assessment (SFRA)”.

Further site specific requirements to manage flood risk are set out in adopted City Plan Part 1 Policies DA2 Brighton Marina, Gas Works and Black Rock Area; DA8 Shoreham Harbour and SA1 The Seafront.
Brighton & Hove City Plan Part 2

The role of the City Plan Part 2 is to support the implementation and delivery of City Plan Part one; to build on the strategic policy framework; to identify and allocate additional development sites in accordance with the adopted City Plan Part 1 Policy CP1 Housing Delivery and to set out a detailed development management policy framework to assist in the determination of planning applications.

The preparation of the CPP2 can play an important role in strategic flood risk management. The overall aim should be to direct development to areas of lower flood risk wherever possible and resist development in areas of flood risk unless the type of development is commensurate with the type of flood risk. Draft Policy DM43 Sustainable Urban Drainage requires the design and layout of all new buildings and development of car parking and hard standing to incorporate appropriate sustainable drainage systems capable of ensuring there is a reduction in the level of surface water leaving the site. The emerging SUDS SPD will assist both the Council and developers deliver SuDs schemes.

CPP2 Site Identification and Assessment Process

The CPP2 Housing and Mixed Use Site Allocations Topic Paper (2018) sets out the staged-approach undertaken by the council to identify all potential housing sites during the preparation of the draft CPP2. A range of evidence has been used to inform the site assessments including early drafts of the SFRA Update (JBA 2018).

A long list of c. 307 sites was identified based on the 2016 Strategic Housing Land Availability Assessment. This long list of site was provided to the SFRA consultant JBA and considered in the SFRA Level 1 Assessment along with the potential additional strategic sites that emerged during scoping consultation on the City Plan Part 2.

The draft Level 1 SFRA informed the detailed consideration of the sustainability implications of development for sites in the City Plan Part 2 Site Assessment Stage 2 Review List. This detailed consideration was achieved through site assessments against the Sustainability Appraisal Framework. Site profiles were produced for all Stage 2 Review sites to assist the assessment process.

Following the sustainability options assessment, sites were removed to form the Stage 2 review list if:

- Completed
- Already allocated in the CPP1

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8 The stage 1 (un-sifted) long list of SHLAA sites includes the Strategic Allocations which were identified in City Plan Part 1 but not yet completed. Further information can be found in the Housing and Mixed Use Site Allocation Topic Paper June 2018
9 Which included a ‘call for sites’ where landowners/ developers could put forward new sites for consideration for allocation in the CPP2.
10 Site profiles are included in Appendix 4 of the Housing and Mixed Use Sites Allocations Paper June 2018.
• Sites provided less than 10 units
• Sites not considered capable of being delivered in plan period
• Sites considered inappropriate for allocation due to an implemented planning permission or covered by other policies (see recommendations of Housing and Employment Land Study)
• Sites were not available (due to long-term use identified through contact with site owners/agents)

Site allocations in the urban fringe were informed by two Urban Fringe Assessments; the initial 2014 assessment which formed background evidence to the CPP1 and the 2015 Further Assessment of Urban Fringe Sites which comprised further assessments relating to landscape, ecology and archaeology. The outcomes of these further assessments led to refinements to the potential development areas considered suitable for housing. Further consideration was given to the likelihood of sites being available for development within the plan period due to their current uses (e.g. allotments).

Updated Evidence - SFRA 2018

The 2018 SFRA\(^\text{11}\) takes into account the latest flood risk information and available data including more detailed groundwater vulnerability mapping and surface water flood mapping.

The NPPF and PPG indicate that within each flood zone, surface water and other sources of flooding also need to be taken into account in applying the sequential approach to the location of development.

The council’s 2018 SFRA introduces the concept of ‘Surface Water Flood Zones’ to define areas potentially at risk from surface water flooding. The aim of this is to encourage sustainable development in Brighton and Hove; to provide for more strategic consideration of surface water flood risk in the land allocation and planning process and secure appropriate commitments that development will be safe for its intended lifetime and not have an adverse effect on third parties.

The SFRA 2018 did not recommend that Surface Water Flood Zones are used as part of the Sequential Test as applies to river or sea flood risk. This means that if a development site is located in a Surface Water Flood Zone it does not automatically cause the site to fail the Sequential Test or trigger the Exception Test\(^\text{12}\). Rather the SWFZ introduce an additional requirement to perform FRA’s that will be submitted in support of planning applications and increases the emphasis that the site layout of a development should consider a sequential

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approach and should include consideration of surface water flood risk and how it is managed.

The SFRA has identified that areas of the city are at high risk of flooding from surface water, groundwater and tidal sources. Therefore, proposed development sites at such locations will be required to satisfy the Sequential and, where necessary, Exception Tests in accordance with the updated 2018 NPPF. The presence of extensive surface water risk zones introduces a requirement to demonstrate that proposed development is safe from surface water flood risk over the intended life.

The 2018 SFRA recommended that the council revisit the Sequential Test, and Exception Test undertaken for the CPP1 where applicable, and confirm that the conclusions are still valid based on the new evidence presented in the SFRA.

The SFRA 2018 also recommended that new development and re-development of land should wherever possible seek to opportunities to reduce overall level of flood risk at the site.

**The Sequential Test Update**

**Methodology**

A description of how flood risk should be taken into account in the preparation of Local Plans is outlined overleaf\(^{13}\).

Planning Policy Guidance sets out a staged approach to undertaken the Sequential Test. This has been slightly modified to relate to the particular circumstances in Brighton & Hove.

\(^{13}\) Taken from Brighton & Hove SFRA Update 2018, JBA Consulting
Stage 1 a) Can development be allocated in Flood Zone 1?

Much of the city is located within Flood Zone 1. The SFRA Level 1 Screening was applied to the SHLAA long list of potential housing sites.

The following 5 sites were not located in Flood Zone 1 and therefore need to proceed to the Sequential Test:

- **Brighton Marina Inner Harbour** (located within DA2 Brighton Marina, Gas Works, and Black Rock Area in the adopted CPP 1)
- **Land at Brighton Marina comprising Outer Harbour West Quay (and adjoining land) Brighton** (located within DA2 Brighton Marina, Gas Works and Black Rock Area in the adopted CPP1 planning permission and partially completed)
• **9-16 Aldrington Basin/ Land South of Kingsway Basin Road North** (located within DA8 Shoreham Harbour in the adopted CPP1)
• **Britannia House, 332 Kingsway** (site along with 336 Kingsway Hove is allocated in the Shoreham Harbour JAAP as AB4 within Policy CA2 Aldrington Basin)
• **336 Kingsway, Hove** (site along with Britannia House, 332 Kingsway Hove is allocated in the Shoreham Harbour JAAP as AB4 within Policy CA2 Aldrington Basin)

**Stage 1b) Can development be allocated in Flood Zone 1 avoiding flooding risk from other sources?**

It is normally reasonable to presume and state that individual sites that lie in Zone 1 satisfy the requirements of the Sequential Test; however, consideration should be given to risks from all sources, including surface water and groundwater flood risk.

In Brighton & Hove, for a site to be considered at higher risk of flooding it would meet the following conditions:

- Surface Water Accumulation Zone >50% of site and sites sized >1000 m²
- Sites where groundwater levels are between the surface and 0.5 m in >50% of the site and sites sized >1000 m²

A total of 291 sites\(^{14}\) did not need to proceed to the Sequential Test – in that they were entirely in Flood Zone 1 and were at a low flood risk from other sources of flooding and therefore the location is appropriate in flood risk terms for all development.

The following 17 sites were highlighted by the Level 1 Screening as being within the FZ1 but found to be at a higher risk of flooding (as defined above) and therefore needed to proceed to the Sequential Test:

- Cover’s Yard Melbourne Street Brighton
- Rear of Rutland Court Rutland Gardens Hove
- Goldstone Retail Park, Old Shoreham Road, Newtown Road & Goldstone Road Hove
- 46-54 Old London Road Patcham Road
- 331 Kingsway Hove
- EDF Portland Road Business Park Portland Road Hove
- Telecom House 123-135 Preston Road Hove
- 87 Preston Road Brighton & Hove City Council
- Boots and Somerfield 118-132 London Road Brighton
- Sackville Hotel Sackville Gardens Hove
- 70 and site of Chrome Productions Ltd, Goldstone Lane, Hove part of allocation
- UF Site 16 Land at and adjoining Horsdean Recreation Ground Patcham Brighton
- 145 Vale Avenue
- 18-30 Kingsthorpe Road Hove
- Housing Office Victoria Road, Portslade (adj Hove Town Hall)

\(^{14}\) SFRA 2018 Level 1 Site Screening July 2019
Stage 2a Can development in Flood Zones 2 and 3a be redirected to areas of Flood Zone 1?

The rationale for the adopted CPP1 strategy for accommodating growth in identified Development Areas was to aid regeneration and redevelopment; assist in meeting the strategic objectives of the CPP1 and in order to meet the identified development needs of the city. The Sustainability Appraisal (2012) documents the various options considered by the council through the process of CPP1 plan preparation relating to both the scale of development as well as different spatial approaches and the testing of individual Development Areas.

Alternative strategic locations for development were considered in the previous Sequential Test and Exception Test (2012) and through the 2012 Sequential Test it was considered that there was not sufficient capacity to accommodate significant development opportunities within these other areas of the city within Flood Zone 1.

The previous Sequential Test also considered whether the proposed amount of development could be alternatively located within FZ1 by breaking it down into a greater number of smaller allocations (intensifying development within another Development Areas; dividing up the proposed development between other Development Areas and relying on windfalls. None of these options were considered practical. There were no reasonably available alternative sites/ broad locations appropriate to accommodate the scale of the proposed development identified in adopted Development Areas 2 and 8 in Flood Zone 1.

The flood risk vulnerability of the land uses proposed in Development Areas 2 and 8 were taken into account in the 2012 SFRA and Table # in Appendix 1 re-provides the analysis of flood risk vulnerability as this has not changed since the adoption of the CPP1.

- The council considers that the conclusions of the CPP1 Sequential Test remain appropriate for sites outside Flood Zone 1.
- The adopted City Plan Part 1 and its accompanying Sustainability Appraisal and Sequential and Exception Test recognised the wider regeneration and sustainability benefits of allocating development in DA2 Brighton Marina, Gas Works and Black Rock Site and at DA8 Shoreham Harbour.
- Development has commenced on a number of sites within these Development Areas in accordance with the City Plan Part 1. Exception Tests were carried out on these Development Areas in 2012 and a Level 2 SFRA were prepared which examined in detail various aspects of risk such as depth, rate of onset and residual risks to people and property.
- It should be noted that the Kingsway/Basin Road North site proposed for allocation in the draft City Plan Part 2 has an extant planning permission and a FRA was
undertaken as part of the planning application. Therefore, no updated Level 2 assessment was carried out for this site.

- Through the SFRA 2018 Update – an updated Level 2 SFRA has been prepared for Brighton Marina Inner Harbour (located within DA2 Brighton Marina, Gas Works, and Black Rock Area in the adopted CPP 1) given that planning applications/development have not yet come forward on this site.
- The role of the CPP2 is to identify and allocate development sites in accordance with the adopted City Plan Part 1 Policy CP1 Housing Delivery to enable the delivery of sufficient new housing to meet the adopted strategic housing target; it does not seek to revisit the adopted approach to accommodating growth in the city.
- The role of the City Plan Part 2 is not to revisit adopted City Plan Part 1 strategic site allocations.

**Stage 2b Can development at higher risk of flooding from other sources in Flood Zone 1 be redirected to areas of lower risk of flooding from other sources?**

The Level 1 SFRA identified that 17 proposed development sites were at locations at higher risk of flooding from surface water and groundwater sources. Applying a sequential approach based on the location of development in relation to the Surface water Flood Zones is not considered appropriate. However, those sites at a higher risk of flooding from other sources underwent the SFRA Level 2 assessments in order to provide further information on the nature of the risk and provide guidance on the evidence to be submitted with Flood risk Assessments.

Through the examination of the CPP1 the council was asked by the Inspector to rigorously assess all opportunities to meet housing need and three potential sources were reconsidered: windfall sites; urban fringe sites and land allocated for employment use. The Inspector acknowledged the real physical and environmental constraints of the City with limited opportunities to increase the supply of land for housing.

It should be noted that the City Plan Part One, seeks to meet only 44% of the objectively assessed need for new housing. The Inspector considered this to be a very significant shortfall which has important implications for the social dimension of sustainable development. The adopted City Plan Part 1 target of 13,200 new homes is expressed as a minimum, which the Inspector felt offered scope for that number to be increased when more detailed consideration of individual sites is undertaken for the preparation of the City Plan Part Two.

The role of the CPP2 is to identify and allocate development sites in accordance with the adopted City Plan Part 1 Policy CP1 Housing Delivery to enable the delivery of sufficient new housing to meet the adopted strategic housing target.

The CPP2 Site Assessment process has assessed all potential sources of supply of housing sites. Through the site assessment process, sites were only discounted for allocation if they were already allocated in the CPP1; completed; under 10 units in size; found to be

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15 BH2012/04044 (9-16 Aldrington Basin/Land South Of Kingsway, Basin road North)
16 The Level 2 SFRA can be found in Appendix D of the SFRA2018 Update.
undeliverable or unavailable (because they are in current active use) or required for another use for which a need has been identified.

- The need and quantum of development has been established through the adopted City Plan Part 1,
- All of the 17 sites are in Flood Zone 1 and all but one of the sites are brownfield sites where the potential for housing/ redevelopment opportunities have been identified through the Strategic Housing Land Availability Assessment.
- Potential for housing development within the Urban Fringe was considered as part of the CPP1 examination. This was addressed in the Sequential and Exception Test Update.

There are therefore no reasonable available alternative sites/ broad locations to avoid allocating development sites in areas of Flood Zone 1 in the city at higher risk of other sources of flooding.

**Stage 3 Can development in Flood Zone 3a be redirected to Flood Zone 2?**

The SFRA Update illustrates that apart from a thin coastal strip, Flood Zone 2 is overlain by Flood Zone 3 in Brighton & Hove, therefore there are no sites in Zone 2 where development could be reasonably be redirected to.

As indicated under stage 2a) the adopted City Plan Part 1 and its accompanying Sustainability Appraisal and Sequential and Exception Test recognised the wider regeneration and sustainability benefits of allocating development in DA2 Brighton Marina, Gas Works and Black Rock Site and at DA8 Shoreham Harbour and development is underway on a number of these allocated sites within these Development Areas.

**Can the more flood sensitive development use types be directed to parts of the site where the risks are lower for both the occupiers and the premises themselves?**

Appendix 1 provides the analysis of flood vulnerability for those sites outside Flood Zone 1 that was undertaken for the CPP1 Sequential and Exception Test. The approach for these areas as set out in the SFRA 2012 is to maximise opportunities to reduce flood risk to the community, for example by locating the higher vulnerability class uses in the areas of lowest flood risk.

City Plan Policy CP11 Flood Risk and the SFRA Update will be used to where possible direct the more vulnerable uses away from the sources of flooding and closer to the lower risk parts of Flood Zone 3. The most sensitive uses on each site will be guided to the areas of relatively lower flood risk through more detailed discussion at the planning application stage. In all cases it must be demonstrated that an adequate standard of safety can be achieved through a site specific Flood Risk Assessment and will comply with Environment Agency requirements and the Exceptions Test if applicable.
Stage 4 Is development appropriate in remaining areas?

The Level 1 SFRA identified that 17 proposed development sites within the Flood Zone 1 were at locations at higher risk of flooding from surface water and groundwater and >1000m² in size. The NPPG at paragraph 67, Table 3 sets out the flood risk vulnerability and flood zone compatibility and where the Exception Test needs to be applied. Whilst the table indicates that vulnerable uses are appropriate in flood zones 1 and that exception tests are not required the notes to the table indicates that the table ‘does not reflect the need to avoid flood risk from sources other than rivers and seas’.

Through the Site Assessment process for the City Plan Part 2, 10 of the sites were not considered further for allocation following the Stage 2 Sites Review because:

- They were allocated sites in the adopted City Plan Part 1 (not commenced); or
- other planning considerations identified through the Site Allocation Site Assessment process (such as not considered available in plan period); or
- they benefitted from planning permission or where planning applications were under consideration and therefore flood risk were being considered at the PA stage with appropriate FRA undertaken

Table 2 overleaf provides an analysis of flood risk vulnerability of the potential housing sites identified in the CPP2 Stage 1 Site Review and whether these went through to the CPP2 Site Assessment Stage 2.
Sequential Test Conclusion

291 potential development sites that underwent the Level 1 Strategic Flood Risk Assessment are entirely within FZ1 and have low risk of surface water flooding/groundwater vulnerability passed the first stage of the Sequential Test.

5 sites have had to go through the Sequential Test for allocation for residential/mixed use site as the identified development needs cannot be accommodated on Flood Zone 1. A number of these sites are Strategic Allocations in the adopted City Plan Part 1 and/or have planning permissions. However the conclusions of the Sequential Test have been reconsidered and are considered still valid based on the new evidence set out in the SFRA 2018.

17 potential development sites were in Flood Zone 1 were found to have higher risk of flooding from other sources. Applying a sequential approach based on the location of development in relation to the Surface Water Flood Zones is not considered appropriate. However given the adopted CPP1 strategy for accommodating growth in the city; the identified housing delivery target and the constraints in available land in the city, there are anyway considered to be no reasonable available alternative sites/broad locations to avoid allocating development sites in areas of Flood Zone 1 in the city at higher risk of other sources of flooding.

Through the SFRA those sites at a higher risk of flooding from other sources were considered for the SFRA Level 2 assessments in order to provide further information on the nature of the risk and provide guidance on the evidence to be submitted with Flood risk Assessments. Of the 17 sites, 10 sites did not go forward for further consideration for CPP2 site allocation due to other planning considerations and therefore did not go through the Level 2 assessment. A number of the sites had unimplemented planning permissions and therefore did not go through to the Level 2 Assessment. 4 sites went through to the Level 2 assessment and this is shown in Table 3.
### Table 2 - Flood Risk Vulnerability of Potential Development Sites and whether they went forward to CPP2 Site Assessment Stage 2

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Flood Zone</th>
<th>Is the site at low risk according to BHCC criteria</th>
<th>Existing Uses</th>
<th>Potential Uses</th>
<th>Flood Risk Vulnerability Classification</th>
<th>Was the site considered for CPP2 Site Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover’s Yard Melbourne Street Brighton</td>
<td>FZ 1</td>
<td>No - &gt; 1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Sui Generis/ Employment/ Retail</td>
<td>Residential</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>No - Completed 2013 – site did not go to Stage 2 Review List</td>
</tr>
<tr>
<td>Rear of Rutland Court Rutland Gardens Hove</td>
<td>FZ 1</td>
<td>No - &gt; 1000 m2 and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Residential</td>
<td>Residential</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>No - housing potential considered post plan period –did not go to Stage 2 Review List</td>
</tr>
<tr>
<td>Goldstone Retail Park, Old Shoreham Road, Newtown Road &amp; Goldstone Road Hove</td>
<td>FZ1</td>
<td>No - &gt; 1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Retail</td>
<td>Mixed Uses</td>
<td>More vulnerable (or highly vulnerable if basements) Less vulnerable</td>
<td>No- housing potential considered post plan period so did not go forward for allocation.</td>
</tr>
<tr>
<td>46-54 Old London Road Patcham Road</td>
<td>FZ1</td>
<td>No - &gt;1000m2 and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Residential</td>
<td>Residential</td>
<td>More vulnerable(or highly vulnerable if basements)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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17 SFRA Update
18 SFRA Update
19 SHLAA 2016 or Site Assessment Proformas
20 NPPG Table 22 Flood Risk Vulnerability Classification
<table>
<thead>
<tr>
<th>Location</th>
<th>Area</th>
<th>Uses</th>
<th>Vulnerability</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>331 Kingsway Hove</td>
<td>FZ1</td>
<td>Vacant. Employment Uses, Mixed Uses</td>
<td>Less vulnerable</td>
<td>No – Completed 2012/13 - site removed at Stage 1 Review List</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Centre D1, Offices B1</td>
<td>More Vulnerable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(or highly vulnerable if basements)</td>
<td></td>
</tr>
<tr>
<td>EDF Portland Road Business Park</td>
<td>FZ1</td>
<td>Employment Uses, Mixed Uses Residential B1a, B1b uses</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>N/a – CPP1 strategic allocation outside Development Area</td>
</tr>
<tr>
<td>Portland Road Hove</td>
<td></td>
<td></td>
<td>Less vulnerable</td>
<td></td>
</tr>
<tr>
<td>Telecom House 123-135 Preston Road</td>
<td>FZ1</td>
<td>Offices, Mixed Uses Residential B1a, B1b uses</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>N/a – CPP1 Strategic Allocation within Development Area 4 although residential potential outside plan period</td>
</tr>
<tr>
<td>Hove</td>
<td></td>
<td></td>
<td>Less vulnerable</td>
<td></td>
</tr>
<tr>
<td>87 Preston Road Brighton &amp; Hove</td>
<td>FZ1</td>
<td>Vacant. Formerly used by city college for education purposes (D1)</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>Yes - Planning Permission November 2017 (not implemented)</td>
</tr>
<tr>
<td>City Council</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boots and Somerfield 118-</td>
<td>FZ1</td>
<td>Retail, Approved application</td>
<td>Less vulnerable</td>
<td>Yes – Planning Permission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More Vulnerable</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Site Description</th>
<th>Water Accumulation Zone</th>
<th>Planning Permission Details</th>
<th>More vulnerable? (or highly vulnerable if basements)</th>
<th>Site Type</th>
<th>More vulnerable? (or highly vulnerable if basements)</th>
</tr>
</thead>
<tbody>
<tr>
<td>132 London Road Brighton</td>
<td>Water Accumulation Zone</td>
<td>(BH2018/02699)</td>
<td>(or highly vulnerable if basements)</td>
<td>BH2018/02699 (not commenced)</td>
<td></td>
</tr>
<tr>
<td>189 Kingsway - Sackville Hotel Sackville Gardens Hove</td>
<td>FZ1</td>
<td>No - &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Vacant – previous use Hotel</td>
<td>Residential</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td>Yes – Planning Permission BH2017/01108 November 2017 (not commenced)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 and site of Chrome Productions Ltd, Goldstone Lane, Hove part of allocation</td>
<td>FZ1</td>
<td>No - &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Employment Uses</td>
<td>Mixed Use Employment (B1a, B1b) Residential</td>
<td>Less vulnerable (more vulnerable if basements)</td>
</tr>
<tr>
<td>N/a - CPP1 Policy CP3.4 Site Allocation commenced 2017 site removed at Stage 1 Review List.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UF Site 16 Land at and adjoining Horsedean Recreation Ground Patcham Brighton</td>
<td>FZ1</td>
<td>No - &gt;1000m2 and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Open spaces used for recreation and outdoor sports</td>
<td>Residential</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>145 Vale Avenue</td>
<td>FZ1</td>
<td>No - &gt;1000m2 and &gt; 50% of the site has</td>
<td>Residential</td>
<td>Residential</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td>No – completed 2014 – site removed at Stage 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>FZ1</td>
<td>18-30 Kingsthorpe Road Hove</td>
<td>No - &gt;1000m² and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Employment</td>
<td>Residential</td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>----------------------------</td>
<td>-------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Property</td>
<td>FZ1</td>
<td>Housing Office Victoria Road, Portslade (adj Hove Town Hall)</td>
<td>No - &gt;1000m² and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>B1 and open space</td>
<td>Residential and re-location of bowling green in alternative location</td>
</tr>
<tr>
<td>Property</td>
<td>FZ1</td>
<td>Boundary House, Boundary Road, Hove</td>
<td>No - &gt;1000m² and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>DWP Office</td>
<td>Mixed use</td>
</tr>
<tr>
<td>Property</td>
<td>FZ1</td>
<td>Kings House, Grand Avenue, Hove</td>
<td>No - &gt;1000m² and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Vacant. Former council offices (B1)</td>
<td>Residential</td>
</tr>
</tbody>
</table>
The Exception Test

If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.

In line with paragraph 160 of the NPPF, should demonstrate that a development fulfils both of the following two criteria:

a) the development provides wider sustainability benefits to the community that outweigh flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

a) Wider Sustainability benefits to the Community that outweigh flood risk

City Plan Part 1 – Development Areas

The wider sustainability benefits to the community for Development Area 2 Brighton Marina, Gas Works, and Black Rock Area and Development Area 8 Shoreham Harbour were considered in the 2012 SFRA Sequential and Exception Test.

The Sustainability Appraisal (SA) of the City Plan Part 1 considered how well the proposed allocations contributed to the twenty-two identified sustainability objectives. The SA findings indicated that the strategic allocations at Brighton Marina and Shoreham Harbour would both have a broadly positive impact on these objectives.

City Plan Part 2 – potential site allocations

Potential CPP2 development sites which had gone through the CPP2 initial site assessment sieving process were assessed against the Sustainability Appraisal Framework to determine the sustainability implications of development on sites.

The SA site assessment process did not assess options for uses on sites. The SA process also was not used to discount sites, for example on sustainability grounds. This is mainly because the city does not have a large pool of sites to draw upon and it is not possible to discount sites e.g. because of their poor scoring against some criteria of the sustainability appraisal framework due to the need to accommodate development and meet local housing/employment targets.

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21 SFRA 2012 Appendix 2.
The site assessment process helped to inform any on-site mitigation and formed the basis for the SA assessment of the final policy where relevant, including the strategic site allocations and housing allocations policies.

The summary of the SA sites assessments is set out in Table 3 below. The full SA Site Assessments can be found within the Draft CPP2 Sustainability Appraisal\textsuperscript{22}.

\textsuperscript{22} Appendix F: https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/FINAL%20SA%2007.06.18.pdf
Table 3 Sustainability Appraisal – site appraisal summary

<table>
<thead>
<tr>
<th>Site Name</th>
<th>SFRA Flood Risk</th>
<th>CPP2 Stage 2 Site Review recommendation</th>
<th>CPP2 Sustainability Appraisal Site Assessment – overall summary</th>
<th>SFRA Level 2 Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brighton Marina Inner Harbour (located within DA2 Brighton Marina, Gas Works, and Black Rock Area in the adopted CPP 1)</td>
<td>Flood Zone 2 and 3a</td>
<td>N/A - CPP1 Strategic Site Allocation</td>
<td>N/A See CPP1 Sustainability Appraisal</td>
<td>Yes update Level 2 FRA to inform future planning applications</td>
</tr>
<tr>
<td>Land at Brighton Marina comprising Outer Harbour West Quay (and adjoining land) Brighton</td>
<td>Flood Zone 2, 3a and 3b</td>
<td>N/A CPP1 Strategic Site Allocation PLANNING PERMISSION Commenced 2014/15. Phase 1 complete 2015/16</td>
<td>N/A See CPP1 Sustainability Appraisal</td>
<td>Yes combined site with above</td>
</tr>
<tr>
<td>9-16 Aldrington Basin/ Land South of Kingsway Basin Road North (located within DA8 Shoreham Harbour in the)</td>
<td>Flood Zone 2 and 3a</td>
<td>JAAP Site Allocation Consider allocation through CPP2 PLANNING PERMISSION Commenced (Technical -</td>
<td>Overall Summary Largely positive/ no issues Development of the site is unlikely to raise any issues with the following objectives: biodiversity as the site does not contain nature conservation designations or BAP habitats; open space as site does not include designated open space; SDNP due to situation within existing urban context; heritage as does not contain any heritage or archaeological designations; transport due to proximity to sustainable transport and services; water quality as site not within GSPZ; climate change adaptation</td>
<td>No23 - Relevant planning consents include BH2012/04044, BH2016/00784 &amp;</td>
</tr>
</tbody>
</table>

23 It should be noted that the Kingsway/Basin Road North site allocated in the draft City Plan Part 2 has an extant planning permission and a FRA was undertaken as part of the planning application BH2012/04044. Therefore, no Level 2 assessment was carried out for this site.
<table>
<thead>
<tr>
<th>Britannia House, Flood Zone 2</th>
<th>Allocated for mixed</th>
<th>as site already entirely PDL; access and health due to proximity to services; community safety as not within an area of high crime deprivation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Potential adverse effects: Site is within the AQMA and any traffic to and from the site would need to travel through the AQMA. The amount of development proposed for the site could result in an increase in traffic that may have a significant effect on air quality. Site also suffers from road noise and is adjacent to the Harbour which could result in noise amenity issues. Parts of site along Basin Road North are at risk of tidal flooding, although noted that planning consent for this part of the site considered that flood risks were adequately mitigated and site undergone sequential and exception tests as part of JAAP preparation. Upper level at risk of surface water and groundwater flooding. Development of parts of site will not provide the opportunity to minimise waste e.g. through adaptive re-use of buildings and would result in demolition waste.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential positive effects: Development of the site would have positive impacts for housing. If 90 dwellings are provided this should include 40% affordable units, would equate to a site density of 160dph and would therefore make good use of land. Site would also provide land in various A and B uses, and is likely to result in a net increase in B floorspace overall as well as improved quality floorspace. Site could have potential for contamination based on surrounding industrial uses and could offer potential for remediation. Site is located within a heat network cluster area and planning consent on part of site incorporate low/zero carbon technologies. Development could provide opportunities for nature conservation enhancement including green infrastructure which would support climate change adaptation; planning consent for part of site includes a green wall. Site could provide employment/training opportunities for adjacent deprived communities. Mixed uses and active frontages within the area could increase passive surveillance and activity which can help to reduce the fear of crime.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BH2015/04408 for some parts of the site</td>
</tr>
</tbody>
</table>

24 Sites were combined and assessed as Kingsway/Basin Road North (site AB4) in Shoreham Harbour Joint Area Action Plan (JAAP) Policy CA2.
<table>
<thead>
<tr>
<th>Address</th>
<th>Flood Zone</th>
<th>Uses Description</th>
<th>Planning Permission Status</th>
<th>Development Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>332 Kingsway and 3a</td>
<td></td>
<td>uses in Shoreham Harbour JAAP Consider allocation in CPP2 Planning Permission commenced</td>
<td></td>
<td>development started BH2011/03300 extension of time for BH2008/02338 and BH2006/03628</td>
</tr>
<tr>
<td>336 Kingsway, Hove</td>
<td>Flood Zone 2</td>
<td>Allocated for mixed uses in Shoreham Harbour JAAP Consider allocation in CPP2 Planning permission commenced</td>
<td>See above 25</td>
<td>No - Relevant planning consents include BH2012/04044, BH2016/00784 &amp; BH2015/04408 for some parts of the site</td>
</tr>
<tr>
<td>Cover’s Yard, Melbourne Street</td>
<td>FZ1-</td>
<td>Completed 2013 – site removed at Stage 1 Review List</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Rear of Rutland Court, Hove</td>
<td>&gt;1000m2 and</td>
<td>Housing potential but not available - removed at Stage 1</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

25 As footnote 17
<table>
<thead>
<tr>
<th>Location</th>
<th>Size Details</th>
<th>Groundwater Details</th>
<th>Review Notes</th>
<th>Final Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldstone Retail Park, Old Shoreham Road, Newtown Road &amp; Goldstone Road Hove</td>
<td>FZ1 - &gt;1000m² and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Housing potential but not available outside plan period – removed at Stage 1 Review</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>46-54 Old London Road Patcham Road</td>
<td>FZ1&gt;1000m² and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Stage 2 – consider for allocation subject to planning application and appeal (BH206/01961). FRA carried out.</td>
<td>Overall SA Summary – Mixed</td>
<td>Yes will provide a better understanding of the potential flood risk.</td>
</tr>
</tbody>
</table>
have good access to frequent sustainable transport modes, which could impact upon how people travel. Development of site will not provide the opportunity to minimise waste e.g. through adaptive re-use of buildings.

Potential positive effects:
Development of the site would have positive impacts for housing. If 30 dwellings were provided, this should include 40% affordable and the site may provide housing for people with protected characteristics (older people) having positive equalities impacts. Delivery of 30 dwellings would provide a site density of 65dph which would help to make the best use of land. Development could retain land providing natural/greenfield functions such as open space offering potential for community interaction and thus supporting community safety, SUDS and flood prevention measures having wider environmental benefits.

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Site Size</th>
<th>Site Characteristics</th>
<th>Status</th>
<th>Sustainability Appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>331 Kingsway Hove</td>
<td>FZ1- &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Completed 2012/13 - site removed at Stage 1 Review List</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>EDF Portland Road Business Park Portland Road Hove</td>
<td>FZ1 - &gt;1000m2 and &gt; 50% of the site has groundwater depths between the surface and 0.5m</td>
<td>Adopted CPP1 strategic allocation outside Development Area</td>
<td>N/A see CPP1 Sustainability Appraisal</td>
<td>Yes will provide a better understanding of the potential flood risk.</td>
</tr>
<tr>
<td>Telecom House</td>
<td>FZ1 &gt;1000m2</td>
<td>Adopted CPP1</td>
<td>N/A see CPP1 Sustainability Appraisal</td>
<td>Yes will</td>
</tr>
<tr>
<td>123-135 Preston Road Hove</td>
<td>and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Strategic Allocation within Development Area</td>
<td>provide a better understanding of the potential flood risk.</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>87 Preston Road Brighton</td>
<td>FZ1- &gt;1000m² and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Stage 2 - consider for allocation - Planning Permission BH2017/01083 unimplemented</td>
<td>No - Approved planning application BH2017/01083 change of use and internal alterations to provide 25 apartments including communal garden space.</td>
<td></td>
</tr>
</tbody>
</table>

Largely positive (based in implementation of approved scheme) The following summary is based on implementation of approved scheme. If approved scheme not implemented, then the potential for positive or negative impacts may be different.

Development of the site (in accordance with its planning consent) is unlikely to raise any issues with the following objectives: biodiversity as site does not contain nature conservation designations; open space as site does not include designated open space; SDNP due to location within urban area; transport due to proximity to sustainable transport and services; road noise; water quality as site not within GSPZ; soil quality as site unlikely to be contaminated; climate change adaptation as site is entirely on urbanised PDL; access and health due to proximity to services; and employment as would not result in loss of employment land.

Potential adverse effects:
The site is situated within the AQMA, however it is noted that the approved scheme is car-free and so although it should not increase vehicle movements in this location, residents may be subjected to poor quality. The site is subject to high levels of road and railway noise, which could impact upon the amenity of future residents. The site is not within a heat network cluster area and although approved scheme includes measures to improve energy efficiency it does not contain and LZC technologies. The site has a risk of surface water flooding and could be susceptible to groundwater flooding and the SFRA recommended it should be considered further in the sequential/exceptions tests.

Potential positive effects:
Development of the site would have positive impacts for housing. 25
dwellings are to be provided, including 40% affordable units and 1 wheelchair accessible unit, also having positive equalities impacts. Delivery of 25 dwellings would provide a site density of 187dph which would help to make the best use of land. The conversion of a locally listed building will help to restore this asset, and demolition of building within the site boundary would improve the appearance of the setting of adjacent listed building having positive impacts for heritage. Delivery of a car-free scheme on a site adjacent to the AQMA should ensure that vehicle movements are not increased, therefore not contributing towards air quality issues. The site has a risk of surface water flooding, however it is noted that approved scheme includes the enlargement of permeable surfacing within the site, which would help reduce this risk and supports climate change adaptation. The conversion of building helps to minimise waste through adaptive re-use. Provision of a communal garden may provide opportunities for community interaction and supports community safety. The site may also provide employment/training opportunities for adjacent deprived communities.

<table>
<thead>
<tr>
<th>Boots and Somerfield 118-132 London Road Brighton</th>
<th>FZ1- &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</th>
<th>Stage 2 Review- Consider for allocation for PBSA Planning Permission BH2018/02699</th>
<th>Overall Summary – Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development of the site is unlikely to raise any issues with the following objectives: biodiversity as the site does not contain nature conservation designations or BAP habitats; open space as site does not include designated open space; heritage as approved scheme was found to preserve the settings of heritage assets; SDNP due to situation within existing urban context; transport due to proximity to sustainable transport and services; groundwater quality as site not within a GSPZ; soil quality as site unlikely to be contaminated; climate change adaptation as site currently PDL and development would not result in loss of green infrastructure or increase urbanised nature of the city; access and health due to proximity to services; and economy as development would not result in loss of employment land.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Potential adverse effects: Development of the site could raise issues with air quality, as the site is within the AQMA, however it is recognised that PBSA in this location is unlikely to generate an increase in average daily vehicles which would</td>
</tr>
<tr>
<td>No – Approved Planning Permission BH2018/02699 to demolish existing buildings and provide for 232 student bedspaces, community hub and A1 floorspace at ground floor level</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
affect air quality. The site is subject to high levels of road noise which could impact upon occupier amenity, and may also generate levels of noise which could impact on adjacent residential neighbourhoods. The entire site has a risk of surface water flooding, and SFRA recommended that the site should be considered through the sequential/exceptions test. Development of site will not provide the opportunity to minimise waste e.g. through adaptive re-use of buildings. Site is within an area with high levels of crime deprivation.

Potential positive impacts:
Development of the site for PBSA would have positive impacts for housing both through the provision of student accommodation but also through relieving pressure on the existing housing market. Development of the site with retail units below would have positive impacts for making the best use of land as would not involve any additional land take and would retain retail uses at ground floor level. The approved scheme incorporates low/zero carbon technologies and supports climate change mitigation.

| 189 Kingsway - Sackville Hotel Sackville Gardens Hove | FZ1>1000m² and > 50% of the site is in a Surface Water Accumulation Zone | Planning Permission November 2017 BH2017/01108 (progress not identified) – consider for allocation | Largely positive Development of the site (in accordance within its planning consent) is unlikely to raise any issues with the following objectives: biodiversity as site does not contain nature conservation designations or BAP habitats/species and may provide opportunities to provides net gains; open space as site does not include designated open space; SDNP due to location within urban area; transport due to proximity to sustainable transport and services; water quality as site not within GSPZ; soil quality as site not shown to be contaminated; climate change adaptation as site is entirely on urbanised PDL; waste, as there are no existing buildings on site; access and health due to proximity to services; community safety as site not within an area of high crime deprivation; and employment as would not result in loss of employment land. |

Potential adverse effects:
Development of the site could raise issues with air quality as within AQMA and could generate an increase in light vehicle movements that could affect air quality; noise, as site suffers from high levels of road noise; heritage due to potential for impact upon conservation area; flood risk, as part of site

| 189 Kingsway - Sackville Hotel Sackville Gardens Hove | FZ1>1000m² and > 50% of the site is in a Surface Water Accumulation Zone | Planning Permission November 2017 BH2017/01108 (progress not identified) – consider for allocation | Largely positive Development of the site (in accordance within its planning consent) is unlikely to raise any issues with the following objectives: biodiversity as site does not contain nature conservation designations or BAP habitats/species and may provide opportunities to provides net gains; open space as site does not include designated open space; SDNP due to location within urban area; transport due to proximity to sustainable transport and services; water quality as site not within GSPZ; soil quality as site not shown to be contaminated; climate change adaptation as site is entirely on urbanised PDL; waste, as there are no existing buildings on site; access and health due to proximity to services; community safety as site not within an area of high crime deprivation; and employment as would not result in loss of employment land. |

Potential adverse effects:
Development of the site could raise issues with air quality as within AQMA and could generate an increase in light vehicle movements that could affect air quality; noise, as site suffers from high levels of road noise; heritage due to potential for impact upon conservation area; flood risk, as part of site

No – planning permission granted for erection of 5 to 8 storey building to provide 60no. residential dwellings (C3)
has risk of surface water flooding and the SFRA recommended the site should be considered by the sequential/exceptions tests.

Potential positive effects:
Development of the site would have positive impacts for housing. 60 dwellings are to be provided, including a proportion of affordable units, also having positive equalities impacts. Delivery of 60 dwellings would provide a site density of 428dph which would help to make the best use of land, as well as bring a vacant/derelict site back into use. Incorporation of L2C technologies helps mitigate against climate change. The site may also provide employment/training opportunities for adjacent deprived communities.

<table>
<thead>
<tr>
<th>70 and site of Chrome Productions Ltd, Goldstone Lane, Hove part of allocation</th>
<th>FZ1 &gt;1000m² and &gt; 50% of the site is in a Surface Water Accumulation Zone</th>
<th>Commenced 2017 - site removed at Stage 1 Review List.</th>
<th>n/a</th>
<th>No</th>
</tr>
</thead>
</table>

| UF Site 16 Land at and adjoining Horsedean Recreation Ground Patcham Brighton | FZ 1 >1000m² and > 50% of the site has groundwater depths between the surface and 0.5m | Stage 2 Review- Consider for allocation in draft CPP2 follow UFA and UFFA recommendation for suitable area of site for residential. | Overall summary – mixed
Development of the site is unlikely to raise any issues with the following objectives: air quality as site is located outside the AQMA; soil quality as site unlikely to be contaminated; economy as development would not result in any loss of employment land; access to services, health and transport, as the site has good access to most services as well as sustainable transport access. Development of site will not provide the opportunity to minimise waste e.g. through adaptive re-use of buildings, as there are none of site. Potential adverse effects: Development of the site could raise issues with biodiversity as the site allocated for development comprises a LWS; loss of open space; landscape due to proximity to SDNP although it is noted that the UFA 2015 concluded that development could be delivered without significant landscape effect on the assumption that vegetated buffers and public access is retained to | Yes will provide a better understanding of the potential flood risk. |
the north of the site; heritage and archaeology as site within an ANA and is in proximity to various heritage assets (noted that no further archaeological assessment has taken place); water quality as site within GSPZ 2; climate change mitigation as site not within a heat network opportunity area; and climate change adaptation as development would result in urbanisation of parts of a site with natural form. Loss of open space could also impact upon health, although it is recognised that only approximately 18% of site area is allocated for housing. Although the site allocated itself is not at risk of surface water flooding, it is adjacent to an area with high flood risk from surface water and could increase the risk of flooding due to change in form to one of a more urbanised nature. Site also has risk of groundwater flooding due to levels being between 0.025-0.5m below surface and SFRA indicated that the sequential and exceptions test would be needed to demonstrate site is suitable for allocation due to higher risk.

Potential positive effects:
Development of the site would have positive impacts for housing. If 25 housing units are provided, this should include 40% affordable dwellings and the site may also be suitable for family type housing. Although delivery of 25 units would only provide a site density of 21dph, this would be in character with the surrounding area and would enable greenfield/ecosystem services to be retained on the remainder of the site, such as SUDS and flood prevention measures, helping to make good use of the site and having wider environmental benefits. The area does not suffer from high levels of crime, however development of the site could increase activity which can provide passive surveillance and support community safety. Development could provide employment/training for nearby employment/skills deprived communities.

<p>| 145 Vale Avenue | FZ1 &gt;1000m2 and &gt; 50% of the site has groundwater depths between the site removed at Stage 1 Review List. | N/A | No |</p>
<table>
<thead>
<tr>
<th>Site Description</th>
<th>Size and Location</th>
<th>Commencement/Review</th>
<th>Overall Summary</th>
<th>Potential Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30 Kingsthorpe Road Hove</td>
<td>FZ1 &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Commenced 2016 – site removed at Stage 1 Review List</td>
<td>N/A</td>
<td>Redevelopment of site would involve loss of the bowling green from the site, which is designated open space, although it is noted that the aspirations for re-development involve re-provision of this elsewhere. Loss of open space on the site would increase the amount of urbanised land on site, which can impact upon climate change adaptation, particularly as the majority of the site has a low to medium risk of surface water flood risk and is of risk groundwater emergence. SFRA recommended the site should be considered through the sequential/exceptions tests. Redevelopment of the site for housing would result in loss of B1a</td>
</tr>
<tr>
<td>Housing Office Victoria Road, Portslade (adj Hove Town Hall)</td>
<td>FZ1 - &gt;1000m2 and &gt; 50% of the site is in a Surface Water Accumulation Zone</td>
<td>Stage 2 Review – consider for housing allocation in draft CPP2</td>
<td>Overall summary – Mixed</td>
<td>Development of the site is unlikely to raise any issues with the following objectives: biodiversity as site does not contain any ecological interest; SDNP due to location within urban area; designated heritage assets and archaeology as does not contain any; transport due to proximity to sustainable transport and services; air quality as not within a AQMA; noise quality as site does not suffer from high levels of road noise; groundwater quality as not within a GSPZ; soil quality as site unlikely to be contaminated; community safety as site not within a area that has high crime deprivation; access and health due to proximity to services.</td>
</tr>
</tbody>
</table>

Council owned site identified for housing delivery as part of the New Homes for Neighbourhood programme. FRA undertaken as part of developing scheme/preparing planning application.
Redevelopment of the site would involve demolition of existing buildings on sites and therefore development will produce waste and won’t conserve natural resources. The site is adjacent to a site which is locally listed (Portslade Town Hall).

Potential positive effects:
Development of the site would have positive impacts for housing and could provide 37 dwellings all of which would be affordable rented provided through the New Homes for Neighbourhood scheme. Delivery of 37 dwellings would provide a site density of 92dph which exceeds minimum requirements helping to make good use of sites in the city. Redevelopment could incorporate opportunities for nature conservation enhancement. The site is located within a heat network opportunity area and delivery of flatted units in particular could provide the opportunity to provide communal heating. Development of the site may also provide employment/training opportunities for locally employed and education deprived communities.

<table>
<thead>
<tr>
<th>Boundary House, Boundary Road, Hove</th>
<th>FZ1 - &gt;1000m² and &gt; 50% of the site has groundwater depths between the surface and 0.5m</th>
<th>Site removed from Stage 1 list as in active use as DWP office – not available</th>
<th>N/A</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kings House, Grand Avenue, Hove</td>
<td>FZ1 - &gt; 50% of the site has groundwater depths</td>
<td>PA under consideration (and subsequently approved) BH2018/00869 –</td>
<td>Overall summary - mainly positive Development of the site (in accordance within its planning consent) is unlikely to raise any issues with the following objectives: biodiversity as the site does not contain nature conservation designations or BAP habitats; open space as site does not include PA under consideration (and subsequently approved) BH2018/00869 –</td>
<td>No Planning Permission BH2018/00868 demolition of existing office</td>
</tr>
<tr>
<td>between the surface and 0.5m</td>
<td>consider for housing allocation in draft CPP2</td>
<td>designated open space; SDNP due to situation within existing urban context; transport due to proximity to sustainable transport and services; water quality as site not within GSPZ; climate change adaptation as site already entirely PDL; access and health due to proximity to services; community safety as not within an area of high crime deprivation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Potential adverse effects:
Site is within the AQMA and is subject to high levels of road noise, although the amount of development was found unlikely to result in an increase in vehicle movements over its existing use.
The site is at risk of surface water flooding and higher risk of groundwater flooding and has suffered recent flooding events.
Approved scheme incorporates measures such as pumps and reductions in run-off. The SFRA recommended site should be considered by the sequential/exception tests.
Redevelopment of the site for housing would result in loss of significant amount of land formerly in employment uses.

Positive effects:
In accordance with approved scheme, development should sustain or enhance heritage assets, including the listed building and wider conservation area; will incorporate measures to reduce carbon emissions and support climate change mitigation; will result in delivery of 169 dwellings, including 28 affordable dwellings and will make good use of the site, providing a density of 325dph; will provide an opportunity to remediate any contaminated land; provides opportunities for nature conservation enhancement; incorporates communal amenity space and provides financial contribution to improving open space; includes measures to promote sustainable travel; incorporates measures to reduce surface water run-off; will facilitate adaptive reuse and preserve some resources through renovation of part of the building.

building B1 building fronting Queens Garden to 69 no dwellings and erection of 10 storey building, 72 flats on Grand Avenue
b) The development will be safe for its lifetime taking SFRA Level 2 Assessments account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

In considering an allocation in the draft CPP2, SFRA Level 2 Strategic Flood Risk Assessments should inform consideration of the second part of the Exception Test.

The second part of the Exception Test can only be fully passed when determining a development proposal. The Level 2 SFRA supports applications of the Exception Test by providing more detailed evidence of flood risk at a site level, and sets out technical information to inform the requirements of site specific Flood Risk Assessments and how to make developments safe (the second part) of the Exception Test.

Following the Level 1 SFRA, 10 sites were brought forward to undergo the Level 2 assessment. The Level 2 assessment is based on the potential flood risk from all sources, including; tidal, surface water, groundwater and sewer flood risk to the sites.

The 5 sites\textsuperscript{26} that following the Level 1 Screening were subject to Level 2 Assessments:

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-54 Old London Road, Patcham</td>
<td>The FZ1 site is subject to a risk from both surface water and ground water flooding, therefore a Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
<tr>
<td>Telecom House 123-135, Preston Road (CPP1 strategic allocation DA4)</td>
<td>The FZ1 site is at risk from surface water flooding, therefore a Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
<tr>
<td>Land at and adjoining Horsdean Recreation Ground</td>
<td>The FZ1 site is in an area of ground water flood risk, therefore a Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
<tr>
<td>Brighton Marina (CPP1 strategic allocation DA2)</td>
<td>The site has a combination of planning permission and no planning permission. The site will be developed and therefore an updated Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
<tr>
<td>EDF Portland Road Business Park, Portland Road</td>
<td>The FZ1 site has numerous flood flow routes through the site and therefore a Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
</tbody>
</table>

\textsuperscript{26} Note the sixth site: Housing Office Victoria Road, Portslade (adj Hove Town Hall) that went through the Exception Test did not go through to Level 2 SFRA because the site is being progressed through the New Homes for Neighbourhood Programme by the council and flood risk assessment was undertaken at the design/planning application stage.
The following five sites that also were taken forward to the Level 2 SFRA to provide the council with more detailed information on the characteristics of the actual flood risk associated with the adopted/potential CPP2 site allocations:

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Justification of Level 2 SFRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brighton General Hospital</td>
<td>Site put forward in the CPP2 ‘call for sites’ and being considered for a strategic site allocation</td>
</tr>
<tr>
<td>Combined Engineering Depot, New England Road</td>
<td>Site put forward in the CPP2 ‘call for sites’ and being considered for a strategic site allocation</td>
</tr>
<tr>
<td>Land at Lyon Close</td>
<td>Site put forward in the CPP2 ‘call for sites’ and being considered for a strategic site allocation</td>
</tr>
<tr>
<td>Sackville Trading Estate and Coal Yard</td>
<td>Site put forward in the CPP2 ‘call for sites’ and being considered for a strategic site allocation</td>
</tr>
<tr>
<td>King Alfred/RNR site (CPP1 strategic allocation SA1)</td>
<td>The site is allocated in City Plan Part 1 and will be developed in the plan period, therefore a Level 2 SFRA will provide a better understanding of the potential flood risk.</td>
</tr>
</tbody>
</table>

The Level 2 SFRA assessment has considered climate change impacts and cumulative effects and provides more detailed information on:

- The resolution and detail of the analysis used to assess the flood risk (more detailed data and higher resolution flood modelling has been prepared so appropriate evidence is available to consider the implications of satisfying the Exception Test).
- The severity and extent of actual flood risk across proposed sites;
- The site-specific flood risk assessment requirements; and
- The implications for the preparation of local policies to provide for sustainable developments as well as reducing flood risk to existing communities.
- Potential options to manage the flood risk which will be considered further by developers when preparing an FRA.

The SFRA Level 2 Assessments can be found on this section of the council website: [https://www.brighton-hove.gov.uk/content/environment/coast-defence-and-flood-management/flood-and-drainage-policies](https://www.brighton-hove.gov.uk/content/environment/coast-defence-and-flood-management/flood-and-drainage-policies).
Exception Test Conclusion

In Brighton and Hove, not all development can be allocated outside of flood risk areas as shown by the Sequential Test prepared for the adopted City Plan Part 1. Following updated evidence on flood risk through the 2018 SFRA Update there has been a reconsideration of the Sequential Test as part of the preparation of the City Plan Part 2 which seeks to identify additional development sites to deliver the adopted City Plan Part 1 housing target.

The Brighton Marina site was required to go through the Exception Test. The Level 2 SFRA assessment considered the characteristics of the actual flood risk associated with the site.

A Level 2 SFRA was also carried out on a number of sites identified at higher risk of flooding from other sources of flooding. It is considered that the wider sustainability benefits of development of the sites outweigh the flood risks. The Level 2 SFRA assessments indicate that there are opportunities to reduce and minimise flood risk on site.

A Level 2 SFRA was also undertaken on five other sites within FZ1 and at a lower risk of flooding from other sources where the council wanted more detailed flood risk information to inform the strategic site allocations.

Sequential and Exception Test Update August 2019

The draft City Plan Part 2 was consulted upon in July- September 2018 under regulation 18. A number of additional sites were put forward for consideration by respondents. Sites considered to be potentially suitable for allocation, needed to meet the same criteria set out in the 2018 Site Allocations Topic Paper and assessed using the same Sustainability Appraisal site assessment process and this is explained further in an updated Site Allocations Topic Paper.

Two sites were considered potentially suitable for allocation for housing sites and one site for student housing. These three sites were subject to the Level 1 Screening undertaken in July 2019 and these sites did not need to proceed to the Sequential Test – in that they were entirely in Flood Zone 1 and were at a low flood risk from other sources of flooding and therefore the location is appropriate in flood risk terms for all development.

The July 2019 Level 1 screening also considered the two City Plan Part 2 draft allocations for non-residential uses/ opportunity sites which had not been included in the original screening. These sites (SSA7 and E1) did not need to proceed to the Sequential Test – in that they were entirely in Flood Zone 1 and were at a low flood risk from other sources of flooding and therefore the location is appropriate in flood risk terms for all development.

Table 4 Exception Test and/or recommendations of the SFRA Level 2

<table>
<thead>
<tr>
<th>Site Name</th>
<th>SFRA Flood Risk - description</th>
<th>Potential Uses (^{28})</th>
<th>Flood Risk Vulnerability Classification (^{29})</th>
<th>SFRA Level 2 Sustainable Drainage Recommendations</th>
<th>SFRA Level 2 - Guidance for site design and making development safe</th>
<th>Conclusions</th>
</tr>
</thead>
</table>
| Brighton Marina Inner Harbour (located within DA2 Brighton Marina, Gas Works, and Black Rock Area in the adopted CPP 1) | The dominant flood mechanism for the site is tidal flooding as it covers the largest extent within the site boundary and would have the highest impact. There is also surface water flood risk to the site. It is unlikely that these flood mechanisms will interact as they are driven by different circumstances. The site is predicted to be at risk from coastal flooding. The southern half of the site is shown to be within Environment Agency Flood Zone 3b and the northern half of the site is located within large areas of Flood Zone 3 and 2. Small isolated areas in the northern half of the site are also situated within Flood Zone 1. The site is shown to be at risk from surface water flooding. The north west corner of the site is shown to be flooded during the 3.33% AEP event where flow accumulated from here and down Palm Drive. The rest of the site has small pockets of flow accumulation during the 1% AEP and 0.1% AEP events around roads and carpark areas. | CPP1 Strategic Site Allocation – leisure, retail and residential (see Appendix #) | Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding. • Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development. • Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than1m) and potential for contamination, then a liner may be required. • Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible. • Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace. | • At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 and/or Surface Water Flood Zones a or b. Other sources of flooding should also be considered. • Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage. • Resilience measures will be required if buildings are situated in the flood risk area. • Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites. • At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ. • As the site is partially located within Surface Water Flood Zone a (Accumulation), FRA requirements include: o Assessment of flood risk from all sources. o Consideration of flow paths across the site and how the proposed development may alter these. o Demonstration that ground floor levels should be a minimum of whichever is higher of: – 300 mm above the general ground level of the site – 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change | Brownfield site within an established commercial and residential area of the city. Allocation in this location is consistent with adopted CPP1 strategy for accommodating growth in Development Areas (it is an adopted strategic site allocation) and the site scored well in CPP1 Sustainability Appraisal. Sequential Test passed - no reasonably alternative available sites appropriate for the development identified in the CPP1 with a lower probability of flooding. The site has had both a Level 1 and Level 2 assessment. The SFRA Level two sets out recommendations for the FRA and site design/ making development safe. An exception test was required due to vulnerability of allocated uses. The first part of the Exception Test is considered passed. Planning applications for Brighton Marina outer harbour and Inner Harbour required FRAs. The SFRA Level 2 sets out updated detailed requirements for making the site safe for is lifetime for the various site users without increasing flood risk elsewhere. Detailed policy criteria address particular FRA requirements (see adopted policies DA2 and CP11). On the basis of the above, the second part of the Exception Test of the site is considered capable of being passed at the

\(^{28}\) Adopted CPP1 Site Allocations/SHLAA 2017 or CPP2 Site Assessment Proformas

\(^{29}\) NPPG Table 22 Flood Risk Vulnerability Classification
The site is also situated in both Accumulation and Conveyance Surface Water Flood Risk Zones.

**Existing Flood Risk Management Infrastructure: Flood Wall – 0.5% AEP good condition.**

Concrete walls with steel toe piling, concrete caisson and mass concrete breakwaters flood defences provide protection to the site.

Overtopping of flood defences present a residual risk to the site.

- Consideration of other surface water flood resilience measures.
  - As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
    - Assessment of flood risk from all sources.
    - Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
    - Consideration of surface water flood resilience measures.
  - The site layout should be designed sequentially to avoid surface water flood risk.
  - Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

Safe access and egress to the site therefore needs to be considered by the developer in a site-specific FRA.

Opportunities through initial development design and site-specific flood risk assessment to consider flood risk management approaches such as raised walkways; development design so that water can flow and move around the development; address safe access and egress to the site and other resilient measures.

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### 46-54 Old London Road Patcham Road

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main flood risk to the site is from groundwater flooding, as there is high groundwater levels predicted across the entirety of the site. The high groundwater could infiltrate into the sewer system, causing sewer flooding.</td>
<td>Housing (SHLAA 2017 - # homes)</td>
</tr>
<tr>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and</td>
</tr>
<tr>
<td></td>
<td>• At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.</td>
</tr>
<tr>
<td></td>
<td>• As the site is partially located within Surface Water Flood Zone a (Accumulation), FRA requirements include:</td>
</tr>
<tr>
<td></td>
<td>o Assessment of flood risk from all sources</td>
</tr>
<tr>
<td></td>
<td>Brownfield site within the built up area of the city.</td>
</tr>
<tr>
<td></td>
<td>Allocation in this location would be consistent with adopted CPI’s strategy for accommodating growth and represents an opportunity to contribute to meet the housing needs of the city.</td>
</tr>
</tbody>
</table>

The following policies would apply:

- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DM43 SuDS
- Draft Sustainable Drainage SPD

Both parts of the Exception Test are considered capable of being passed, but part two of the Test shall ultimately be discharged through consideration of a planning application.
areas of ponding.

- Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development.
- The site is situated within groundwater Source Protection inner zone 1 where infiltration may not be permitted. However if infiltration techniques are proposed adequate measures should be taken to prevent contamination of groundwater.
- Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than1m) and potential for contamination, then a liner may be required.
- Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.
- Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.


ciares.

- Consideration of flow paths across the site and how the proposed development may alter these.
- Demonstration that ground floor levels should normally be a minimum of whichever is higher of:
  - 300 mm above the general ground level of the site
  - 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change
- Consideration of other surface water flood resilience measures.
  - As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
    - Assessment of flood risk from all sources.
    - Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
    - Consideration of surface water flood resilience measures.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Resilience measures will be required if buildings are situated in the flood risk area.
- The site layout should be designed sequentially to avoid surface water flood risk.
- Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
- Evidence shall be included to confirm Sequential Test n/a - but note that no reasonable alternative available sites appropriate for the development identified through the draft CPP2 site assessment process with a lower probability of flooding from other sources of flooding.

The site has had both a Level 1 and Level 2 assessment. The SFRA Level 2 sets out recommendations for the FRA and site design/ making development safe.

Wider sustainability considerations have been taken into account at CPP2 SA site appraisals and overall the site had a mixed score with a positive impact for housing and the potential to provide natural/greenfield functions such as open space.

There are no planning permissions for this site. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for is lifetime for the various site users without increasing flood risk elsewhere. Reference to flood risk could be addressed in CPP2 Policy H1.

The site is considered capable of being passed at the development management stage of considering a planning application, subject to a site-specific FRA that fully addresses the requirements of the Level 2 SFRA including access and egress issues.

The following policies would apply:
- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DM43 SUDs
- Draft Sustainable Drainage SPD

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30 It should be noted that Planning Application BH2016/01961 was dismissed at appeal, the Inspector considered the proposal would be acceptable in terms of flood risk and drainage, but there would be material harm to the character and appearance of the area.
| EDF Portland Road Business Park Portland Road Hove | The main flood mechanism of the site is thought to be surface water flooding due to the presence of risk during the 3.33% event. In addition, sewer flooding has occurred near the site, suggesting there may be limited capacity in the sewer system for additional development. A small proportion of the site is shown to be at risk from flooding during the 3.33% AEP event within the south west corner. Additionally, the site is situated within the Accumulation Zone in the western half of the site and the Conveyance Zone in areas along the east, west and southern site boundary. | Adopted CPP1 strategic allocation outside Development Area – Mixed use commercial (B1a, B1b) and residential (SHLAA 2017 indicates 117 units 2027-2032) | More vulnerable (or highly vulnerable if basements) Less vulnerable | Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding. • Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development. • Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required. • Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible. • Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness | At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ. • As the site is partially located within Surface Water Flood Zone a (Accumulation), FRA requirements include: o Assessment of flood risk from all sources. o Consideration of flow paths across the site and how the proposed development may alter these. o Demonstration that ground floor levels should be a minimum of whichever is higher of: 300 mm above the general ground level of the site 600 mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change o Consideration of other surface water flood resilience measures. • As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include: o Assessment of flood risk from all sources. o Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling may be required to demonstrate this. o Consideration of surface water flood resilience measures. | Brownfield site within the built up area of the city. CPP1 allocation (CP3.4) is consistent with adopted CPP1 strategy for accommodating growth in the city. Sequential Test n/a - but note that no reasonable alternative available sites appropriate for the development identified in the CPP1 with a lower probability of flooding. Wider Sustainability considerations have been taken into account at CPP1 SA. There are no planning applications for this adopted CPP1 site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere. The site is considered capable of being passed at the development management stage of considering a planning application, subject to a site-specific FRA that fully addresses the requirements of the Level 2 SFRA including access and egress issues. The following policies would apply: • CPP1 Policy CP11 Flood Risk • Draft CPP2 Policy DM43 SUDs • Draft Sustainable Drainage SPD |
through water resource education and SuDS integration within greenspace.

- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Resilience measures will be required if buildings are situated in the flood risk area.
- The site layout should be designed sequentially to avoid surface water flood risk.
- Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
- Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

Safe access and egress may not be available on Portland Road during the 0.1% AEP surface water event and needs to be considered by the developer in a site-specific FRA.

| Telecom House 123-135 Preston Road Hove | Surface water flood risk at this site is high so development here must demonstrate it is safe from surface water. In addition, the groundwater is high which should be considered for safe design of foundations and any basements. It is unlikely that these flood mechanisms would dynamically interact, but the surface water flow paths can be used as an indication of where ground water would route should it reach the surface. Almost the entirety of the site is at surface water flood risk for the 3.33% AEP flood event. A small section of the north west corner of the site | Adopted CPP1 Strategic Allocation within Development Area - Mixed Use commercial (B1a, B1b) and residential SHLAA 2017 Update indicates potential supply of 85 units and policy requires 3,000 sq m office | More vulnerable (or highly vulnerable if basements) Less vulnerable | Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding.
• Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development.
• The site is located in a sloping terrain (13%), therefore a successful SuDS design should look for potential opportunities for runoff conveyance and attenuation storage areas. SuDS features should follow contours and include check dams to slow | At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.
As the site is partially located within Surface Water Flood Zone a (Accumulation), FRA requirements include:
- Assessment of flood risk from all sources.
- Consideration of flow paths across the site and how the proposed development may alter these.
- Demonstration that ground floor levels should be a minimum of whichever is higher of:
  - 300 mm above the general ground level of the site
  - 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for | Brownfield site within the built up area of the city.

Adopted Strategic Site Allocation within an identified development area (DA4) is consistent with adopted CPP1 strategy for accommodating growth in the city.

Sequential Test n/a – but note that no reasonable alternative available sites appropriate for the development identified in the CPP1 with a lower probability of flooding.

Wider sustainability considerations have been taken into account in the CPP1 SA for DA4.

There are no planning applications for this adopted CPP1 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users.
is at risk during the 1% AEP flood event. The entirety of the site is situated within the Accumulation Zone with a small section of the site being situated within the Conveyance Zone in the south east corner of the site. This section is also identified to be at no risk in any modelled surface water flood event.

Floorspace retained.

The flow.
- Infiltration systems may not be suitable for this site due to the high risk from groundwater flooding. Depending on the depth of groundwater below the site it may be possible to use shallow infiltration basins or permeable pavements.
- Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.
- Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

Climate change
- Consideration of other surface water flood resilience measures.
- As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
  - Assessment of flood risk from all sources.
  - Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
- Consideration of surface water flood resilience measures.
- The cumulative effect on flood risk of development at this site and at the Combined Engineering Depot.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Resilience measures will be required if buildings are situated in the flood risk area.
- The site layout should be designed sequentially to avoid surface water flood risk.
- Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
- Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

The site is considered capable of being passed at the development management stage of considering a planning application, subject to a site-specific FRA that fully addresses the requirements of the Level 2 SFRA including access and egress issues.

The following policies would apply:
- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DMA3 SUDs
- Draft Sustainable Drainage SPD

Urban Fringe housing site allocation consistent with the adopted CPP1 strategy for accommodating growth in the city.

Sequential Test n/a - but note that there are no reasonable alternative available sites appropriate for the development identified during the draft CPP2 site assessment process with a lower probability of flooding from other sources.
to occur in the southern half of the site. In this location, the Accumulation Surface Water Flood Zone is present, the majority of the rest of the site is located within the Conveyance Zone.

likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development.

• The site is situated within groundwater Source Protection outer zone 2 where infiltration may not be permitted. However if infiltration techniques are proposed adequate measures should be taken to prevent contamination of groundwater.

• Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required.

• Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.

• Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

• Consideration of flow paths across the site and how the proposed development may alter these.

• Demonstration that ground floor levels should be a minimum of whichever is higher of:
  - 300 mm above the general ground level of the site
  - 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change

o Consideration of other surface water flood resilience measures.

• As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
  o Assessment of flood risk from all sources.
  o Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
  o Consideration of surface water flood resilience measures.

• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.

• Resilience measures will be required if buildings are situated in the flood risk area.

• The site layout should be designed sequentially to avoid surface water flood risk.

• Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.

• Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

Wider sustainability considerations have been taken into account at CPP2 SA site appraisal, overall the site scored mixed with potential positive impact on housing delivery and the opportunity to retain greenfield/ ecosystem services on the remainder of the UF site such as SUDs and flood prevention measures.

There is no planning application for this adopted CPP1 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for is lifetime for the various site users without increasing flood risk elsewhere. Reference to flood risk could be addressed in CPP2 Policy H2.

The site is considered capable of being passed at the development management stage of considering a planning application, subject to a site-specific FRA that fully addresses the requirements of the Level 2 SFRA including access and egress issues.

The following policies would apply:

• CPP1 Policy CP11 Flood Risk
• Draft CPP2 Policy DM43 SUDs
• Draft Sustainable Drainage SPD
Table 5 Recommendations of Level 2 SFRA for sites within FZ1 and low risk of flooding from other sources of flooding

<table>
<thead>
<tr>
<th>Site Name</th>
<th>SFRA Flood Risk - description</th>
<th>Adopted allocations/ Potential Uses</th>
<th>Flood Risk Vulnerability Classification</th>
<th>SFRA Level 2 Recommendations</th>
<th>SFRA Level 2 - Guidance for site design and making development safe</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>King Alfred/RNR site (CPP1 Strategic Site Allocation)</td>
<td>Surface water is the flooding mechanism at the site. This is due to the high risk in the western area of the site which occurs due to accumulation of flow from the runoff from the northern higher elevated areas of the study area. Additionally, the only record of historical flooding is noted to be surface water in flood source. The site is at risk from surface water in the north west corner of the site where flow ponds in the 3.33% AEP flood event. A small section of ponding also occurs either side of the leisure centre building during the 0.1% AEP event. In areas where ponding occurs, these areas are also within the Accumulation Flood Zone. In the centre of the site, the Conveyance Zone is also present.</td>
<td>Leisure Retail Housing</td>
<td>n/a</td>
<td>Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding. • Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development. • Detention features and infiltration systems may be feasible at locations where the slopes are &lt;5%. If there is groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required. • Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible. • Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness</td>
<td>At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ. • As the site is partially located within Surface Water Flood Zone a (Accumulation), FRA requirements include: o Assessment of flood risk from all sources. o Consideration of flow paths across the site and how the proposed development may alter these. o Demonstration that ground floor levels should be a minimum of whichever is higher of: – 300 mm above the general ground level of the site – 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change o Consideration of other surface water flood resilience measures. • As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include: o Assessment of flood risk from all sources. o Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this. o Consideration of surface water</td>
<td>Brownfield site within an established commercial and residential area of the city. Allocation in this location is consistent with adopted CPP1 strategy for accommodating growth (adopted strategic site allocation within SA1 The Seafront) and site scored well in CPP1 Sustainability Appraisal. Sequential Test: n/a - FZ1 and low risk of flooding from other sources of flooding Exception Test: n/a There is no planning application for this adopted CPP1 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere. The following policies would apply: • CPP1 Policy CP11 Flood Risk • Draft CPP2 Policy DM43 SuDS • Draft Sustainable Drainage SPD • SA1 The Seafront</td>
</tr>
</tbody>
</table>

31 Adopted City Plan Part 1 Site Allocations/ Potential as identified in SHLAA 2017 or CPP2 Site Assessment Proformas
32 NPPG Table 22 Flood Risk Vulnerability Classification – these sites are within FZ1 and were found through the Level 1 Screening to be at a low risk of flooding from other sources.
<table>
<thead>
<tr>
<th>Site Description</th>
<th>Risk Assessment Details</th>
<th>Development Constraints</th>
<th>Brownfield Site Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brighton General Hospital Site</td>
<td>Although there is some small areas of surface water ponding at the site, there is no significant flood risk issue at the site. The site is predicted to be impacted during the 1% AEP flood event by three small areas of pooling within the site. This is predicted to occur due to flow being obstructed by buildings within the site where flow accumulates and ponds.</td>
<td>Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding.</td>
<td>Brownfield site within the built up area of the city in good proximity to sustainable transport. Allocation in this location is consistent with adopted CPP1 strategy for accommodating growth and would make a significant contribution towards meeting the housing needs of the city and re-provide a modern health and care facilities for the city. The site had a mixed score in the Sustainability Appraisal site appraisal with a positive impact for housing. Sequential Test: n/a - FZ1 and low risk of flooding from other sources of flooding. Exception Test: n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is no planning application for this proposed CPP2 Strategic Site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere. This could be reflected in the Strategic Site Allocation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o As the site is located entirely within Surface Water Flood Zone b (Conveyance), FRA requirements include:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Assessment of flood risk from all sources. Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this. Demonstration that ground floor levels should normally be a minimum of whichever is higher of:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o 300 mm above the general ground level of the site</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Consideration of surface water flood resilience measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resilience measures will be required if buildings are situated in the flood risk area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The site layout should be designed sequentially to avoid surface water flood risk.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.</td>
<td></td>
</tr>
</tbody>
</table>
Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required.

- Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.
- Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

Resilience measures will be required if buildings are situated in the flood risk area.

- The site layout should be designed sequentially to avoid surface water flood risk.
- Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
- Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

**Combined Engineering Depot, New England Road**

Generally, the flood risk to the site is low. Flood mechanisms to consider are sewer flooding and groundwater flooding. In the steeper areas of the site, there is a chance flood waters could be conveyed across the site.

The site is not at risk from surface water flooding for the modelled return periods. However, the site is located within the Conveyance Surface Water Flood Zone.

A minimum of 100 residential units; and 1,000 sq m B1 workspace and managed starter office units.

Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding.

- Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development.
- Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is undertaken at an early stage.
- Resilience measures will be required if buildings are situated in the flood risk area.
- The site layout should be designed sequentially to avoid surface water flood risk.
- Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
- Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.

- As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
  - Assessment of flood risk from all sources.
  - Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
  - Demonstration that ground floor levels should normally be a minimum of whichever is higher of:
    - 300 mm above the general ground level of the site

Brownfield site within the built up area of the city in close proximity to sustainable transport.

Site located within a Development Area (DA4) consistent with adopted CPP1 strategy for accommodating growth and would make a significant contribution towards meeting city’s housing needs. The site had a mixed score in the CPP2 Sustainability Appraisal. The development would make a significant contribution to housing need and there may opportunities for remediation of a previously development site and nature conservation enhancement and the opportunity to provide improved and modernised employment floorspace.

Sequential Test: n/a - FZ1 and low risk of flooding from other sources of flooding.

The following policies would apply:
- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DM43 SUDs
- Draft Sustainable Drainage SPD
groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required.

- Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.
- Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

- 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change
  - Consideration of surface water flood resilience measures.
  - Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
  - The FRA should consider cumulative effect on flood risk of development at this site and at Telecom House
  - Resilience measures will be required if buildings are situated in the flood risk area.
  - The site layout should be designed sequentially to avoid surface water flood risk.
  - Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.
  - A Flood Risk Assessment for this site should consider the cumulative impact of development at this site and at Telecom House.
  - Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

Exception Test: n/a

There is no planning application for this adopted CPP1 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere.

The following policies would apply:
- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DM43 SUDs
- Draft Sustainable Drainage SPD

### Land at Lyon Close, Hove

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood risk mapping and flood history</td>
<td>Indicate that surface water flooding is a concern for this site and this should be considered in the design of any future development. The only recorded sewer flooding incident is over 20 years ago, so likely to have now been resolved by Southern Water. However, a sewer capacity assessment should be completed as part of any planning application.</td>
</tr>
<tr>
<td>Retention/replacement of a minimum of 5,700 sq m net B1a office</td>
<td>A minimum of 300 residential units Expanded D1 health facilities (GP surgery) and/or</td>
</tr>
<tr>
<td>Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding.</td>
<td>Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be</td>
</tr>
<tr>
<td>At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.</td>
<td>As the site is partially located within Surface Water Flood Zone (Accumulation), FRA requirements include:</td>
</tr>
<tr>
<td>• Assessment of flood risk from all sources.</td>
<td>o Consideration of flow paths across the site and how the proposed development may alter these.</td>
</tr>
<tr>
<td>• Demonstration that ground floor</td>
<td>o Consideration of flow paths across the site and how the proposed development may alter these.</td>
</tr>
<tr>
<td>• Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing surface water flow paths and areas of ponding.</td>
<td>Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be</td>
</tr>
<tr>
<td>At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.</td>
<td>As the site is partially located within Surface Water Flood Zone (Accumulation), FRA requirements include:</td>
</tr>
<tr>
<td>• Assessment of flood risk from all sources.</td>
<td>o Consideration of flow paths across the site and how the proposed development may alter these.</td>
</tr>
<tr>
<td>• Demonstration that ground floor</td>
<td>o Consideration of flow paths across the site and how the proposed development may alter these.</td>
</tr>
</tbody>
</table>

Brownfield site within the built up area of the city in close proximity to sustainable transport.

Site allocation consistent with adopted CPP1 strategy for accommodating growth and would make a significant contribution towards meeting the housing needs of the city. The site had a mixed score in CPP2 Sustainability Appraisal with a positive impact for housing, better use of a previously developed site and the potential for remediation and nature conservation enhancement and opportunity to deliver improved and
The site is shown to be at surface water flood risk during the 1% AEP flood event. Flow is shown to accumulate in front of the existing buildings and along Lyon Close. The site is shown to be partially within the Conveyance Zone to the east of the site with small areas in the west of the site being located within the Accumulation Zone.

Safe access and egress can be made for the site via Davigdor Road Montefiore Road and Holland Road. This may not be available on Holland Road and Montefiore Road during the 0.1% AEP surface water event.

Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than1m) and potential for contamination, then a liner may be required.

Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.

Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

Levels should be a minimum of whichever is higher of:
- 300 mm above the general ground level of the site
- 600mm above the estimated surface water level in the 1% AEP event with drainage plus30% uplift to account for climate change

Consideration of other surface water flood resilience measures. As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:
- Assessment of flood risk from all sources.
- Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.
- Consideration of surface water flood resilience measures.

Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.

Resilience measures will be required if buildings are situated in the flood risk area.

The site layout should be designed sequentially to avoid surface water flood risk.

Reference should be made to the SuDS SPD regarding SuDS techniques in new or re-development sites.

Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk.

At the planning application stage, a site-specific Flood Risk Assessment will be required if any change of use is within a SWFZ.

As the site is partially located within Surface Water Flood Zone b (Conveyance), FRA requirements include:

Modernised employment floorspace as part of a mixed use redevelopment.

Sequential Test: n/a FZ1 and low risk of flooding from other sources of flooding

Exception Test: n/a

There are a number of permitted/ current planning applications for this proposed CPP2 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere.

The following policies would apply:
- CPP1 Policy CP11 Flood Risk
- Draft CPP2 Policy DM43 SUDs
- Draft Sustainable Drainage SPD

Groundwater flooding is expected to be the flooding mechanism at the site due to the entirety site being situated within groundwater levels between 0.5, and 5, below the ground surface.

Minimum of 500 residential units minimum of 6000m2 B1;

Due to the existing flood risk to properties surrounding the site, surface water discharge should be restricted to greenfield runoff rate. As a minimum SuDS should be designed around existing

Brownfield site within the built up area of the city.

Site located within a Development Area (DA6) consistent with adopted CPP1 strategy for accommodating growth and would make a significant contribution.
This could impact ground floor properties, basements and foundations and should be considered as part of a site-specific FRA.

The site is at risk of surface water flooding for the 0.1% AEP event in small areas of flow accumulation in the centre of the site. Areas along the east and western site boundaries are situated within the Conveyance Surface Water Flood Zone.

Safe access and egress can be made for the site via Sackville Road however this may not be available during the 1% AEP surface water event, therefore safe access and egress should be considered by the developer in a site-specific FRA.

Ancillary retail and food and drinks outlets; High quality public realm including public square

Children’s play space and/or an informal multi use sports area; and

Community facilities based on local need.

Surface water flow paths and areas of ponding.

• Source control techniques are likely to be suitable such as rain gardens, green roofs, rainwater harvesting and reuse and permeable paving may be suitable depending on the proposed development.

• The site is situated within groundwater Source Protection inner zone 1 where infiltration may not be permitted. However if infiltration techniques are proposed adequate measures should be taken to prevent contamination of groundwater.

• Detention features and infiltration systems may be feasible at locations where the slopes are <5%. If there is groundwater risk (where the depth of water table is less than 1m) and potential for contamination, then a liner may be required.

• Surface based SuDS and conveyance features (such as swales and attenuation ponds) are likely to be suitable for this site, following natural flow paths where possible.

• Opportunities should be taken to deliver SuDS with multiple benefits, such as biodiversity, recreation, water quality and provide public awareness through water resource education and SuDS integration within greenspace.

o Assessment of flood risk from all sources.

o Consideration of flow paths across the site and how the proposed development may alter these. Overland flow modelling maybe required to demonstrate this.

o Demonstration that ground floor levels should normally be a minimum of whichever is higher of:
  - 300 mm above the general ground level of the site
  - 600mm above the estimated surface water level in the 1% AEP event with drainage plus 30% uplift to account for climate change

Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.

Resilience measures will be required if buildings are situated in the flood risk area.

The site layout should be designed sequentially to avoid surface water flood risk.

• Reference should be made to the SuDS SPG regarding SuDS techniques in new or re-development sites.

• Evidence shall be included to confirm that the appropriate commitment is made by the parties with responsibility for assets required to manage the risk of surface water flooding for the lifetime of the development.

towards meeting the housing needs of the city the site. The site had a mixed score in the CPP2 Sustainability Appraisal with a positive impact for housing and the potential to make better use of a previously developed site, potential for remediation, nature conservation enhancements and deliver improved and modernised employment floorspace through mixed use redevelopment.

Sequential Test: n/a – FZ1 and low risk of flooding from other sources of flooding

There is a current planning application for this proposed CPP2 strategic site allocation. The SFRA Level 2 assessment sets out detailed requirements for making the site safe for is lifetime for the various site users without increasing flood risk elsewhere.

The following policies would apply:
• CPP1 Policy CP11 Flood Risk
• Draft CPP2 Policy DM43 SuDS
• Draft Sustainable Drainage SPD
### Appendix 1 Adopted CPP1 analysis of flood risk vulnerability in City Plan Development Areas

<table>
<thead>
<tr>
<th>Policy no.</th>
<th>Development Area</th>
<th>Flood risk zone(s)</th>
<th>Existing flood defences</th>
<th>Existing uses</th>
<th>Proposed Development</th>
<th>Flood vulnerability classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA1</td>
<td>Brighton Centre and Churchill Square Area</td>
<td>FZ1</td>
<td>n/a</td>
<td>Retail, Leisure, Hotels, Offices, Church, Residential</td>
<td>Minimum of 20,000 m² retail, 25,000 m² leisure, 20 residential units</td>
<td>Less vulnerable, Less vulnerable</td>
</tr>
</tbody>
</table>

33 Flood Risk Zones are identified in the Brighton & Hove Strategic Flood Risk Assessment, which is informed by Environment Agency Flood Maps

34 See ‘Technical Guidance to the National Planning Policy Framework’, Table 1
<table>
<thead>
<tr>
<th>DA2</th>
<th>Brighton Marina, Gas Works, and Black Rock Area</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>Currently defended to 1 in 200 (0.5%) annual probability level.</th>
<th>Retail</th>
<th>Leisure</th>
<th>Residential</th>
<th>Hotel</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2000 m² industrial</td>
<td>5000 m² retail</td>
<td>10,500 m² leisure and recreation</td>
<td>1,940 residential units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community building</td>
<td>A health facility within or in the vicinity of the Marina</td>
<td>A primary school or increase in the number of school places within or in the vicinity of the Marina</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA3</td>
<td>Lewes Road Area</td>
<td>FZ1</td>
<td>n/a</td>
<td></td>
<td>810 residential units</td>
<td>Community Building</td>
<td>15,600 m² employment floorspace including an Innovation Centre; Business School and additional academic floorspace (16,000 m²);</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>Less vulnerable</td>
<td>Less vulnerable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35 See SFRA, Appendix B.
<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Zone</th>
<th>Type</th>
<th>Units</th>
<th>Vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA4</td>
<td>New England Quarter and London Road Area</td>
<td>FZ1</td>
<td>n/a</td>
<td>1,185 residential units</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>300 student housing</td>
<td>Less vulnerable</td>
</tr>
<tr>
<td>DA5</td>
<td>Eastern Road Edward Street Area</td>
<td>FZ1</td>
<td>n/a</td>
<td>470 residential units; 18,200 - 23,200 m² employment floorspace; 74,000 m² hospital floorspace; 400-bed student accommodation</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,800 m² education floorspace</td>
<td>Less vulnerable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dance studio, multi-practice GP and community building</td>
<td>More vulnerable (or highly vulnerable if basements)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3530 m² University library (education floorspace); a community building for Queens Park and Craven Vale.</td>
<td>More vulnerable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ancillary supporting uses</td>
<td>Few vulnerable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>More vulnerable (or highly vulnerable if basements)</td>
<td>Less vulnerable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>More vulnerable</td>
<td>Less vulnerable</td>
</tr>
</tbody>
</table>
| DA6  | Hove Station Area | FZ1 | n/a | Residential Retail Employment | Within Conway Street Industrial Area retention/ replacement of 12,000 sq m employment floorspace 1,000 m² employment additional 630 residential units | Less vulnerable
More vulnerable (or highly vulnerable if basements)
|
|------|------------------|-----|-----|-------------------------------|----------------------------------------------------------------------------------|----------------------------------|
| DA7  | Toad's Hole Valley | FZ1 | n/a | Open space                    | Minimum of 700 residential units
Minimum of 25,000 m² of office space
Primary School
Eco-centre
Public open space with children’s play space and informal sports facilities
Shops and cafes
Doctor’s surgery
Food growing space | More vulnerable (or highly vulnerable if basements)
Less vulnerable
More vulnerable
Less vulnerable
Water compatible development
Less vulnerable
Less vulnerable
Water compatible development |
<table>
<thead>
<tr>
<th>DA8</th>
<th>Shoreham Harbour Area</th>
<th>FZ1 FZ2 FZ3a</th>
<th>South Portslade - n/a Shoreham Harbour – estimated defence of 1 in 50 year standard(^\text{36})</th>
<th>Port Employment Residential Retail Education Community</th>
<th>300(^\text{17}) residential units within Brighton &amp; Hove 7500 m(^2) net additional employment floorspace</th>
<th>More vulnerable (or highly vulnerable if basements) Less vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA1</td>
<td>The Seafront - King Alfred</td>
<td>FZ1 n/a</td>
<td>Sport &amp; Recreation Replacement leisure facility Minimum 400 homes</td>
<td>Less vulnerable More vulnerable (or highly vulnerable if basements)</td>
<td>Less vulnerable</td>
<td></td>
</tr>
</tbody>
</table>

\(^{37}\) Through the proposed modifications to the City Plan the housing allocation at Shoreham Harbour has been reduced from 400 to 300 homes