

**SEQUENTIAL AND  
EXCEPTION TEST**

**of sites in the**

**SUBMISSION DRAFT LOCAL PLAN**

**March 2018**

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## 1. CONTEXT AND METHODOLOGY

### Introduction

- 1.1 Flooding has been a particularly high-profile issue in recent years. In Reading, flooding is a significant constraint, as it affects the majority of the Borough's undeveloped land, as well as substantial parts of the urban area, including the centre. The Council's Strategic Flood Risk Assessment (2017)<sup>1</sup> details the extent of flood risk in the Borough, and also provides an overview of historic flooding in Reading.
- 1.2 The National Planning Policy Framework (NPPF) applies a Sequential and Test and, in some cases, an Exception Test to the development of land which could be affected by flooding. These Tests apply to both allocations in the development plan and planning applications. Therefore, a Local Plan which proposes to allocate sites in either Flood Zone 2 or 3 for development should be supported by a Sequential and, if necessary, Exception Test. Planning Practice Guidance outlines more detail on how these tests should be applied.
- 1.3 The Local Plan proposes to allocate 27 sites either wholly or partly in Flood Zones 2 and 3 for development. These sites are:
- CR11c: Station Hill
  - CR11e: North of the Station
  - CR11f: West of Caversham Road
  - CR11g: Riverside
  - CR11h: Napier Road Junction
  - CR11i: Napier Court
  - CR12a: Cattle Market
  - CR12b: Great Knollys Street and Weldale Street
  - CR13b: Forbury Retail Park
  - CR13c: Forbury Business Park and Kenavon Drive
  - CR14g: The Oracle Extension, Bridge Street and Letcombe Street
  - CR14h: Central Club, London Street
  - CR14m: Caversham Lock Island and Caversham Weir, Thames Side
  - SR1a: Former Landfill, Island Road
  - SR1b: North of Island Road
  - SR1c: Island Road A33 Frontage
  - SR2: Land North of Manor Farm Road
  - SR4a: Pulleyn Park, Rose Kiln Lane
  - SR4d: 16-18 Bennet Road
  - SR4e: Part of Former Berkshire Brewery Site
  - SR4f: Land South West of Junction 11 of the M4
  - WR3a: Former Cox & Wyman Site, Cardiff Road
  - WR3b: 2 Ross Road and Part of Meadow Road
  - WR3c: 28-30 Richfield Avenue
  - WR3i: Part of Former Battle Hospital, Portman Road
  - WR4: Potential Traveller Transit Site, Cow Lane
  - CA1a: Reading University Boat Club, Thames Promenade
- This document demonstrates that the allocation of these sites is in line with the NPPF, as well as the Council's own draft planning policy on flooding. The document also applies the sequential test to other possible sites at risk

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<sup>1</sup> Available on the Council's website: [www.reading.gov.uk/readingldf](http://www.reading.gov.uk/readingldf)

of flooding where flood risk is the issue identified within the HELAA upon which allocation hinges.

### Policy Context

- 1.4 The NPPF sets the national policy context for consideration of flood risk. It states that:

“Local Plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change...” (paragraph 100)

- 1.5 Local planning authorities allocating land in a Local Plan should apply the Sequential Test to demonstrate that there are no reasonably available sites appropriate for the proposed development in areas with lower probability of flooding. If, following the application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the development to be located in zones of lower probability of flooding, the Exception Test can be applied.
- 1.6 The Exception Test consists of two elements, both of which are required to be passed. Firstly, a development must provide wider benefits to the community that outweigh flood risk. Secondly, a site-specific flood risk assessment must be carried out, and this should show that 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.
- 1.7 National Planning Practice Guidance<sup>2</sup> contains considerably more detail on the application of both the Sequential and Exception Tests.

### Reading Borough Local Plan

- 1.8 The Reading Borough Local Plan will be the main document containing planning policies for the Borough, and will replace the three existing development plan documents, the Core Strategy (adopted 2008, amended 2015), Reading Central Area Action Plan (adopted 2009) and Sites and Detailed Policies Document (adopted 2012, amended 2015).
- 1.9 A Draft Local Plan was subject to consultation in May and June 2017. A Pre-Submission Draft Local Plan, which was the final consultation stage before the Local Plan is submitted to the Secretary of State, was subject to consultation between November 2017 and January 2018. Following this, submission to the Secretary of State is timetabled for March 2018. A public examination of the Local Plan will follow during 2018.
- 1.10 The Local Plan contains both general policies which will apply to developments within Reading regardless of location, and area and site-specific policies, which will include development allocations. The development management policies include matters relevant to this assessment, such as flooding and adaptation to climate change. However, it

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<sup>2</sup> <https://www.gov.uk/guidance/flood-risk-and-coastal-change>



is the allocation of sites for development that is of interest in terms of the Sequential and Exception Test.

## Methodology

- 1.11 The Council has used the following methodology for carrying out the Sequential and Exception Test.
- 1.12 ***Stage A: Identify the need for development***  
This section will identify the development needs for Reading, as informed by a number of assessments. In the main, these are quantitative needs, corresponding with the NPPF's objective assessment of needs, but more qualitative issues are also considered. Development already under construction is subtracted from the need figure at this point.
- 1.13 ***Stage B: Identify all potential development sites and their flood risk***  
This section will list all identified opportunities for development, and will identify their flood risk. These sites are consistent with those sites set out in the Housing and Economic Land Availability Assessment (HELAA, May 2017), as, whilst the consideration is presented separately here to aid understanding, the carrying out of the Sequential Test was an integral part of that HELAA process.
- 1.14 The identification of flood risk on each site is derived from the Council's most recent Strategic Flood Risk Assessment. The SFRA, as well as identifying Flood Zones 2 and 3, also identifies the functional floodplain (Zone 3b) as well as likely changes as a result of climate change. Where a variety of flood risk exists across the site, the percentage of land at each level of risk is shown.
- 1.16 ***Stage C: Identify the level of development need that can be met in Flood Zone 1***  
In this Stage, all of the Flood Zone 1 sites are considered, in terms of their suitability, availability and achievability to accommodate the identified development needs. This analysis is the same analysis as is carried out in the HELAA. This section will then identify the extent to which the identified needs can be met on such sites within Reading.
- 1.17 ***Stage D: Apply Sequential Test to all sites in Flood Zones 2 and 3***  
This Stage considers all potential development sites in Flood Zones 2 and 3, including any sites that are identified in the Strategic Flood Risk Assessment (May 2017) as being part of the 1 in 100 year floodplain when taking account of allowances for 25%, 35% or 70% for climate change.

For each site, the following analysis will be undertaken:

- Summarise flood risk, including flood risk from sources other than fluvial flooding - this is consistent with the SFRA, and includes surface water and groundwater flooding. The SFRA identifies other potential sources of flooding including from a breach of Whiteknights Reservoir, but no sites within this assessment would be affected;
- Identify the need that the development would fulfil (from Stage A);
- Examine strategic opportunities to reduce flood risk, such as alternative uses;

- Examine the opportunities to minimise flood risk, in particular on mixed-use sites where more vulnerable uses can be in lower-risk areas;
  - Assess suitability of the development according to Table 3 of Planning Practice Guidance on Flood Risk and Coastal Change<sup>3</sup>; and
  - Conclude - has the sequential test been passed? If so, is the Exception Test required?
- 1.18 The sites are appraised in order of flood risk. The order is determined as follows;
- Firstly by the proportion of the site in the functional floodplain;
  - Secondly by the proportion of the site in Flood Zone 3;
  - Thirdly by the proportion of the site in Flood Zone 3 with a 25% allowance for climate change;
  - Fourthly by the proportion of the site in Flood Zone 3 with a 35% allowance for climate change;
  - Fifthly the proportion of the site in Flood Zone 3 with a 25% allowance for climate change; and
  - Sixthly the proportion of the site in Flood Zone 2.
- 1.18 ***Stage E: Apply Exception Test where it is required***  
Where a site passes the Sequential Test, an Exception Test is sometimes required, depending on the vulnerability of the use and the flood risk. Table 3 of Planning Practice Guidance on Flood Risk and Coastal Change sets out where an Exception Test is required.
- 1.19 Where an Exception Test is required, this document presents it immediately after the Sequential Test for the relevant site. This is because it is relevant to the sequential test of the following sites - if the Exception Test can be passed, the relevant sites are available for the purposes of applying the sequential test to sites at greater risk of flooding.
- 1.20 ***Traveller Transit Site***  
A potential location has been identified for a traveller transit site under policy WR4 at the junction of Cow Lane and Richfield Avenue. This is primarily in Flood Zone 2 and therefore also requires the application of the sequential test. However, because the site search process for sites for gypsy and traveller use was undertaken separately from the HELAA, and is summarised instead in the Gypsy and Traveller Provision Background Document, it makes sense to separate it out to avoid confusion, and it is therefore dealt with in section 6. However, the overall methodology is the same as stages A to E above.

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<sup>3</sup> Paragraph: 067 Reference ID: 7-067-20140306

## 2 STAGE A: IDENTIFY THE NEED FOR DEVELOPMENT

### Quantitative Needs

2.1 A variety of studies have been undertaken to identify the development needs that Reading must plan for.

- **Housing:**  
The Berkshire (with South Bucks) Strategic Housing Market Assessment (SHMA, February 2016) identifies an 'objectively assessed need' for new dwellings of 699 per annum up to 2036, or **16,077** in total.
- **Other types of accommodation:**  
The SHMA identifies a need for **253** bedspaces of residential care in Reading up to 2036, which is in addition to the objectively assessed needs above. No other additional housing needs are identified, including for new student accommodation. For ease of reference, the need for residential care is included within the overall housing figure, using a dwelling equivalent which is justified in full in the HELAA<sup>4</sup>, but is one dwelling equating to two bedspaces, meaning a need of **127** is added to the overall housing need.
- **Offices:**  
The Central Berkshire Economic Development Needs Assessment (EDNA, November 2016) identifies need for various levels of new offices up to 2036 depending on which scenario is used. It then adds a 'safety margin' and an allowance for future losses. It is considered that the most robust level of need to compare against supply is the 'labour supply' scenario (which produces the highest levels of need of the three scenarios) plus the safety margin. The figure used for these purposes is therefore the need from the Labour Supply scenario of 44,605 sq m plus the safety margin of 8,170 sq m, meaning a total of **52,775 sq m**.
- **Industry and warehouses:**  
The Central Berkshire EDNA also calculated need for industrial and warehouse floorspace to 2036. The same assumptions have been used as for offices, i.e. the 'labour supply' scenario of 133,910 sq m plus the safety margin of 14,530 sq m, resulting in a total of **148,440 sq m**.
- **Retail and related uses:**  
A Retail and Leisure Study in conjunction with Bracknell Forest Borough Council, Wokingham Borough Council and West Berkshire Council reported in April 2017. A need of up to **34,900 sq m** of retail and related space was identified.
- **Leisure:**  
As above, a Retail and Leisure Study has recently been undertaken. The need for leisure is not identified in terms of floorspace, rather it identifies specific types of facility. No floorspace figure is therefore used here.

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<sup>4</sup> See Section 7 of the Housing and Economic Land Availability Assessment, May 2017

- 2.2 These needs are summarised in Table 2.1. This takes account of development that has already taken place between 2013 and 2017, and development which is already under construction at 1 April 2017. It also takes account of an allowance for small housing sites of less than 10 dwellings, in line with the approach of the HELAA, and based on average rates over the last fifteen years. It also includes allowance for a site for a secondary school on an as-yet unidentified site, which is also part of the HELAA analysis.

**Table 2.1: Identified Quantitative Needs**

Use	Identified Need 2013-2036	Completed devt 2013-2017	Devt under construction 2017	Allowance for small sites	Allowance for school	Remaining Need
Housing (homes)	16,204 <sup>b</sup>	2,514 <sup>b</sup>	914 <sup>b</sup>	2,413 <sup>7</sup>	-120	10,483
Offices (sq m)	52,775	-96,685	21,641	0	0	127,819
Industrial/ w'housing (sq m)	148,440	-6,692	29,258	0	0	125,874
Retail & related (sq m)	34,900	-18,994	-2,009	0	0	55,903
Leisure (sq m)	No f/s figure	-7,047	-298	0	0	No f/s figure

### Regeneration Needs

- 2.3 In the past, this Council has argued that the sequential test has been passed on some sites on the basis of a strong regeneration need. This has usually been linked to significant town centre sites at risk of flooding, which are previously developed and either vacant or substantially underused, and where development for uses including residential help to bring about vital regeneration benefits to the town centre and wider town. This was argued in particular when producing the Reading Central Area Action Plan (adopted 2009), and accepted by the Inspector. Many of the sites to which this applied are assessed again in this document (e.g. North of the Station, Forbury Retail Park etc).
- 2.4 This version of the Sequential and Exception Test does not seek to rely on regeneration need to justify the relevant allocations. The Council still considers that those arguments remain entirely valid, as without development on some of these sites at risk of flooding, there would be highly visible, highly accessible town centre sites allowed to become underused and derelict over time. However, in the context of the scale of the needs identified in studies to support the Local Plan, there is simply no requirement to consider issues beyond the quantitative needs, and therefore regeneration needs are not a factor in this document. Were that position to change, a successor to this document could well examine regeneration needs in more depth once again.

<sup>5</sup> Includes an allowance for need for residential care - see HELAA for full explanation. This is not the figure from the Commitments, because it could lead to double-counting with the small site allowance - instead it is the amount of development on HELAA sites under construction.

<sup>6</sup> Includes taking account of forms of residential not within the C3 use class, in particular student accommodation and residential care - see HELAA for full explanation.

<sup>7</sup> 127 homes per annum

## Other Needs

- 2.5 As well as the above, there are other forms of development that are less straightforward to quantify that nevertheless make a major contribution to meeting the agreed aims of the area. Of particular relevance to this report is the need for uses involving some limited development to help make the best use of the waterways for sustainable forms of sport and recreation. Reading already benefits from such uses of the Thames in particular, with walking and cycling along much of its length in the Borough, a strong role for sports on the river such as rowing, complemented by riverside leisure uses such as eating and drinking. Clearly, such uses need to be considered against other factors such as flood risk, biodiversity and water quality, but where a balance can be struck, development can bring substantial economic and social benefits to the town.
- 2.6 These potential benefits are highlighted in documents such as the Thames Waterways Plan, produced by the River Thames Alliance. The original Thames Waterways Plan, which underlined the benefits of sport and recreation use of the river, was withdrawn in 2016, but a consultation on a successor in 2015 continued to identify the following strategic objectives:
- *“The River Thames and its corridor should be promoted effectively as a visitor destination for the benefit of visitors and the local economy.*
  - *To increase the use of the Thames for water-based sport and recreation, focussing particularly on better access for those groups of people whom Sport England identifies as particular priorities. These groups include disabled people, young people under 25 and older people over 50 years of age.”<sup>8</sup>*
- 2.7 Achieving such aims may require some development along the river, although much of it may be small scale and, in many cases, water compatible as defined in Planning Practice Guidance. However, this still requires compliance with the sequential test, and these sites are therefore dealt with in this document.

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<sup>8</sup> [http://www.riverusergroups.org.uk/groupfiles/viewfile.php?viewfile=thames-rugfile\\_1422720757\\_MS%20JS%20Final%20-%20310115%20-%201238.pdf&recid=42](http://www.riverusergroups.org.uk/groupfiles/viewfile.php?viewfile=thames-rugfile_1422720757_MS%20JS%20Final%20-%20310115%20-%201238.pdf&recid=42)

### 3. STAGE B: IDENTIFY ALL POTENTIAL DEVELOPMENT SITES AND THEIR FLOOD RISK

- 3.1 The full list of potential development sites potentially capable of accommodating ten or more dwellings or 500 sq m of non-residential floorspace, as identified in the Housing and Economic Land Availability Assessment, is set out at Appendix 1. This identifies the level of flood risk associated with each site, as identified within the Strategic Flood Risk Assessment 2017, in terms of the percentage of each site that is situated within each level of flood risk. Sites where all potential development on the site is already under construction are excluded, as they have been taken into account in Table 2.1.
- 3.2 As well as identifying Flood Zones 1, 2 and 3 and the functional floodplain, the level of flood risk identified also seeks to take potential changes as a result of climate change into account. Section 10.2 of the SFRA takes into account the 2016 guidance on the application of climate change allowances from the Environment Agency, and sets out a range of levels that need to be considered for different vulnerabilities of development in different flood zones. Essentially, the three scenarios relate to the extent of the 1 in 100 year flood plain plus 25%, 35% and 70%. Where appropriate, a site is assigned to one of those categories.
- 3.3 The table in Appendix 1 sets out the amount of land in each classification. The totals do not add, because if a site is 30% in Flood Zone 3, that 30% is also within Flood Zone 2. It should be noted that, due to some very slight differences in how the modelling has been spatially presented, there are occasions where there is considered to be slightly more land at a higher flood risk (e.g. there might be 15% in the functional floodplain but 10% in Flood Zone 3), but this does not affect the overall conclusions.
- 3.4 After advice by the Environment Agency, these sites have been ordered by flood risk, with the sites at lowest risk of flooding listed first. Sites which are 100% in Flood Zone 1 are listed first, and then, where any land at elevated risk of flooding exists, the sites are ordered as follows:
- By proportion of the site in the functional floodplain; then
  - By the proportion of the site in Flood Zone 3; then
  - By the proportion of the site in Flood Zone 3 with a 25% allowance for climate change; then
  - By the proportion of the site in Flood Zone 3 with a 35% allowance for climate change; then
  - By the proportion of the site in Flood Zone 3 with a 25% allowance for climate change; and then
  - By the proportion of the site in Flood Zone 2.
- 3.5 It should be noted that this ordering can throw up some anomalies. For instance, Station Hill, a large site currently entirely in Flood Zone 1, but where a small portion of the site would be within Flood Zone 3 taking account of 70% for climate change, is considered at greater risk of flooding than sites where the vast majority of the site is within Flood Zone 2. However, where there are a number of different flood risks to take account of, it is difficult to avoid this.

4. **STAGE C: IDENTIFY THE LEVEL OF DEVELOPMENT NEED THAT CAN BE MET IN FLOOD ZONE 1**
- 4.1 In this Stage, all of the Flood Zone 1 sites are considered, in terms of their suitability, availability and achievability to accommodate the identified development needs. The analysis was carried out in full within the HELAA (May 2017) for each site, and a conclusion has been drawn about the extent to which a site will be able to meet identified needs.
- 4.2 Appendix 2 lists all sites, with sites in Flood Zone 1 listed first, and identifies firstly whether they are suitable, available or achievable, in line with the HELAA. These conclusions are part of a thorough and detailed analysis of each site, so for the full reasoning for why a site is accorded a certain conclusion, reference must be made to the HELAA.
- 4.3 Table 4.1 sets out the amount of development which can be accommodated within sites wholly within Flood Zone 1. After these 100% Flood Zone 1 sites are taken into consideration, there clearly remain very significant levels of development need that cannot be met - around two thirds of the remaining housing need, an actual increase in the office need (due to some of the housing potential coming from loss of offices), and the vast majority of the industrial and warehousing and retail need. Given the fact that so many of Reading's potential development sites are in the centre and the south and affected at least in part by greater risk of flooding, this is not a surprising conclusion.

**Table 4.1: Potential of Flood Zone 1 sites**

Use	Remaining Need after Stage A	Potential of Flood Zone 1 sites	Remaining Need after Stage C
Housing (homes)	10,483	3,554	6,929
Offices (sq m)	127,819	-25,606	153,425
Industrial/warehousing (sq m)	125,874	-3,079	128,953
Retail & related (sq m)	55,903	1,682	54,221
Leisure (sq m)	No f/s figure	-1,705	No f/s figure

- 4.4 Therefore, it is clear that, if the full needs for development are to be accommodated within Reading, use of sites within higher risk flood zones will be required.

**5. STAGES D AND E: APPLY SEQUENTIAL TEST AND EXCEPTION TEST TO ALL SITES IN FLOOD ZONES 2 AND 3.**

5.1 The schedules in this section look at every site that is proposed to be identified in the Local Plan, along with any other sites which would be considered to be suitable, available and achievable within the HELAA subject to flood risk, and considers whether they would pass the sequential test.

5.2 However, before this analysis is carried out, there are a number of sites within Flood Zones 2 and 3 which already benefit from planning permission for the full development. A sequential test was generally required for these sites during the planning application process, and it is not therefore considered necessary to re-run that process. The sites, together with their development potential, are set out in Table 5.1 below. This excludes any sites with planning permission that are also to be included as allocations in the Local Plan, because an allocation in the Local Plan might lead to an alternative development, and still requires this justification in line with national policy.

**Table 5.1: Sites with Planning Permission in Flood Zones 2 and 3**

Site Ref	Address	Development potential (minus dwellings/floorspace under construction)							
		Resi (units)	Office (m <sup>2</sup> )	Ind/Whsg (m <sup>2</sup> )	Retail (m <sup>2</sup> )	Leisure (m <sup>2</sup> )	Hotel (m <sup>2</sup> )	Commy (m <sup>2</sup> )	Other (m <sup>2</sup> )
AB034	Land West of Rivermead Car Park	0	0	0	425	0	0	0	0
AB041	Havell House, 62-66 Queens Road	12	-806	0	0	0	0	0	0
AB056	Former Gas Works Building, Gas Works Road	18	0	-482	0	0	0	0	0
AB095	3-4 Wesley Gate, Queens Road	13	-749	0	0	0	0	0	0
AB098	Clarendon House 59-75 Queens Road	44	-2,264	0	0	0	0	0	0
CA001	Unit 1, Paddock Road Industrial Estate	0	0	1,419	0	0	0	0	0
CA003	St Martin's Precinct, Church Street	36	0	0	923	587	0	0	0
KA031	Building 1, New Century Place, East Street	68	-2,282	0	0	0	0	0	0
KA032	Building 2, New Century Place, East Street	52	-1,778	0	0	0	0	0	0
MA001	Chazey Farm, The Warren	35	0	0	0	0	0	0	0
MI002	Lok n Store, 5-9 Berkeley Avenue	112	0	0	0	0	0	0	0
WH005	400 Longwater Avenue	0	27,207	0	0	0	0	0	0
WH006	Plot 8, 600 South Oak Way	0	20,430	0	0	0	0	0	0
WH008	Green Park Village, Longwater Avenue	559	16,000	0	684	0	0	190	0
WH009	Plot 17, 500-600 Longwater Avenue	0	22,540	0	0	0	0	0	0
WH011	Foudry Place and 22 Commercial Road	0	2,295	0	0	0	1,400	0	0
WH014	Land west of Longwater Avenue	0	0	0	0	0	0	0	6,106
WH016	Kennet Island Phase 3, Manor Farm Road	52	0	0	0	0	0	0	0



WH018	Land at the Madejski Stadium	556	1,775	0	1,735	20,732	21,245	0	15,570
WH048	Unit 4 Brunel Retail Park	0	0	0	948	0	0	0	0
<b>TOTAL</b>		<b>1,556</b>	<b>82,367</b>	<b>937</b>	<b>4,714</b>	<b>21,318</b>	<b>22,645</b>	<b>190</b>	<b>21,676</b>
<b>REMAINING NEED</b>		<b>5,373</b>	<b>71,058</b>	<b>128,016</b>	<b>49,507</b>	<b>No f/s</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>










5.3 After carrying out the Sequential Test, the next stage would generally be to apply the Exception Test where it was required (in line with Table 3 of Planning Practice Guidance on Flood Risk and Coastal Change<sup>9</sup>), i.e. for:

- More vulnerable uses in Flood Zone 3a;
- Highly vulnerable uses in Flood Zone 2; and
- Essential infrastructure in Flood Zones 3a and 3b.

5.4 The Exception Test, in line with paragraph 102 of the NPPF, should demonstrate that a development fulfils both of the following two criteria:

- It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and
- A site-specific flood risk assessment must demonstrate that 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.

5.5 The below tables carry out the sequential test for those sites proposed to be allocated within Flood Zones 2 and 3. These are in order of flood risk, with those at lowest risk of flooding considered first. Where an exception test is required, it follows the sequential test for each site.

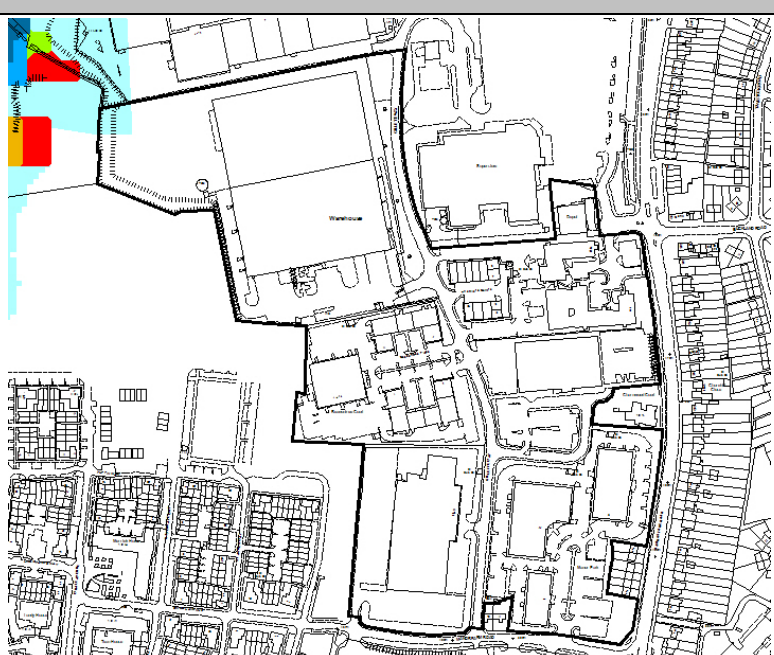
KEY TO FLUVIAL FLOOD RISK MAPS	KEY TO SURFACE WATER FLOOD RISK MAPS
 Functional floodplain	 1 in 30 year (3.3% annual probability)
 Flood Zone 3	 1 in 100 year (1% annual probability)
 1 in 100 plus 25% climate change extent	 1 in 1000 year (0.1% annual probability)
 1 in 100 plus 35% climate change extent	
 1 in 100 plus 70% climate change extent	
 Flood Zone 2	


<sup>9</sup> <https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-3-Flood-risk-vulnerability>

**WH003: LAND NORTH OF MANOR FARM ROAD (Local Plan Ref: SR2)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 5%</p>	
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<p>Flooding from other sources:</p>	<p>Highest risk of flooding from surface water is around Gillette Way at the centre of the site.</p> <p>Within an area of less than 50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>
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**What are the proposed uses?**

Draft allocation in the Local Plan for 680-1,020 dwellings plus potential retail uses, school provision and employment uses. Residential and education are more vulnerable uses and retail and employment are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Education need:</p>	<p>Need for school facilities to support housing growth</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 5,373 homes, 128,017 sq m of

industrial and warehouse space and 49,506 sq m of retail and related uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The small part of the site within Flood Zone 2 is entirely covered in hardstanding, as are many of the areas at higher risk of surface water flooding. Provision of some landscaping areas and permeable surfaces within a residential development as well as on site public space required by the allocation presents an opportunity to reduce the risk of flooding on-site.
Minimisation:	Within a large development scheme, there may be opportunities to leave this small area of the site undeveloped, for instance to provide open space, although this will depend on other considerations around the layout of the site.

**Suitability of development on site:**

Residential, education and retail development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential, education and retail uses, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities within the development to both reduce and minimise flood risk on site.

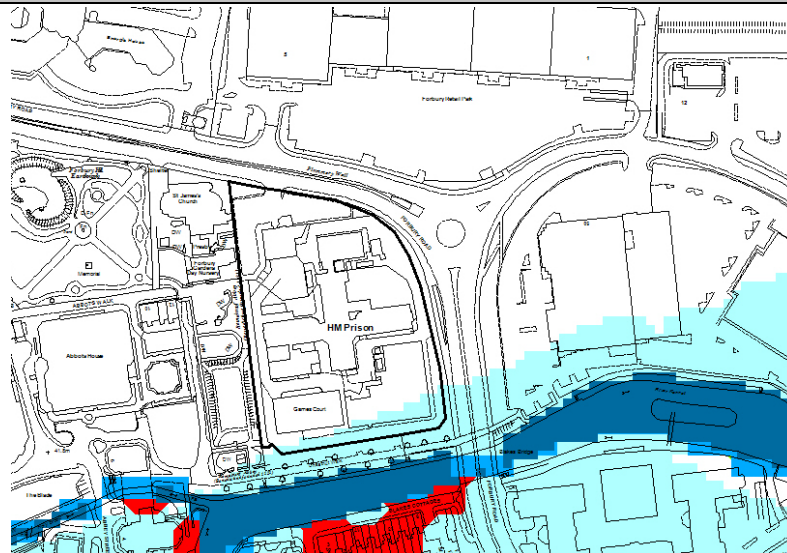

**EXCEPTION TEST**

None required

**AB013: READING PRISON (Local Plan Ref: CR13a)**

**SEQUENTIAL TEST**

**What is the flood risk?**

Fluvial flooding:	Flood Zone 2 - 8%		
Flooding from other sources:	<p>Slightly higher risk of flooding from surface water around the footprint of the existing prison building.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>		<p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for conversion of the listed prison building to a range of potential uses including residential (potential for 80 dwellings) and hotel, with potential for development on surrounding areas subject to archaeology and heritage issues. Residential and hotel uses are **more vulnerable** uses.

**What is the need for development?**

Housing need:	Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)
Office need:	Need for 52,775 sq m of office floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).
Industrial & warehousing need:	Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).
Retail need:	Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)
Leisure need:	Not applicable

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 4,689 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The area within Flood Zone 2 is the sloping southern edge of the site. A landscaped buffer to the southern edge, which would include removal of any buildings within current Flood Zone 2, would be likely to reduce flood risk on site. Replacement of some hardstanding within the areas at greater risk of surface water flooding would also be likely to reduce flood risk on site.
Minimisation:	The area in Flood Zone 2 is very much the edge of the site, and it may be possible to focus development on the main part of the site in Flood Zone 1. The archaeology of the site will be the primary factor in determining where, if anywhere, additional development can be accommodated on the site.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential uses, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities within the development to both reduce and minimise flood risk on site.



**EXCEPTION TEST**

None required

**AB014: FORBURY RETAIL PARK (Local Plan Ref: CR13b)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 20%</p>	
<p>Flooding from other sources:</p>	<p>Small patches within site at higher risk of flooding from surface water.  Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 1,230-1,840 dwellings plus potential retail development (no significant net gain). Residential is a **more vulnerable** use and retail is a **less vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 4,617 homes and 49,506 sq m of retail and related uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>Virtually the entire site is covered in retail buildings with a large footprint and hardstanding (surface car parks). There are some areas of landscaping, but</p>
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	these are minimal. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development as well as on site public space required by the allocation presents an opportunity to reduce the risk of flooding on-site.
Minimisation:	The area in Flood Zone 2 is restricted to the southern and eastern fringe of the site. Provision of a buffer to the Kennet & Avon canal, as required by policy, will help to minimise flood risk in the south. As a high to medium density residential development is proposed, it will not be possible to leave the areas of Flood Zone 2 undeveloped, but the likely focus will be on higher density residential towards the Inner Distribution Road, within Flood Zone 1.

**Suitability of development on site:**

Residential and retail development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential and retail uses, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities within the development to both reduce and minimise flood risk on site.

**EXCEPTION TEST**

None required



**WHO45: 16-18 BENNET ROAD (Local Plan Ref: SR4d)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 – 24% Flood Zone 3 – 8%</p>	
<p>Flooding from other sources:</p>	<p>Risk of surface water flooding is high across much of the site</p> <p>Within an area of less than 25% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 2,200 to 2,700 sq m of industrial and warehousing. Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 149,967 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>Most of the site is covered by buildings and hardstanding, including surface car parks. There are some vegetated areas around the southern edge of the site. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable</p>
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	drainage systems, as required by existing policy, would be able to reduce flood risk to some extent.
Minimisation:	There are no particular opportunities to provide a layout that minimises flood risk by only developing areas in Flood Zone 1, as this would essentially rule out a frontage building to Bennet Road.

**Suitability of development on site:**

Industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to reduce flood risk on site.

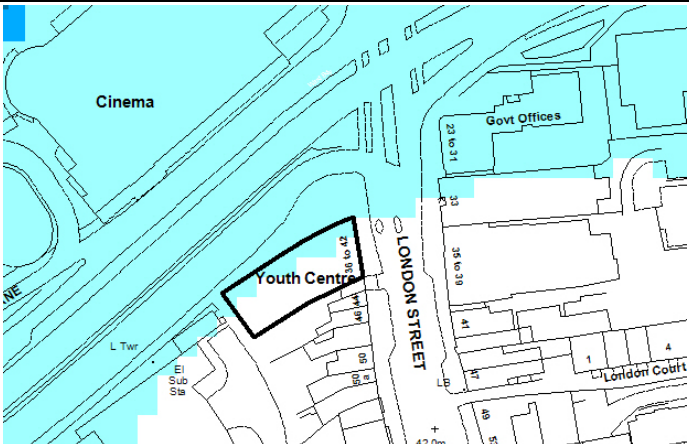

***EXCEPTION TEST***

None required

**KA030: CENTRAL CLUB, LONDON STREET (Local Plan Ref: CR14h)**

**SEQUENTIAL TEST**

**What is the flood risk?**

Fluvial flooding:	Flood Zone 2 - 34%	
Flooding from other sources:	<p>The Inner Distribution Road is at high risk of surface water flooding.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 8-12 dwellings with community use provision. Residential is a more vulnerable use.

**What is the need for development?**

Housing need:	Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)
Office need:	Not applicable
Industrial & warehousing need:	Not applicable
Retail need:	Not applicable
Leisure need:	Not applicable

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 3,625 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	As this is a very small site covered by a single building, there are not considered to be any clear opportunities to reduce flood risk. Retaining the mural along the northern edge of the site as required by policy means that the building footprint is unlikely to significantly alter.
Minimisation:	Provision of community floorspace on the ground floor is will minimise risk to residents. Current access to the building is within Flood Zone 1, and this is not expected to change.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the

Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to minimise flood risk through the layout.

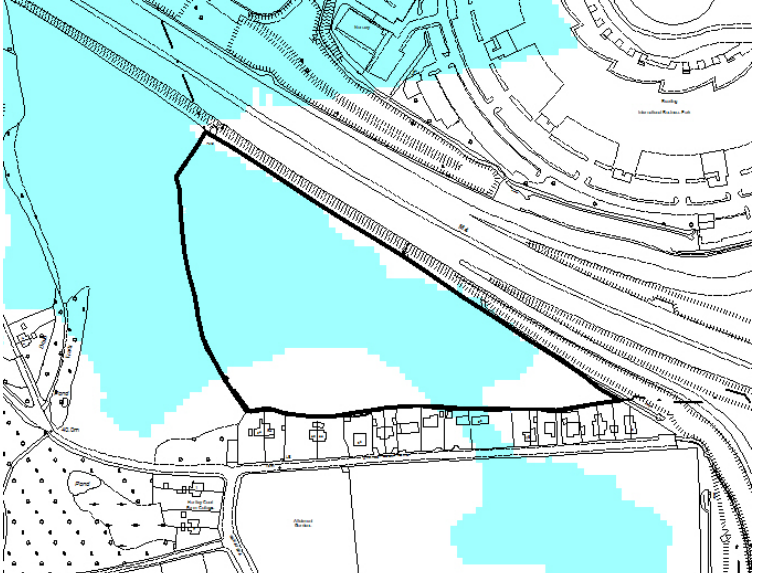

***EXCEPTION TEST***

None required

**WH022: LAND SOUTH OF THE M4 (Local Plan Ref: SR4f)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 72%</p>	
<p>Flooding from other sources:</p>	<p>Western edge of site at slightly higher risk of surface water flooding.</p> <p>Within an area of less than 25% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Site identified within the Draft Local Plan to be considered as part of a wider Grazeley scheme, which could accommodate up to 15,000 homes in adjacent authorities. The use of the land would be dependent on an overall masterplan for the area, so the Draft Local Plan does not identify a specific use. Residential, if included, is a **more vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 3,617 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	Potential for reduction and minimisation of flood risk is largely dependent on how the wider Grazeley area is developed. Since the Draft Local Plan comes in advance of the Local Plans for the two authorities (Wokingham and West Berkshire) within which the bulk of the site sits, identification in the policy is a placeholder at this stage to ensure that it is considered as part of a whole. The site could potentially be used for development, but equally it could be used to provide open space, landscaping or supporting facilities to the wider development.
Minimisation:	

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

At this stage, there is no proposal to use this land for any specific use. It could form part of a wider housing development, or it could equally contribute towards open space, landscaping or supporting uses. Flood risk would need to be considered across the wider site at a later stage, depending on the overall proposal. The conclusion is not therefore that the Sequential Test is formally passed at this stage for any particular development.

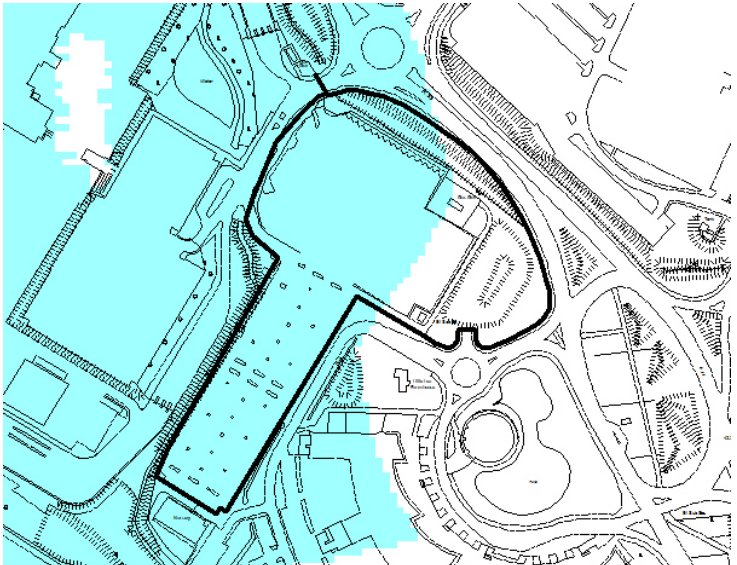

***EXCEPTION TEST***

None required

**WH002: PART OF FORMER BERKSHIRE BREWERY SITE (Local Plan Ref: SR4e)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 73%</p>	
<p>Flooding from other sources:</p>	<p>Much of site potentially affected by surface water flooding, highest risk at fringes of site.  Within an area of less than 25% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 11,000 to 13,000 sq m of industrial and warehousing, or office uses in line with planning permission. Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Need for 52,775 sq m of office floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 147,782 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The most likely development is for industrial and warehouse development, and this will inevitably involve large buildings and hardstanding. However, redevelopment of the site does offer an opportunity to reconsider drainage arrangements, and inclusion of SuDS is required by the Draft Local Plan. Office floorspace is a potential alternative, which already has planning permission.
Minimisation:	The ditches surrounding the site are clearly important for drainage and minimising flood risk, and there is potential for development to enhance their role in this regard.

**Suitability of development on site:**

Office and industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to minimise flood risk through the layout. Development for offices already has planning permission.


***EXCEPTION TEST***

None required

**WH010: LAND BOUNDED BY ISLAND ROAD, LONGWATER AVENUE, A33 AND SEWAGE TREATMENT WORKS (Local Plan Ref: SR1c)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 88%</p>	
<p>Flooding from other sources:</p>	<p>Small patches within site at higher risk of flooding from surface water.  Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 27,000 to 32,000 sq m of industrial and warehousing, or office uses in line with planning permission. Offices, industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Need for 52,775 sq m of office floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 87,496 sq m of offices and 138,074 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The most likely development is for industrial and warehouse development, and</p>
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	this will inevitably involve large buildings and hardstanding. However, redevelopment of the site does offer an opportunity to reconsider drainage arrangements, and inclusion of SuDS is required by the Draft Local Plan. Office floorspace is a potential alternative, which already has planning permission.
Minimisation:	The proposed development offers little opportunity to arrange uses in a way that minimises flood risk. There is a portion of the site within Flood Zone 1, but it makes little sense as a development site in its own right.

**Suitability of development on site:**

Office and industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be limited opportunities to reduce flood risk through the layout. Development for offices already has planning permission.

**EXCEPTION TEST**

None required

**AB026: THE ORACLE EXTENSION, BRIDGE STREET AND LETCOMBE STREET (Local Plan Ref: CR14g)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 90%</p>	
<p>Flooding from other sources:</p>	<p>The Inner Distribution Road as well as service roads at high risk of surface water flooding.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	<p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 1,600-2,000 sq m of retail or town centre uses. Retail is a less vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2. After these sites have been considered, there is a remaining need of 49,506 sq m of retail and related floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The vast majority of the site is currently covered in buildings. This is not likely to change substantially within the allocation, but redevelopment of the site does offer an opportunity to reconsider drainage arrangements, and inclusion of SuDS is required by the Draft Local Plan.
Minimisation:	The proposed development offers little opportunity to arrange uses in a way that minimises flood risk.

**Suitability of development on site:**

Retail development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites.

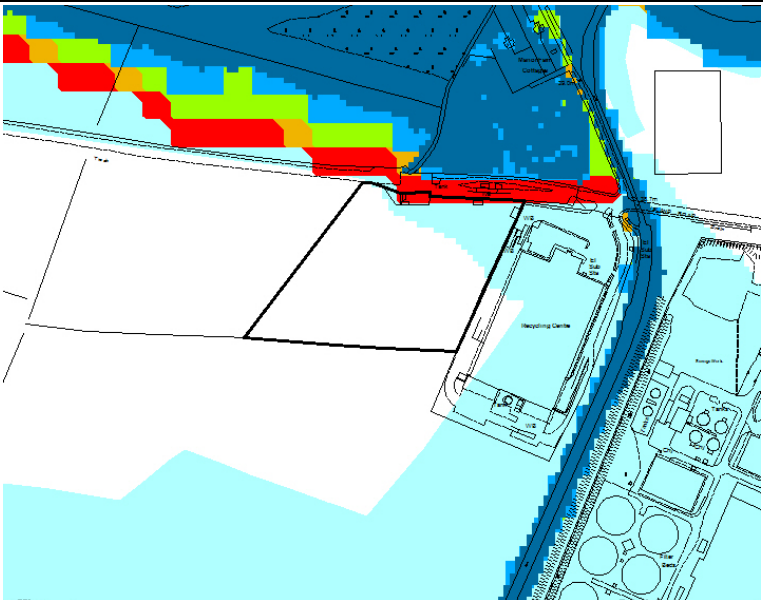

***EXCEPTION TEST***

None required

**WH020: LAND ADJACENT TO SMALLMEAD MRF, ISLAND ROAD (Local Plan Ref: SR1a - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 19% Flood Zone 3 + 70% - 3%</p>	
<p>Flooding from other sources:</p>	<p>The only area of higher risk of surface water flooding is at the access from Island Road.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 95,000 to 110,000 sq m of industrial and warehousing (across whole site, also including WH017 and WH047). Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 114,452 sq m of industrial and warehouse uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The site is former landfill, raised above ground level. Developing the site will involve some technical solutions to address possible contamination, groundwater and instability issues. Depending on how these are carried out, incorporation of flooding and drainage measures may have potential to reduce flood risk on site. More generally, an industrial or warehouse development will inevitably involve large floorplate buildings and significant areas of hardstanding, but there is an opportunity to design in flood risk reduction measures from the start.
Minimisation:	The areas of highest flood risk are in the north eastern corner of the site. It is likely to be possible to lay out any development so that buildings are kept to the areas in Flood Zone 1 without significantly reducing the development potential.

**Suitability of development on site:**

Industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to reduce and minimise flood risk on site.

**EXCEPTION TEST**

None required

**AB093: 2 ROSS ROAD (Local Plan Ref: WR3b - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 5% Flood Zone 3 + 70% - 5%</p>	
<p>Flooding from other sources:</p>	<p>There is a small area with slightly higher risk of surface water flooding in the south west corner of the site.</p> <p>Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 39-60 dwellings (part of wider site). Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 3,617 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The site is almost entirely covered with buildings, with no apparent permeable surfaces on the site. The prevailing character of the surrounding residential area is of houses with gardens, so it may well be that a residential development would actively reduce flood risk on site through provision of more permeable surfaces such as gardens and landscaping.
Minimisation:	The area of highest flood risk is on the access to the site, which is unlikely to be subject to residential development in any case as it would continue to be required as an access route. It is therefore unlikely that residential would be located outside Flood Zone 1 on this site.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site.



***EXCEPTION TEST***

None required

**AB003: STATION HILL (Local Plan Ref: CR11c)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 3 + 70% - 7%</p>	
<p>Flooding from other sources:</p>	<p>There are some small areas of high risk of flooding from surface water, in particular to the rear of the car park.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for mixed use development including 380-570 dwellings, 80,000-100,000 sq m of offices and other uses including retail and leisure. Residential is a more vulnerable use, and office, retail and leisure uses are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Need for 52,775 sq m of office floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Qualitative need for various leisure facilities including swimming.</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 and Flood Zone 2 sites, and sites with a smaller proportion of the site within Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a



remaining need of 3,617 homes, 87,496 sq m of offices and 49,506 sq m of retail and related uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The site is almost entirely covered by buildings and hardstanding, including service areas and car parking. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply. There is therefore considered to be some potential for reduction of flood risk on site.
Minimisation:	Higher risk of flooding is restricted to one small part of the site currently occupied by an office building. The Station Hill development is covered by a current planning permission, under which this plot would be developed for offices rather than residential. Any alternative development featuring a mix of uses could follow this example.

**Suitability of development on site:**

Residential, office and retail development is considered to be appropriate in this area, subject to the Sequential Test being passed.

It is worth bearing in mind that the entirety of this site is covered by an extant planning permission for a very significant development, largely within the parameters of the draft allocation. At the time it was granted planning permission, it would not have needed to pass the sequential test as no part was outside Flood Zone 1, as this was before the definition of the climate change allowances. However, a flood risk assessment was required as for any development of this scale.

**Conclusion:**

The development passes the sequential test for allocation for residential, office and retail use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site.

**EXCEPTION TEST**

None required

**AB055: FORMER COX & WYMAN, CARDIFF ROAD (Local Plan Ref: WR3a)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 19% Flood Zone 3 + 70% - 19%</p>	
<p>Flooding from other sources:</p>	<p>The areas with higher risk of flooding from surface water are restricted to the roads surrounding the site.</p> <p>Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 70-110 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 3,166 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is almost entirely covered with one large building with no apparent significant permeable surfaces on the site. The prevailing character of the</p>
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	surrounding residential area is of houses with gardens, so it may well be that a residential development would actively reduce flood risk on site through provision of more permeable surfaces. It is highly likely that the amount of the site covered by buildings would be reduced.
Minimisation:	The area of highest flood risk is at the periphery of the site. Whilst it may not be possible to avoid locating development within the area of Flood Zone 3 when accounting for 70% for climate change, there is not likely to be any need to locate development within the areas within Flood Zone 3 when accounting for the other climate change scenarios.

**Suitability of development on site:**

Residential development is considered to be appropriate in this area, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site.

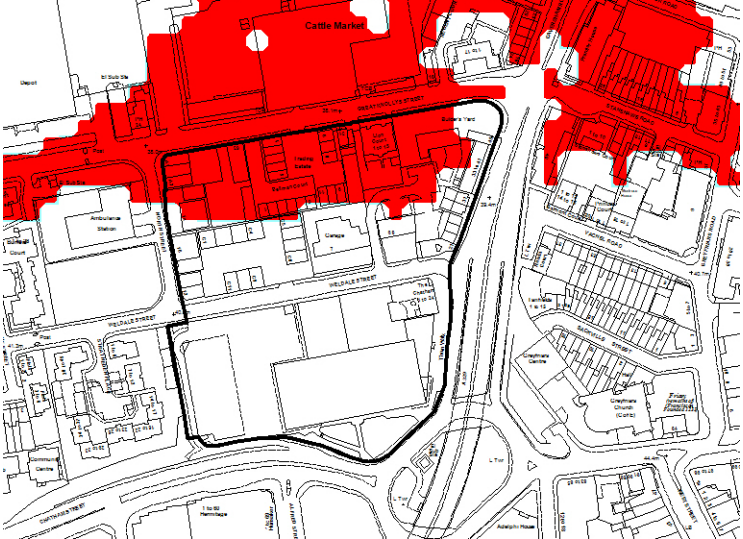

**EXCEPTION TEST**

None required

**AB009: GREAT KNOLLYS STREET AND WELDALE STREET (Local Plan Ref: CR12b)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 26% Flood Zone 3 + 70% - 26%</p>	
<p>Flooding from other sources:</p>	<p>Higher risk of surface water flooding at northern part of site near Great Knollys Street</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p>Extract from SFRA updated Flood Map for Surface Water</p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 280-430 dwellings and potential replacement of small business units (no net gain). Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 3,085 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is almost entirely covered by buildings and hardstanding, including service areas and surface car parking. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces.</p>
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	As a major development, the policy on SuDS will apply. There is therefore considered to be some potential for reduction of flood risk on site.
Minimisation:	Flood risk is restricted to the northernmost part of the site. Most of the area at risk of flooding is currently occupied by small business units in a variety of ownerships. The Draft Local Plan requires retention or replacement of these units within any development. At this stage, the HELAA does not anticipate that development of this part of the site will take place during the plan period. It is certainly likely that the bulk of new housing will be outside this part of the site, and will primarily be on the areas to the south of Weldale Street, within Flood Zone 1. A planning application for this part of the site is currently under consideration.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

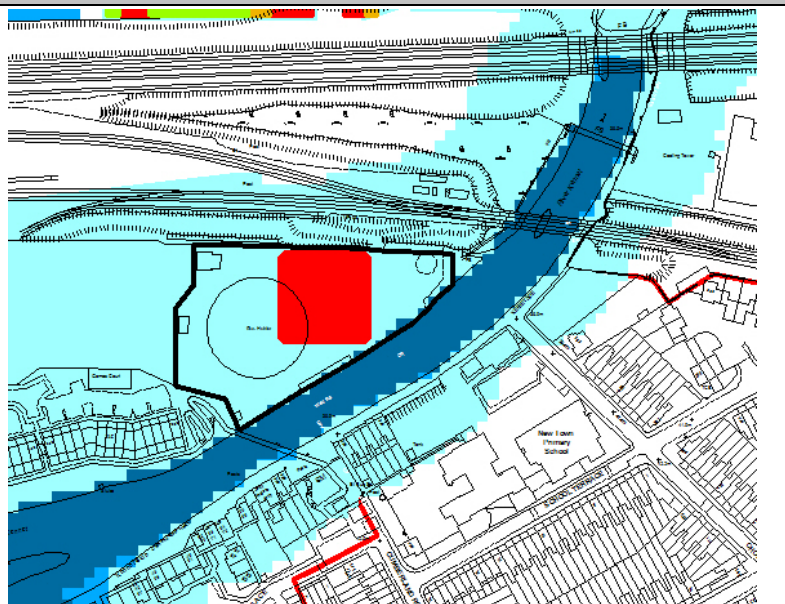

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site.

***EXCEPTION TEST***

None required

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100% Flood Zone 3 + 70% - 28%</p>	
<p>Flooding from other sources:</p>	<p>Small patch of higher risk of surface water flooding in centre of site.  Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 46-70 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 2,790 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is almost entirely covered by hardstanding and the footprint of the gas holder itself. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include</p>
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	landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply. There is therefore considered to be some potential for reduction of flood risk on site.
Minimisation:	The pattern of flood risk across the site, with the highest risk at the centre, makes it difficult to envisage a layout that will locate development in the lowest risk parts of the site.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce flood risk on site.

***EXCEPTION TEST***


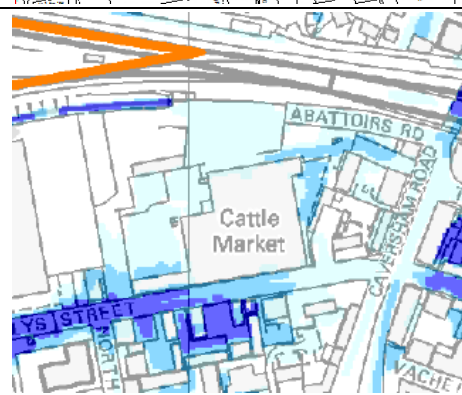
None required



**AB008: CATTLE MARKET (Local Plan Ref: CR12a)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 60% Flood Zone 3 + 70% - 82%</p>	
<p>Flooding from other sources:</p>	<p>Some elevated risk of surface water flooding across the site.  Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 330-490 dwellings and 10,000-15,000 sq m of retail. Residential is a more vulnerable use and retail is a less vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 2,744 homes and 40,593 sq m of retail and related uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**



Reduction:	The current Cattle Market site is entirely occupied by buildings, some of which have a significant footprint, and large areas of hardstanding, including use for surface car parking. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply. There is therefore considered to be some potential for reduction of flood risk on site.
Minimisation:	Given the pattern of flood risk across the site, it is not considered that there are substantial options to locate uses so that they are in the areas of lowest flood risk. Inclusion of retail across much of the ground floor will help to minimise the risk to some residential properties, although building entrances are still likely to be affected.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce flood risk on site.

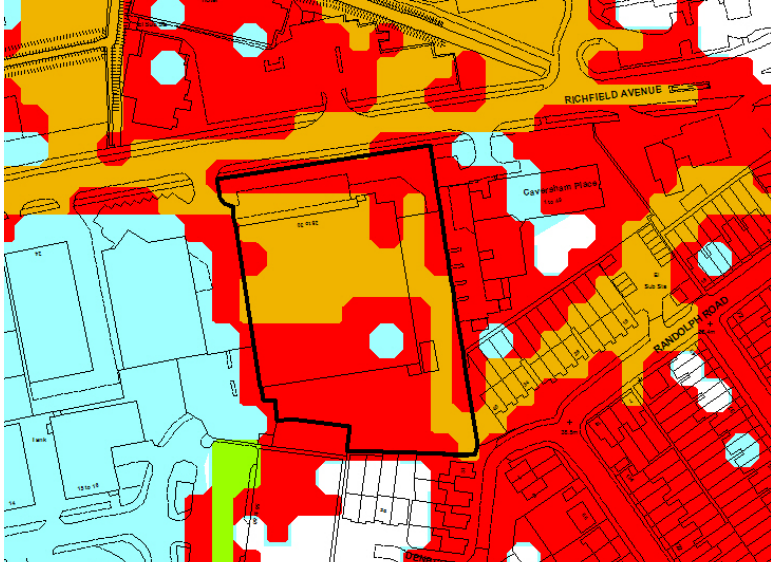

***EXCEPTION TEST***

None required

**AB073: 28-30 RICHFIELD AVENUE (Local Plan Ref: WR3c)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100% Flood Zone 3 + 70% - 98% Flood Zone 3+ 35% - 41%</p>	
<p>Flooding from other sources:</p>	<p>Some areas of higher risk of surface water flooding around the edges of the current building.  Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 50-80 dwellings. Residential is a **more vulnerable** use.

**What is the need for development?**

Housing need:	Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)
Office need:	Not applicable
Industrial & warehousing need:	Not applicable
Retail need:	Not applicable
Leisure need:	Not applicable

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 2,339 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	Site is covered by a building with a large footprint and hardstanding comprising service areas and surface car parking. The only clearly permeable surface is a thin strip of grass at the Richfield Avenue frontage. Whilst the drainage
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	arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply.
Minimisation:	The centre of the site forms the area of lowest flood risk. It would be possible for this to be the focus for the bulk of the new development proposed, although it is unlikely to be possible to achieve the proposed level of housing using only the areas at lowest risk of flooding. However, areas of on-site amenity or landscaping could be located to be within the highest flood risk areas, and a layout similar to the adjacent Trafalgar House would mean setting the building back beyond the northern edge featuring a strip of higher flood risk.

#### **Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that a portion of the site would be within the 1 in 100 year area with a 35% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

#### **EXCEPTION TEST**

##### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.
- Objective 17 - Value, protect and enhance opportunities for all to engage in culture, leisure, and physical and recreational activity, particularly in areas of open space and waterspace.

In general, the main sustainability benefits that the development would bring are in terms of being able to create a more satisfactory buffer between residential and commercial uses, which will reduce negative impacts on residential amenity. This is in addition to factors such as making best use of previously-developed land and provision of much needed land for housing.

##### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>10</sup>

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

<sup>10</sup>[http://www.reading.gov.uk/media/8139/27560RBCCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development. The site is not shown to be impacted by this event, and therefore floor levels should be raised an appropriate freeboard above the external general ground level;
2. The site is not impacted by the 1 in 100 annual probability plus 25% climate change allowance flood event, therefore the flood storage during this design event is not expected to be impacted through development proposals. The presence of a significant existing building footprint also suggests that floodplain storage capacity in more extreme events could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access would be available in the 1 in 100 annual probability +25% climate change allowance scenario and is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated an appropriate freeboard above the general ground level. Basement dwellings in Flood Zone 2 'Medium Probability' are considered appropriate subject to the Exception Test.
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

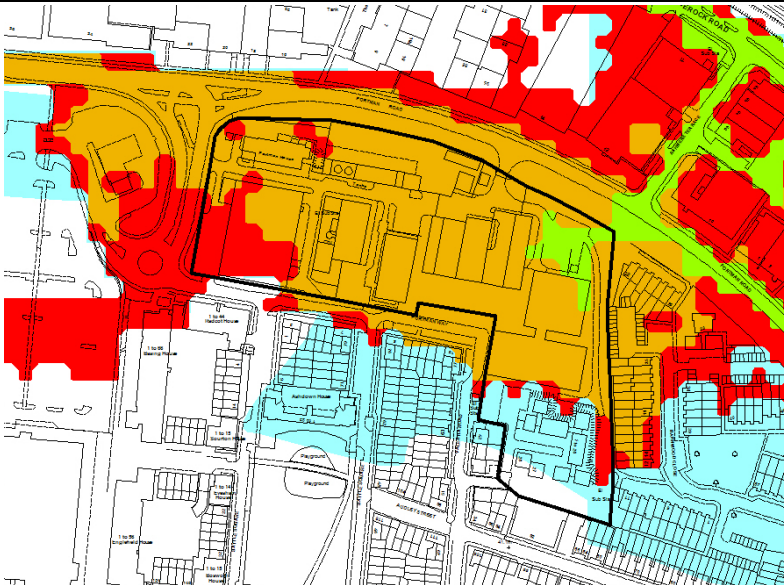

**Conclusion:**

The development passes the exception test for allocation for residential use.

**BA003: PART OF FORMER BATTLE HOSPITAL, PORTMAN ROAD (Local Plan Ref: WR3i)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 95%                  Flood Zone 3 + 70% - 86%                  Flood Zone 3+ 35% - 75%                  Flood Zone 3+ 25% - 4%</p>	
<p>Flooding from other sources:</p>	<p>Much of the site has high potential for surface water flooding, particularly in the north eastern corner.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 160-240 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 2,339 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>Site is covered mainly by a variety of buildings and car parks, although there are some small patches of grass and vegetation within the site, particularly the</p>
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	southern end which in any case is at the lowest risk. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply.
Minimisation:	Generally, much of the site is at a broadly similar risk of flooding, with the highest risk at the very north-eastern corner, and the lowest risk at the southern extent. Whilst there is potential to align on-site open space or landscaping to reflect the area of Flood Zone 3 with 25% for climate change, keeping development to the areas in Flood Zones 1 and 2 is not possible.

#### **Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 35% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

#### **EXCEPTION TEST**

##### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 12 - Promote strong and vibrant communities through reduction in crime and the fear of crime and enhanced community cohesion
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.
- Objective 15 - Ensure good physical access for all to essential services and facilities, including healthcare.

In general, the main sustainability benefits that the development would bring are bringing back into use an extensive, primarily redundant, brownfield site. The site is currently of very low visual quality, directly adjacent to existing homes, and without redevelopment will continue to decline and detract from the local area. Residential is the most appropriate use of the site, as Portman Road marks a strong dividing line between residential and industrial.

##### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>11</sup>

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.

<sup>11</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The presence of a significant existing building footprint suggest that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access would be available in the current 1 in 100 annual probability flood event and the 1 in 100 annual probability +25% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basement dwellings in Flood Zone 2 'Medium Probability' are considered appropriate subject to the Exception Test;
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

**Conclusion:**

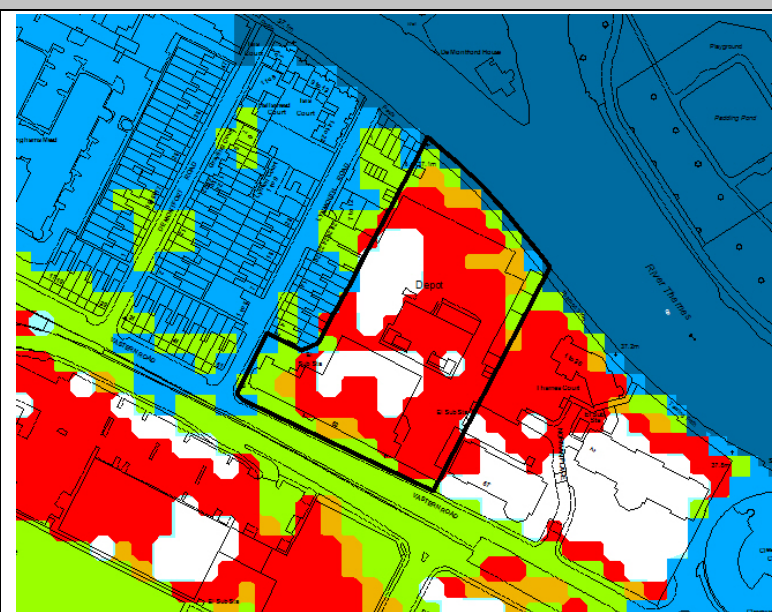
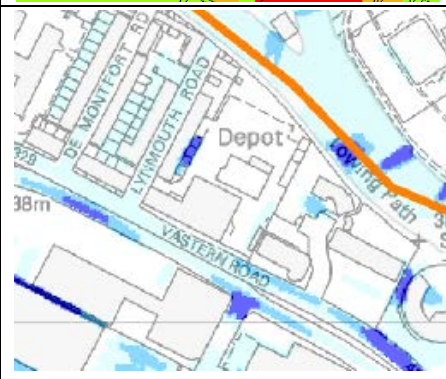
The development passes the exception test for allocation for residential use.



**AB005: RIVERSIDE (Local Plan Ref: CR11g)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 80%                  Flood Zone 3 + 70% - 80%                  Flood Zone 3+ 35% - 26%                  Flood Zone 3+ 25% - 13%</p>	
<p>Flooding from other sources:</p>	<p>Higher risk of surface water flooding is restricted to the very edges of the site.                   Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 250-370 dwellings and 1,000-2,000 sq m of leisure. Residential is a more vulnerable use. Leisure uses are generally classified as less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Qualitative need for facilities including additional swimming facilities, plus entertainment uses. Some limited development would be necessary to help to make the most of the River Thames for sport and recreation use (see section 2).</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 2,182 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)



**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	<p>Other than a small grassed area at the northwest corner, the site is covered with hardstanding and buildings. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply.</p> <p>The site, owned by Scottish &amp; Southern Energy, also already contains substantial strategically-important electricity infrastructure, comprising a number of substations. This may well qualify as essential infrastructure. Fulfilment of the allocation would mean either needing to relocate the infrastructure off site, or rationalising and relocating it within the site (with the latter option having been identified by SSE as the only realistic one). This infrastructure is currently largely within the Flood Zone 3 with 70% allowance for climate change area. Given that a range of flood risk exists across the site, there may be an opportunity to do this in a way which reduces flood risk to this infrastructure. However, this will very much depend on more detailed proposals for any development.</p>
Minimisation:	<p>The highest levels of flood risk exist at the northern edge of the site, adjacent to the Thames, and the southern edge of the site, adjacent to Vastern Road. Setting development back slightly from those edges may provide the opportunity to minimise flood risk on site. This is likely to be easiest to achieve at the northern edge. The Draft policy already identifies the need for an area of riverside open space, which is likely to coincide with some of the highest risk areas, as well as stating the need to set development 10m back from the river.</p>

**Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that a portion of the site would be within the 1 in 100 year area with a 35% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable. Leisure development is considered to be appropriate in both Flood Zones 2 and 3, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.
- Objective 17 - Value, protect and enhance opportunities for all to engage in culture, leisure, and physical and recreational activity, particularly in areas of open space and waterspace.

Development of this site is absolutely critical to the overall strategy for the centre, which hinges on a north-south axis. Links across the railway and the River Thames have been

enhanced in recent years, and this site is the final piece of the jigsaw in linking this axis together and linking the town centre, station area, river and Caversham. It therefore has a strategic importance way beyond its own boundaries. Bringing the site back into use will increase access from the town centre to the river and the leisure and recreation opportunities around it, and would ensure that an underused site that is expected to become largely surplus to requirements in the near future is brought into beneficial use.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>12</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access is available in the current 1 in 100 annual probability flood event and would therefore meet the requirements of Section 3.4 of the L2 SFRA provided a 'Flood Management and Evacuation Plan' is prepared to consider the impacts in the climate change scenarios. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

**Conclusion:**

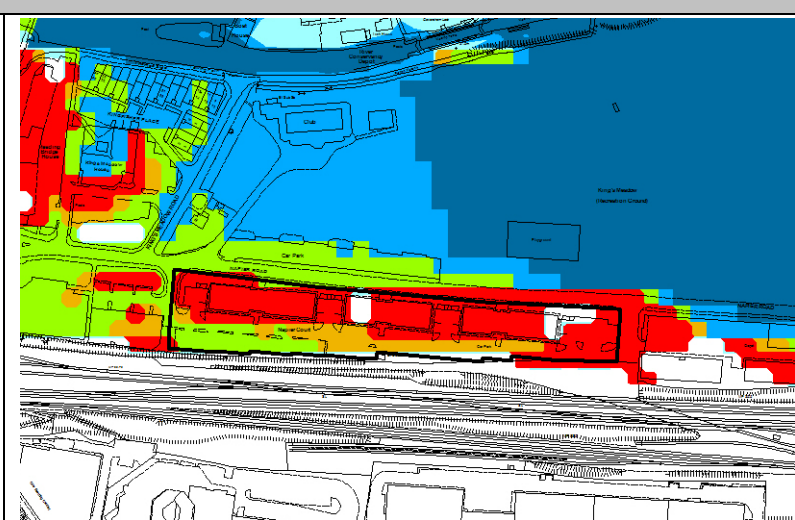
The development passes the exception test for allocation for residential use.

<sup>12</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

**AB007: NAPIER COURT (Local Plan Ref: CR11i)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 90%                  Flood Zone 3 + 70% - 90%                  Flood Zone 3+ 35% - 29%                  Flood Zone 3+ 25% - 13%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified.                   Within an area of 75% + susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

Draft allocation in the Local Plan for 210-310 dwellings along with part of site AB099. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 1,978 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>Site is covered by buildings and a surface car park, with a thin landscaped strip along northern edge. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply.</p>
<p>Minimisation:</p>	<p>The areas of highest flood risk are in the south west part of the site. There is certainly an opportunity to lay any development out in a way that allows any on site amenity space or landscaping to be located within the area of highest</p>

	risk, although this will need to be considered in more detail at application stage alongside other important considerations affecting the layout.
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#### **Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that a portion of the site would be within the 1 in 100 year area with a 35% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

### **EXCEPTION TEST**

#### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 12 - Promote strong and vibrant communities through reduction in crime and the fear of crime and enhanced community cohesion
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.
- Objective 17 - Value, protect and enhance opportunities for all to engage in culture, leisure, and physical and recreational activity, particularly in areas of open space and waterspace

This is a highly visible site along the railway line which is substantially underused given its level of accessibility. It represents an opportunity to contribute substantially towards meeting the housing needs of Reading and creating a mixed use destination close to the station, with good access to services, facilities and open space.

#### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>13</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for the residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be

<sup>13</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

- improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
  4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
  5. Safe access is available in the current 1 in 100 annual probability flood event and would therefore meet the requirements of Section 3.4 of the L2 SFRA provided a 'Flood Management and Evacuation Plan' is prepared to consider the impacts in the climate change scenarios. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
  6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability';
  7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

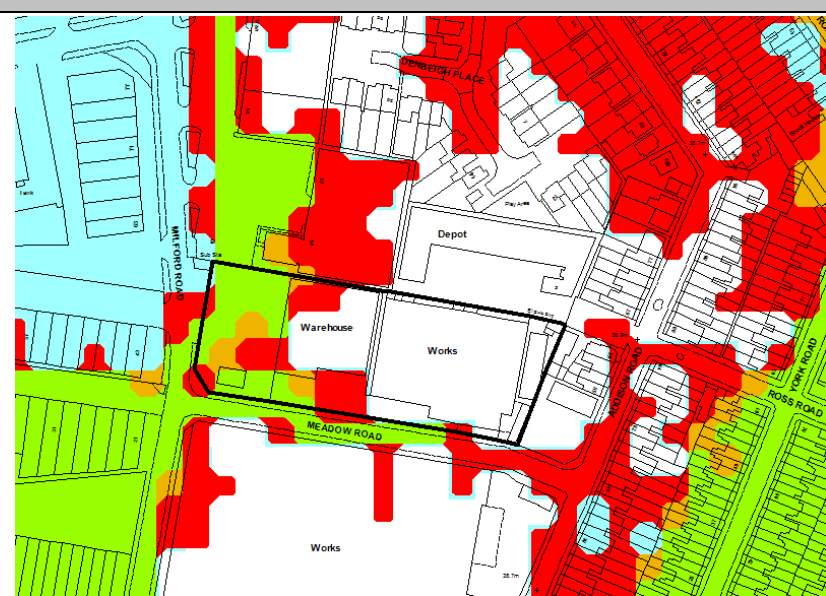

**Conclusion:**

The development passes the exception test for allocation for residential use.

**AB063: MANROSE MANUFACTURING, MEADOW ROAD (Local Plan Ref: WR3b)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 38%                  Flood Zone 3 + 70% - 38%                  Flood Zone 3+ 35% - 23%                  Flood Zone 3+ 25% - 17%</p>	
<p>Flooding from other sources:</p>	<p>Slightly higher risk of surface water flooding at northwest corner.</p> <p>Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 39-60 dwellings (part of wider site). Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 1,824 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is almost entirely covered with buildings, with no apparent permeable surfaces on the site. The prevailing character of the surrounding residential area is of houses with gardens, so it may well be that a residential</p>
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	development would actively reduce flood risk on site through provision of more permeable surfaces.
Minimisation:	The areas of highest flood risk are all on the western part of the site. The HELAA considered this site in detail, and comes to the conclusion that the loss of employment uses on this western part of the site is not appropriate. As such, the allocation in the Draft Local Plan covers the eastern half of the site only, which is entirely within Flood Zone 1.

**Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that a portion of the site would be within the 1 in 100 year area with a 35% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable. However, the draft allocation is limited to the eastern part of the site in Flood Zone 1, where residential development is considered suitable.

**Conclusion:**

The development of the whole site would pass the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. However, for reasons not related to flooding considerations, only the area in Flood Zone 1 is proposed to be allocated.

**EXCEPTION TEST**

None required



**AB081: SHURGARD SELF-STORAGE, 75-77 CAVERSHAM ROAD (Local Plan Ref: CR11f - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3 + 70% - 100%                  Flood Zone 3+ 35% - 68%                  Flood Zone 3+ 25% - 53%</p>	
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<p>Flooding from other sources:</p>	<p>Some limited areas of the site are at higher risk of surface water flooding at the western edge of the site.</p> <p>Within an area of 25-50% susceptibility to groundwater flooding.</p>		<p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>
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**What are the proposed uses?**

Draft allocation in the Local Plan for 75-115 dwellings (wider site including AB075). Residential and is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 1,824 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)



<b>If need remains, are there opportunities to reduce or minimise flood risk?</b>	
Reduction:	The site contains an existing commercial operation and is entirely covered in buildings and hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard.
Minimisation:	The site is relatively small with the areas at lowest risk of flooding in the centre of the site. As such, there are relatively few options for reconfiguring uses to place more vulnerable uses within areas of lower flood risk.

**Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce flood risk on site. An Exception Test is required.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

This is a site in close proximity to the station which is substantially underused given its level of accessibility. It represents an opportunity to contribute substantially towards meeting the housing needs of Reading and creating a mixed use destination close to the station, with good access to services and facilities.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>14</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

<sup>14</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA;
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access would be available in the current 1 in 100 annual probability flood event. The impacts on the route should be assessed for the 1 in 100 annual probability +25% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basement dwellings in Flood Zone 2 'Medium Probability' are considered appropriate subject to the Exception Test;
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

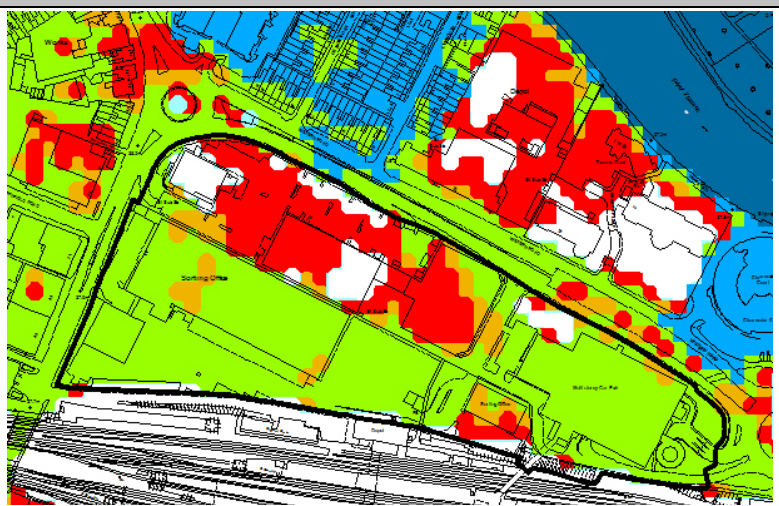

**Conclusion:**

The development passes the exception test for allocation for residential use.

**AB004: NORTH OF THE STATION (Local Plan Ref: CR11e)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 89%                  Flood Zone 3 + 70% - 89%                  Flood Zone 3+ 35% - 77%                  Flood Zone 3+ 25% - 62%</p>	
<p>Flooding from other sources:</p>	<p>Much of the site has high potential for surface water flooding, particularly on existing service roads.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 640-960 dwellings, 50,000-80,000 sq m of offices, 3,000-6,000 sq m net gain of retail, leisure, potential hotel. Residential and hotel use is a **more vulnerable** use. Office, retail and leisure uses are **less vulnerable** uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Need for 52,775 sq m of office floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Qualitative need for facilities including additional swimming facilities, plus entertainment uses.</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 1,773 homes and 31,073 sq m of retail and related uses. There is no remaining quantitative need for offices.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	Site is covered mainly by a variety of buildings with large footprints and substantial areas of surface car parking. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces. An area of open space on site is also a requirement of policy. As a major development, the policy on SuDS will apply.
Minimisation:	The wide mix of uses on site does give some potential to look at various ways of laying out any development. However, there are also some other important considerations on this key site adjacent to the new northern entrance to Reading station, one of the most accessible development sites in the south. Firstly, to make any significant dent in the identified retail need, use must be made of this site as an extension to central Reading, enlivening streets and spaces on the ground floor across the site. Secondly, the presence of residential dispersed across the site is required to fulfil the aims of establishing the station area as a destination in itself, as it ensures that there is surveillance and activity throughout the day, across the whole site. Finally, it must be remembered that this is one of the main opportunities to help meet the need for new homes, a need which is more pressing than any of the other identified needs, and efficient use of a site such as this minimises the need to look at sequentially inferior sites.

**Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

It should also be borne in mind that the sorting office site, which represents a substantial portion of the site, and includes much of the area at highest flood risk, was granted planning permission for a major mixed use development including up to 434 homes in 2012. That permission has since expired, but it is nonetheless an important consideration.

**Conclusion:**

The development passes the sequential test for allocation for residential and retail use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There is no quantitative need remaining for office development, but the inclusion of this less vulnerable use would reduce the amount of more vulnerable residential on site, whilst contribution towards a mix of uses to create a destination location. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate

sustainable travel choices.

- Objective 17 - Value, protect and enhance opportunities for all to engage in culture, leisure, and physical and recreational activity, particularly in areas of open space and waterspace.
- Objective 18 - Facilitate sustainable economic growth and regeneration that provides employment opportunities for all and supports a successful, competitive, and balanced local economy that meets the needs of the area.

This is one of the most accessible sites in the south of England by public transport, yet it is currently a car-focused area containing a retail park, former sorting office and multi-storey car park. With the new northern entrance to Reading Station, one of the busiest stations outside London, adjacent to the site and a new public transport interchange for local buses as well as the service to Heathrow within the site itself, it is essential that efficient use be made of what is currently a very underused site. This site is central to the regeneration of central Reading, and provides an opportunity to expand the town centre northwards, and offer new retail, leisure, office and residential opportunities.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>15</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The presence of a significant existing building footprint suggest that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access is available in the current 1 in 100 annual probability flood event and would therefore meet the requirements of Section 3.4 of the L2 SFRA provided a 'Flood Management and Evacuation Plan' is prepared to consider the impacts in the climate change scenarios. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability

<sup>15</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

+25% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability';

7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

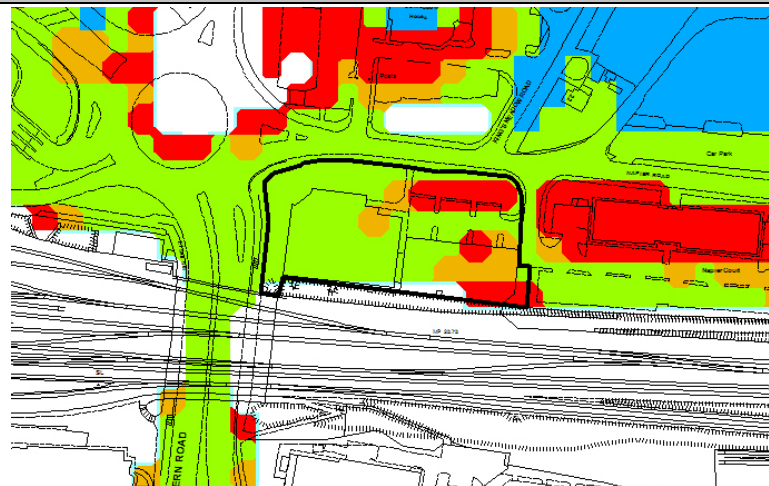

**Conclusion:**

The development passes the exception test for allocation for residential use.

**AB006: NAPIER ROAD JUNCTION (Local Plan Ref: CR11h)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 96%                  Flood Zone 3 + 70% - 96%                  Flood Zone 3+ 35% - 78%                  Flood Zone 3+ 25% - 65%</p>	
<p>Flooding from other sources:</p>	<p>Some limited areas of the site are at higher risk of surface water flooding.                   Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p data-bbox="1037 835 1399 884"><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 200-300 dwellings and 2,000-3,000 sq m of retail or commercial use. Residential and is a more vulnerable use. Retail is a less vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Need for up to 34,900 sq m of retail and related space between 2013 and 2026 (Western Berkshire Retail and Leisure Study, 2017)</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 1,234 homes and 29,570 sq m of retail and related uses.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The former car dealership on the site has now been demolished and the site is currently used for car parking - half of it using the former decked car parking for the dealership, the remainder surface car parking where the building previously stood. As such, the site is virtually all covered by hardstanding. Whilst the drainage arrangements are not known specifically, it is possible that</p>
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	a development involving residential would include landscaping and an increase in permeable surfaces. As a major development, the policy on SuDS will apply. It is worth noting that a planning application was submitted for redevelopment of the site for residential. Planning Applications Committee has resolved to grant permission subject to the completion of a Section 106 agreement.
Minimisation:	The site is relatively small, and identified for a very high density development, and as such there is little scope for different configurations of land uses within the site. Residential uses will generally be on upper floors, raised out of the immediate risk of flooding, and the current application has been able to demonstrate safe access to officers' satisfaction.

#### **Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable. Retail development is considered to be appropriate in both Flood Zones 2 and 3, subject to the Sequential Test being passed.

This site is now subject to a resolution to grant planning permission subject to the completion of a Section 106 agreement.

#### **Conclusion:**

The development passes the sequential test for allocation for residential and retail use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. An Exception Test is required.

#### **EXCEPTION TEST**

##### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, where buildings have been demolished and current uses are temporary, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.
- Objective 18 - Facilitate sustainable economic growth and regeneration that provides employment opportunities for all and supports a successful, competitive, and balanced local economy that meets the needs of the area

This is a highly visible site along the railway line which was substantially underused given its level of accessibility, and where buildings have now been demolished pending redevelopment, and which is currently in use for temporary car parking. It represents an opportunity to contribute substantially towards meeting the housing needs of Reading and creating a mixed use destination close to the station, with good access to services, facilities and open space. It has been previously identified in the Reading Station Area Framework as an opportunity for a landmark tall building. A resolution to grant permission for a development in line with the allocation was recently made, subject to completion of a Section 106 agreement.

##### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.



The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>16</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The existing site contains a significant existing building footprint - however, a significant proportion of this is currently a floodable undercroft parking area;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access is available in the current 1 in 100 annual probability flood event and would therefore meet the requirements of Section 3.4 of the L2 SFRA provided a 'Flood Management and Evacuation Plan' is prepared to consider the impacts in the climate change scenarios. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

**Conclusion:**

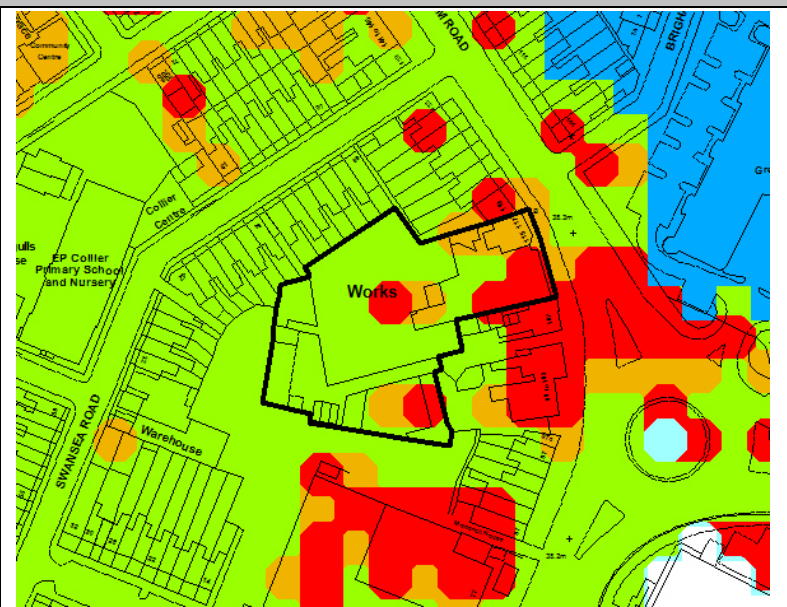
The development passes the exception test for allocation for residential use.

<sup>16</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

**AB075: 115-117 CAVERSHAM ROAD (Local Plan Ref: CR11f - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3 + 70% - 100%                  Flood Zone 3+ 35% - 85%                  Flood Zone 3+ 25% - 70%</p>	
<p>Flooding from other sources:</p>	<p>Some areas of the site are at higher risk of surface water flooding, particularly towards the western edge.</p> <p>Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p data-bbox="1053 940 1412 1379"><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 75-115 dwellings (wider site including AB081). Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 when accounting for climate change. After these sites have been considered, there is a remaining need of 950 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The site contains an existing commercial operation and is entirely covered in buildings and hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard.
Minimisation:	The site is relatively small and largely within the same classification of flood risk. As such, there are relatively few options for reconfiguring uses to place more vulnerable uses within areas of lower flood risk.

#### **Suitability of development on site:**

Whilst the site is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce flood risk on site. An Exception Test is required.

#### **EXCEPTION TEST**

##### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within the town centre.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

This is a site in close proximity to the station which is substantially underused given its level of accessibility. It represents an opportunity to contribute substantially towards meeting the housing needs of Reading and creating a mixed use destination close to the station, with good access to services and facilities.

##### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.<sup>17</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +25%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +25% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access would be available in the current 1 in 100 annual probability flood event. The impacts on the route should be assessed for the 1 in 100 annual probability +25% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +25% allowance for climate change flood level. Basement dwellings in Flood Zone 2 'Medium Probability' are considered appropriate subject to the Exception Test;
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +35% allowance for climate change flood event.

**Conclusion:**

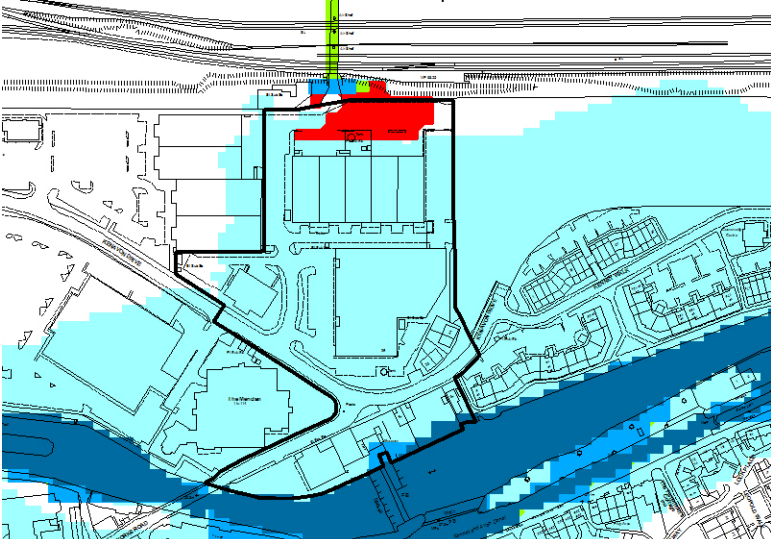

The development passes the exception test for allocation for residential use.

<sup>17</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

**AB015: FORBURY BUSINESS PARK AND KENAVON DRIVE (Local Plan Ref: CR13c)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 92% Flood Zone 3 + 70% - 7% Flood Zone 3 - 1%</p>	
<p>Flooding from other sources:</p>	<p>Small patches within site at higher risk of flooding from surface water</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 130-190 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 925 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is covered in industrial buildings with a large footprint and hardstanding, comprising car parking and servicing. There are some areas of landscaping, but these are minimal. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by</p>
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	existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development as well as on site public space required by the allocation presents an opportunity to reduce the risk of flooding on-site.
Minimisation:	The area south of Kenavon Drive, which is adjacent to areas in Flood Zone 3, and indeed includes a small area of Flood Zone 3, does not constitute part of the proposed redevelopment due to the presence of listed buildings. At the north of the site, the flood risk at the entrance to the underpass will increase with the 70% climate change scenario, and there is scope to set development back a little and include landscaping to provide a northern entrance to the site.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities within the development to reduce and minimise flood risk on site, and the allocation does not require the use of land at higher risk than Flood Zone 2.

**EXCEPTION TEST**

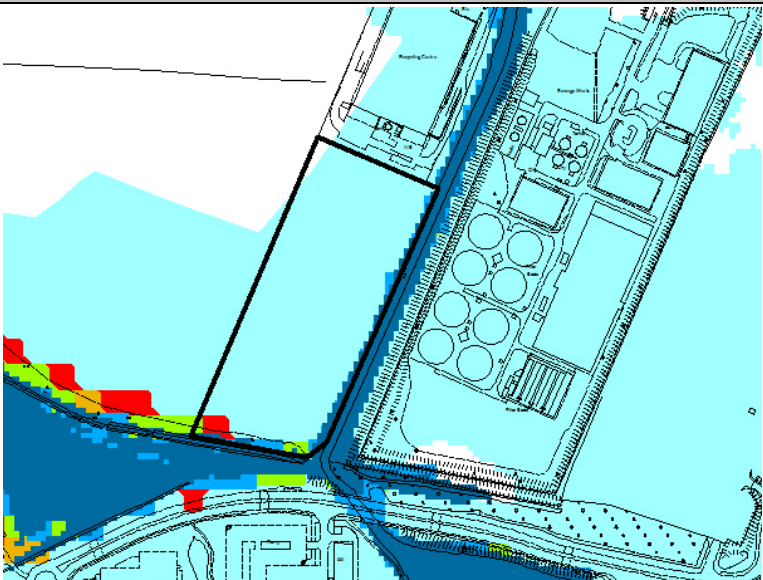

None required.



**WH047: LAND SOUTH OF SMALLMEAD MRF AND NORTH OF LONGWATER AVENUE**  
*(Local Plan Ref: SR1a - part)*

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 39%                  Flood Zone 3 + 70% - 7%                  Flood Zone 3+ 35% - 6%                  Flood Zone 3+ 25% - 5%                  Flood Zone 3 - 3%                  Functional floodplain - 3%</p>	
<p>Flooding from other sources:</p>	<p>Highest risk of surface water flooding associated with streams at edge of site.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 95,000 to 110,000 sq m of industrial and warehousing (across whole site, also including WH017 and WH020). Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 130,157 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is former landfill, raised above ground level. Developing the site will</p>
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	involve some technical solutions to address possible contamination, groundwater and instability issues. Depending on how these are carried out, incorporation of flooding and drainage measures may have potential to reduce flood risk on site. More generally, an industrial or warehouse development will inevitably involve large floorplate buildings and significant areas of hardstanding, but there is an opportunity to design in flood risk reduction measures from the start.
Minimisation:	The areas of highest flood risk are along the eastern and southern edges of the site, adjacent to streams. The draft policy seeks a landscaping buffer to the southern boundary in any case, to prevent industrial uses from having a negative effect on the amenity of residents in the Green Park Village development, currently under construction. Therefore, it is not likely that the highest risk areas of the site will be developed.

**Suitability of development on site:**

Industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to reduce flood risk on site, and development in the areas of highest risk will be avoided.

**EXCEPTION TEST**

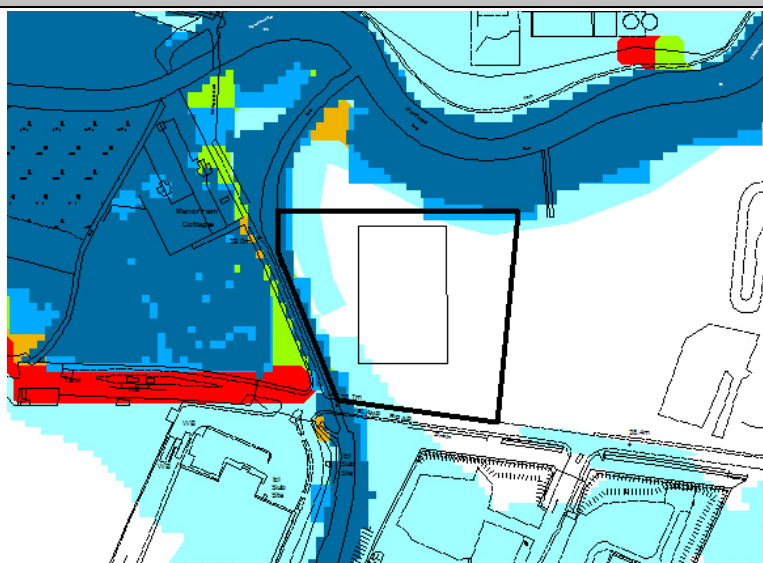

None required



**WH046: LAND NORTH OF ISLAND ROAD (Local Plan Ref: SR1b)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 24% Flood Zone 3 - 8%</p>	
<p>Flooding from other sources:</p>	<p>Some higher risk of surface water flooding on fringes of site.  Within an area of 75% + susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 7,400 to 9,000 sq m of industrial and warehousing. Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 118,969 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>Much of the site is an existing area of hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent.</p>
<p>Minimisation:</p>	<p>The policy identifies the importance of strong landscaped buffers particularly</p>

	at the north of the site, to reduce landscape and biodiversity impacts. These coincide with the areas of highest flood risk across the site, and development can therefore be laid out in a way which makes most use of the areas at lowest risk of flooding.
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**Suitability of development on site:**

Industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

It should be noted that planning permission has now been granted for a development for industrial and warehousing, along the lines set out in the draft allocation. Flood risk was considered as part of that planning application.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to reduce flood risk on site, and development in the areas of highest risk will be avoided.

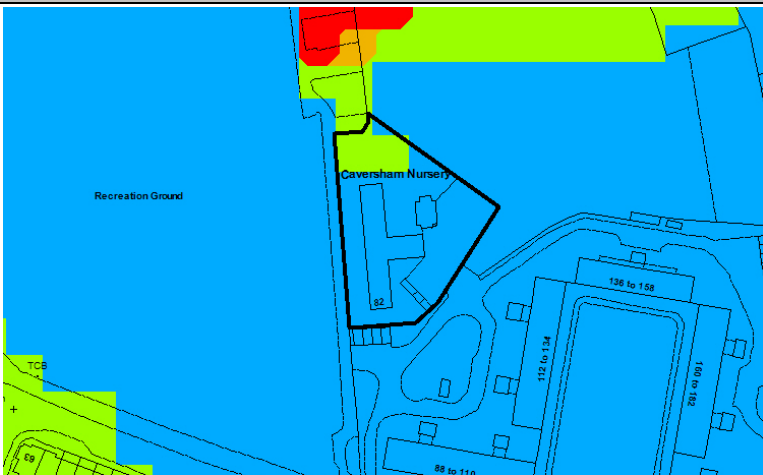
***EXCEPTION TEST***

None required

**CA011: FORMER CAVERSHAM NURSERY, 82 GOSBROOK ROAD (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 3+ 25% - 100% Flood Zone 3 - 87%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified.  Within an area of 25-50% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

The site has been suggested in the past for residential use. Residential and is a **more vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 784 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is currently in temporary education use and is largely covered by buildings and hardstanding, albeit with some grassed and vegetated areas at the western and northern edges. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard.</p>
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Minimisation:	The site is relatively small and largely within the same classification of flood risk. As such, there are relatively few options for reconfiguring uses to place more vulnerable uses within areas of lower flood risk. The small area within the lowest area of flood risk does not make sense as a development in its own right, although it does represent a likely position for a safe access to lower flood risk areas.
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**Suitability of development on site:**  
The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

**Conclusion:**  
The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.

Although the site would deliver housing to help to meet the needs of the area, this would be of very limited scale and it has not been demonstrated that it would make a contribution that would be likely to outweigh flood risk on site. The site is not of particular visual prominence and does not currently particularly detract from the local area.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on further assessment of a mitigation strategy associated with providing safe access.<sup>18</sup>

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings within the site should adopt resilient design techniques to

<sup>18</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA;

4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access via the access road is impacted in the current 1 in 100 annual probability flood event. Further analysis is required to assess if a safe route is available in accordance with the requirements in Section 3.4 of the L2 SFRA and, if so, a Flood Management and Evacuation Plan' should be prepared. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +70% allowance for climate change flood event.

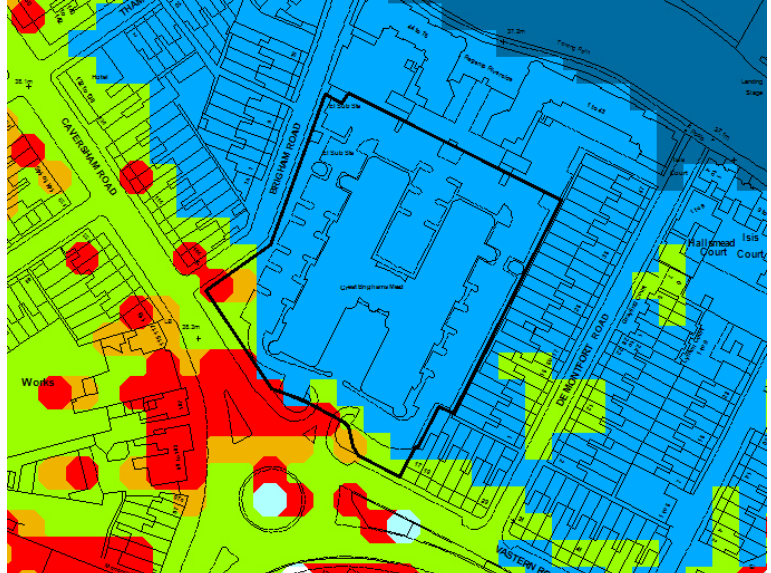

**Conclusion:**

The development has not been demonstrated to pass the exception test for allocation for residential use.

**AB096: GREAT BRIGHAM'S MEAD (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3 + 70% - 100%                  Flood Zone 3 + 35% - 99%                  Flood Zone 3+ 25% - 97%                  Flood Zone 3 - 92%</p>	
<p>Flooding from other sources:</p>	<p>Small area of slightly higher risk of surface water flooding at south of site.                   Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

The site has been suggested for mainly residential use. Residential and is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 784 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is currently in office use, and is mainly covered by buildings and external car parking, with some limited landscaping around the fringes. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable</p>
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	drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard.
Minimisation:	The site is virtually all within Flood Zone 3, and there is not considered to be any significant scope to reconfigure uses to place more vulnerable uses within areas of lower flood risk.

#### **Suitability of development on site:**

The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce flood risk on site. An Exception Test is required.

### **EXCEPTION TEST**

#### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

This is a site in close proximity to the station which is substantially underused given its level of accessibility. It represents an opportunity to contribute substantially towards meeting the housing needs of Reading and creating a mixed use destination close to the station, with good access to services and facilities.

#### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>19</sup>

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on a management/evacuation plan to address safe access. This would need to be provided at planning application stage.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;

<sup>19</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access would be available in the current 1 in 100 annual probability flood event from the southern boundary of the site. The impacts on the route should be assessed for the 1 in 100 annual probability +35% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and are actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 3a 'High Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +70% allowance for climate change flood event.

**Conclusion:**



The development has not at this stage been demonstrated to pass the exception test for allocation for residential use.



**CA007: CANTAY HOUSE, ARDLER ROAD (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 3 - 100%</p>	
<p>Flooding from other sources:</p>	<p>Slightly higher risk of surface water flooding identified at fringes of the site.</p> <p>Within an area of 50-75% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

The site has been suggested in the past for residential use. Residential is a **more vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and 3. After these sites have been considered, there is a remaining need of 784 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is almost entirely covered by one large building, with the remainder being hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development</p>
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	would assist in this regard. In addition, it is likely that a residential redevelopment would reduce the proportion of the site that is covered by buildings. As well as reducing flood risk on site, this may also reduce flood risk to surrounding residential properties.
Minimisation:	The site is relatively small and largely within the same classification of flood risk. As such, there are relatively few options for reconfiguring uses to place more vulnerable uses within areas of lower flood risk.

#### **Suitability of development on site:**

The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

### **EXCEPTION TEST**

#### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

This is a site within a wholly residential area, where the existing close relationship of housing and commercial uses causes potential tensions in terms of residential amenity. Residential development would alleviate this issue and provide a contribution towards meeting the Borough's substantial housing need.

#### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>20</sup>

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on further assessment of a mitigation strategy associated with providing safe access.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event;
3. Where appropriate, buildings within the site should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient

<sup>20</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';

4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access is impacted in the current 1 in 100 annual probability flood event. Further analysis is required to assess if a safe route is available in accordance with the requirements in Section 3.4 of the L2 SFRA and, if so, a Flood Management and Evacuation Plan' should be prepared. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 3a 'High Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +70% allowance for climate change flood event.

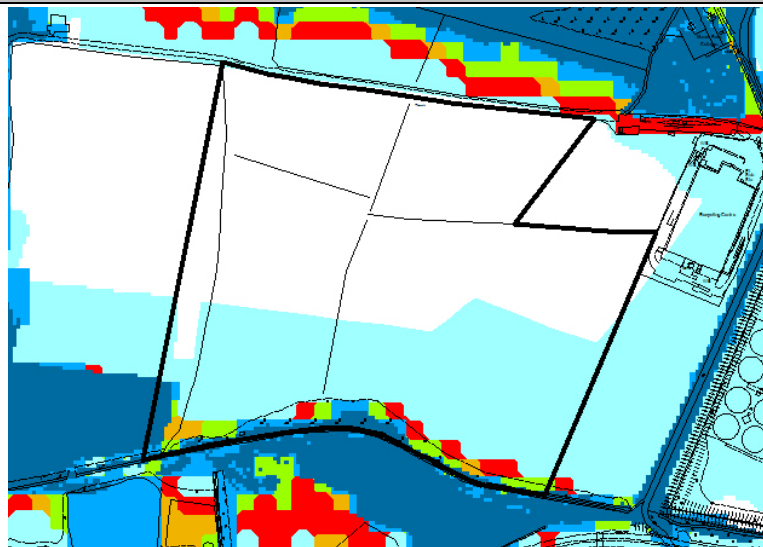
**Conclusion:**

The development has not been demonstrated to pass the exception test for allocation for residential use.

**WH017: LAND SOUTH OF ISLAND ROAD AT SMALLMEAD (Local Plan Ref: SR1a - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 39%                  Flood Zone 3 + 70% - 7%                  Flood Zone 3+ 35% - 6%                  Flood Zone 3+ 25% - 5%                  Flood Zone 3 - 3%                  Functional floodplain - 3%</p>	
<p>Flooding from other sources:</p>	<p>No surface water risk identified.                   Within an area of 75% + susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

Draft allocation in the Local Plan for 95,000 to 110,000 sq m of industrial and warehousing (across whole site, also including WH020 and WH047). Industrial and storage and distribution are less vulnerable uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Need for 148,440 sq m of industrial and warehouse floorspace between 2013 and 2036 (Central Berkshire EDNA, 2016).</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 109,008 sq m of industrial and warehouse floorspace.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site is former landfill, raised above ground level. Developing the site will involve some technical solutions to address possible contamination, water quality and instability issues. Depending on how these are carried out, incorporation of flooding and drainage measures may have potential to reduce flood risk on site. More generally, an industrial or warehouse development will inevitably involve large floorplate buildings and significant areas of</p>
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	hardstanding, but there is an opportunity to design in flood risk reduction measures from the start.
Minimisation:	The areas of highest flood risk are a strip along the southern boundary of the site adjacent to a stream. The draft policy seeks a landscaping buffer to the southern boundary in any case, to prevent industrial uses from having a negative effect on the amenity of residents in the Green Park Village development, currently under construction. Therefore, it is not likely that the highest risk areas of the site will be developed, i.e. those areas where flood risk would increase due to climate change and a portion of the Flood Zone 2 area.

**Suitability of development on site:**

Industrial/warehouse development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for industrial and warehouse use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There may be opportunities to reduce flood risk on site, and development in the areas of highest risk will be avoided.

***EXCEPTION TEST***

None required

**AB099: NETWORK RAIL LAND, NAPIER ROAD (Local Plan Ref: CR11i - part)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 58%</p> <p>Flood Zone 3 + 70% - 52%</p> <p>Flood Zone 3+ 35% - 41%</p> <p>Flood Zone 3+ 25% - 37%</p> <p>Flood Zone 3 - 31%</p> <p>Functional floodplain - 3%</p>	
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<p>Flooding from other sources:</p>	<p>The areas at high risk of surface water flooding are associated with the underpass under the railway.</p> <p>Within an area of 75% + susceptibility to groundwater flooding.</p>	<p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>
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**What are the proposed uses?**

Draft allocation in the Local Plan for 210-310 dwellings, alongside AB007. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 784 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	Site is covered by buildings and a surface car park at the western end, with a thin landscaped strip along northern edge. The remainder is a vegetated embankment to the railway. Whilst the drainage arrangements are not known specifically, it seems highly likely that a development involving residential would include landscaping and an increase in permeable surfaces on the depot area at the west of the site. There are few opportunities to reduce flood risk on the remainder. As a major development, the policy on SuDS will apply.
Minimisation:	The areas of lowest flood risk are in the south west part of the site, particularly the current railway depot. The proposed allocation includes only this depot, and anything further east (including the area of Flood Zone 3) is excluded from the proposed development, for a variety of reasons. Within the depot site itself, there are opportunities to avoid development along the northern fringe of the site, which is the area at highest risk of flooding, to incorporate landscaping and open space.

**Suitability of development on site:**

Whilst parts of the site are currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that a portion of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable. Other parts of the site are within Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site. As the proposed allocation involves only the part of the site at lowest risk of flooding, excluding the areas within Flood Zone 3, no exception text is required.

**EXCEPTION TEST**

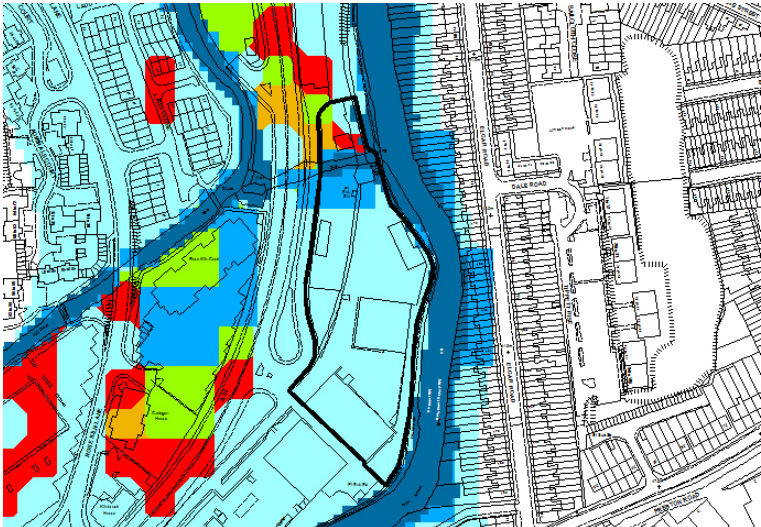

None required



**MI010: PULLEYN PARK, ROSE KILN LANE (Local Plan Ref: SR4a)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3 + 70% - 13%                  Flood Zone 3+ 35% - 11%                  Flood Zone 3+ 25% - 10%                  Flood Zone 3 - 10%                  Functional floodplain - 5%</p>	
<p>Flooding from other sources:</p>	<p>Areas of higher risk from surface water flooding limited to vicinity of existing waterways                   Within an area of 25-50% susceptibility to groundwater flooding.</p>	 <p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 70-100 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 729 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>A waterway linking the Holy Brook and the Kennet &amp; Avon Canal crosses the site towards the northern end, and is culverted across much of the site. Development offers a potential opportunity to open up the culvert, and use the area around it as part of the site's contribution to landscaping and/or open</p>
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	space. On the remainder of the site, the current site comprises mostly large commercial buildings and hardstanding, and provision of some landscaping areas and permeable surfaces within a residential development as well as on site public space required by the allocation presents an opportunity to reduce the risk of flooding on-site.
Minimisation:	It would be reasonably straightforward to ensure that any development layout avoids development in the small part of the site within Flood Zone 3, which, as above, could form part of the landscaping and open space. The bulk of the development would be focused on the southern part of the site which is at lowest risk of flooding.

**Suitability of development on site:**

Residential development is considered to be appropriate in Flood Zone 2, subject to the Sequential Test being passed. Small parts of the site fall within Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable, but development in this area can be avoided through a buffer to the watercourse through the site, as sought in the policy.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are opportunities to reduce and minimise flood risk on site.

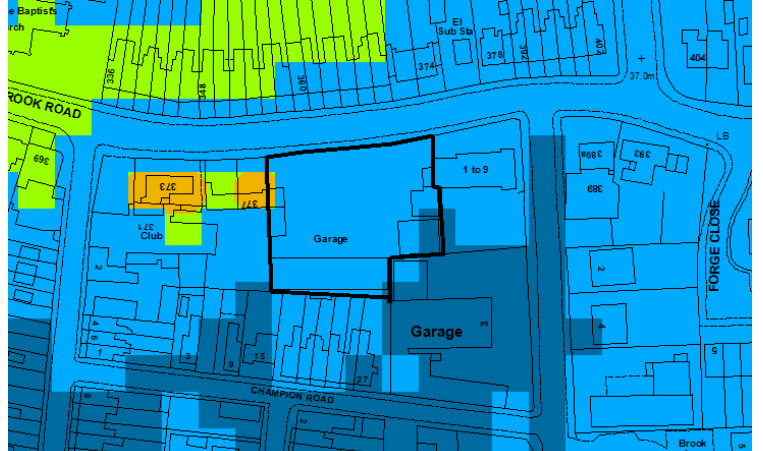
***EXCEPTION TEST***

None required

**CA004: 383 GOSBROOK ROAD (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3+ 35% - 100%                  Flood Zone 3+ 25% - 98%                  Flood Zone 3 - 98%                  Functional floodplain - 5%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified.                   Within an area of 50-75% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

The site has been suggested in the past for residential use. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3. After these sites have been considered, there is a remaining need of 651 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site contains an existing commercial operation and is entirely covered in buildings and hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard. As well as reducing flood risk on site, this may also reduce flood risk to surrounding residential properties.</p>
<p>Minimisation:</p>	<p>The site is relatively small and largely within the same classification of flood risk. As such, there are relatively few options for reconfiguring uses to place</p>

	more vulnerable uses within areas of lower flood risk. Any development would need to avoid location within the functional floodplain.
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#### **Suitability of development on site:**

The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

### **EXCEPTION TEST**

#### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.

Although the site would deliver housing to help to meet the needs of the area, this would be of very limited scale and it has not been demonstrated that it would make a contribution that would be likely to outweigh flood risk on site.

#### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>21</sup>

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on further assessment of a mitigation strategy associated with providing safe access.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event. The presence of existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';

<sup>21</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
5. Safe access is impacted in the current 1 in 100 annual probability flood event. Further analysis is required to assess if a safe route is available in accordance with the requirements in Section 3.4 of the L2 SFRA and, if so, a Flood Management and Evacuation Plan' should be prepared. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 3a 'Medium Probability';
7. Residual risk to the development should be investigated against the 1 in 100 annual probability +70% allowance for climate change flood event.


**Conclusion:**

The development has not been demonstrated to pass the exception test for allocation for residential use.

**CA009: 4-6 SEND ROAD (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 3 - 100% Functional floodplain - 6%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified.  Within an area of 50-75% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

The site has been suggested in the past for residential use. Residential is a **more vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3. After these sites have been considered, there is a remaining need of 651 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site contains an existing commercial operation and is entirely covered in buildings and hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard. As well as reducing flood risk on site, this may also reduce flood risk to surrounding residential properties.</p>
<p>Minimisation:</p>	<p>The site is relatively small and largely within the same classification of flood risk. As such, there are relatively few options for reconfiguring uses to place</p>

	more vulnerable uses within areas of lower flood risk. Any development would need to avoid location within the functional floodplain. Consideration would also need to be given to safe access, given that Send Road itself is within the functional floodplain. Safe access for pedestrians could potentially be gained from Forge Close, to the rear.
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**Suitability of development on site:**

The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 9 - Create, enhance and maintain attractive and clean environments including protecting and, where appropriate, enhancing landscape and townscape character
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.

Although the site would deliver housing to help to meet the needs of the area, this would be of very limited scale and it has not been demonstrated that it would make a contribution that would be likely to outweigh flood risk on site.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>22</sup>

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on further assessment of a mitigation strategy associated with providing safe access.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Development should be avoided within the area defined as Flood Zone 3b 'functional floodplain';
2. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
3. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
4. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding

<sup>22</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';

5. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
6. Safe access is impacted in the current 1 in 100 annual probability flood event. Further analysis is required to assess if a safe route is available in accordance with the requirements in Section 3.4 of the L2 SFRA and, if so, a Flood Management and Evacuation Plan' should be prepared. Future tenants/residents within the site should be made aware of the potential risks of flooding, and should be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
7. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 3a 'High Probability';
8. Residual risk to the development should be investigated against the 1 in 100 annual probability +70% allowance for climate change flood event.

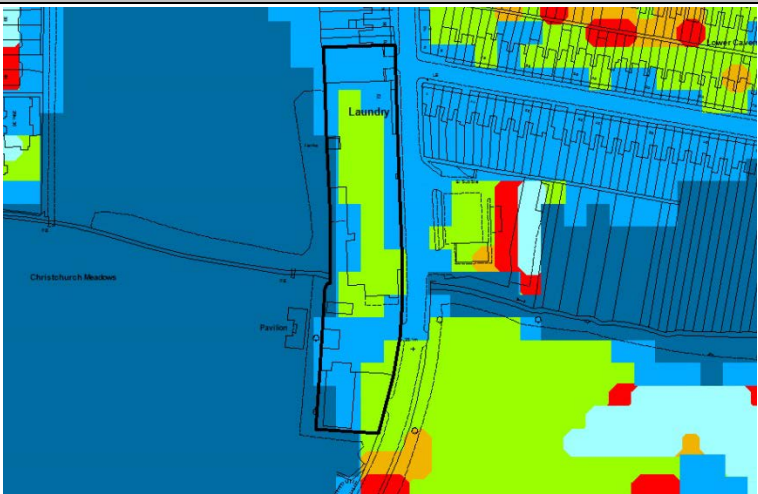
**Conclusion:**

The development has not been demonstrated to pass the exception test for allocation for residential use.

**CA002: 72 GEORGE STREET (not identified in Local Plan)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3 + 70% - 100%                  Flood Zone 3+ 35% - 100%                  Flood Zone 3+ 25% - 100%                  Flood Zone 3 - 60%                  Functional floodplain - 8%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified.                   Within an area of 25-50% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

The site has been suggested in the past for residential use, and past applications have been refused on grounds including flood risk. Residential is a **more vulnerable** use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 651 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>The site contains an existing commercial operation and is entirely covered in buildings and hardstanding. Whilst little is known of the existing arrangements for drainage on the site, it seems reasonable to assume that modern building techniques and sustainable drainage systems, as required by existing policy, would be able to reduce flood risk to some extent. Provision of some landscaping areas and permeable surfaces within a residential development would assist in this regard.</p>
<p>Minimisation:</p>	<p>It is possible that any residential development could reflect the pattern of flood risk on site, with the centre of the site at lowest risk. However, this</p>



	would reduce the development potential of the site, since there are reasons relating to the surrounding landscape and townscape to avoid too high a building. Practically, it would be difficult to keep any building entirely out of Flood Zone 3.
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#### **Suitability of development on site:**

The site is currently in Flood Zone 3, where an Exception Test would be required for residential development to be considered to be suitable.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

### **EXCEPTION TEST**

#### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a previously developed site, with existing buildings and uses, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

Development would, dependent on design, help to improve the visual appearance of the site, which is prominent from George Street as well as from Christchurch Meadows. It would deliver housing close to the town centre, with good access to services, facilities and open space.

#### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>23</sup>

The Level 2 SFRA concludes that the feasibility of developing the site in a way that it is safe for the lifetime of the development is dependent on further analysis of the impacts of providing safe access along George Street.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime, subject to overcoming the issue of safe access. These are as follows:

1. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
2. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event. The presence of a significant existing building footprint suggests that floodplain storage capacity could be improved through effective design measures;
3. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of

<sup>23</sup> [http://www.reading.gov.uk/media/8139/27560RBCL2SFRARreportDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRARreportDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

- New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA;
4. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
  5. Safe access would be available in the current 1 in 100 annual probability flood event from the south-east boundary of the site. The impacts on the route should be assessed for the 1 in 100 annual probability +35% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. It is essential that future tenants/residents within the site are made aware of the potential risks of flooding, and are actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
  6. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified as Flood Zone 2 'Medium Probability' or Flood Zone 3a 'High Probability';
  7. Residual risk to the development should be considered against the 1 in 100 annual probability +70% allowance for climate change flood event.

**Conclusion:**

The development has not been demonstrated to pass the exception test for allocation for residential use.

**CA006: READING UNIVERSITY BOAT CLUB, PROMENADE ROAD (Local Plan Ref: CA1a)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%                  Flood Zone 3+ 70% - 100%                  Flood Zone 3+ 35% - 93%                  Flood Zone 3+ 25% - 92%                  Flood Zone 3 - 61%                  Functional floodplain - 16%</p>	
<p>Flooding from other sources:</p>	<p>Much of the site is subject to higher risk of surface water flooding.                   Within an area of 25-50% susceptibility to groundwater flooding.</p>	<p><i>Extract from SFRA updated Flood Map for Surface Water</i></p>

**What are the proposed uses?**

Draft allocation in the Local Plan for 16-25 dwellings. Residential is a more vulnerable use.

**What is the need for development?**

<p>Housing need:</p>	<p>Need for 16,099 homes and 253 residential care spaces between 2013 and 2036 (Berkshire SHMA, 2016)</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Not applicable</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

Sequentially preferable sites at lower risk of flooding have been considered. These include all Flood Zone 1 sites, and sites with a smaller proportion of the site within Flood Zone 2 and Flood Zone 3 (including when accounting for climate change). After these sites have been considered, there is a remaining need of 651 homes.

**Assessment of potential alternative sites:**

See summary in Appendix 2 and full analysis in the HELAA (November 2017)

**If need remains, are there opportunities to reduce or minimise flood risk?**

<p>Reduction:</p>	<p>More than half of the site is currently undeveloped, and has a significant area of grass in the northern part of the site. Development for residential would not therefore necessarily reduce flood risk on site, although it is possible that</p>
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	this could be achieved with the right SuDS scheme.
Minimisation:	There is a clear pattern of flood risk increasing from north to south. There is certainly potential for a development to be laid out in a way that reflects flood risk. Development can, and should, be avoided in the small part of the site within the functional floodplain, but it would also be possible to develop only the portion of the site currently outside Flood Zone 3, which is what the Draft Local Plan proposes. If the site is treated as a whole, with existing buildings removed from the southern part and replaced with open areas and new buildings in the northern part only, this will result in a development that better reflects the pattern of flood risk.

#### **Suitability of development on site:**

The part of the site proposed to be developed is currently in Flood Zone 2, where residential development is considered suitable subject to the Sequential Test being passed, the SFRA demonstrates that most of the site would be within the 1 in 100 year area with a 25% allowance for climate change. Based on EA climate change allowances for the Thames Basin, it is appropriate to consider this area as Flood Zone 3 for these purposes, meaning that an Exception Test would be required for residential development to be considered to be suitable. Development of the whole site would require an Exception Test in any case.

#### **Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. There are potential opportunities to reduce and minimise flood risk on site. An Exception Test is required.

#### **EXCEPTION TEST**

##### **Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is an in-use site, part of which is previously developed, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly positively in terms of the following objectives:

- Objective 4 - Minimise the consumption of, and reduce damage to, undeveloped land
- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices.

Development would make good use of a site on the fringe of a district centre and within easy walking distance of the centre of Reading and the station, and with good access to services, facilities and open space. It would provide housing to help to meet the substantial need within Reading.

##### **Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in December 2017.<sup>24</sup>

The Level 2 SFRA concludes that it is feasible that the site can be developed in a way that it is safe for the lifetime of the development.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime.

1. All 'More Vulnerable' uses should be steered towards areas within the site that are at lowest risk. If at all possible, residential uses should be restricted to those areas within the site that fall within Flood Zone 2 'Medium Probability';

<sup>24</sup>[http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560\\_RBC\\_L2\\_SFRA\\_Report\\_Dec17\\_AppB.pdf](http://www.reading.gov.uk/media/8139/27560RBCL2SFRAReporDec17AppB/pdf/27560_RBC_L2_SFRA_Report_Dec17_AppB.pdf)

2. No development, excepting water compatible or essential infrastructure, should be proposed for the area of the site classified as Flood Zone 3b 'functional floodplain'. The Exception Test must be passed for essential infrastructure;
3. Floor levels within the site should be situated a minimum of 300mm above the 1 in 100 annual probability plus allowance for climate change, in this instance +35%, assuming a 100 year lifetime for residential development;
4. Flood storage should be analysed to show that the proposed building footprint of the development will not cause a detriment to the available storage during the 1 in 100 annual probability +35% climate change allowance flood event;
5. Where appropriate, buildings should adopt resilient design techniques to minimise the damage and disruption sustained by businesses and/or residents following a flooding event. Further guidance can be found in BRE Digest DG523 'Flood Resilient Building', the Department for Communities and Local Government document 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', and Section 12.4 of the Level 1 SFRA';
6. Sustainable Drainage Systems (SuDS) should be incorporated into the site design, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Buildings and landscaping should be designed within the site to avoid locking overland flow routes;
7. Safe access would be available in the current 1 in 100 annual probability flood event from the northern boundary of the site. The impacts on the route should be assessed for the 1 in 100 annual probability +35% climate change allowance and a Flood Management and Evacuation Plan' should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future tenants/residents within the site should be made aware of the potential risks of flooding, and be actively encouraged to sign up to the Environment Agency's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event;
8. It is essential to ensure that all basement areas within flood affected areas of the site are watertight, and the entrance point is situated above the 1 in 100 annual probability +35% allowance for climate change flood level. Basements should not be used to provide habitable areas in locations classified at Flood Zone 2 'Medium Probability' or Flood Zone 3a 'High Probability';
9. Residual risk to the development should be considered against the 1 in 100 annual probability +70% allowance for climate change flood event.

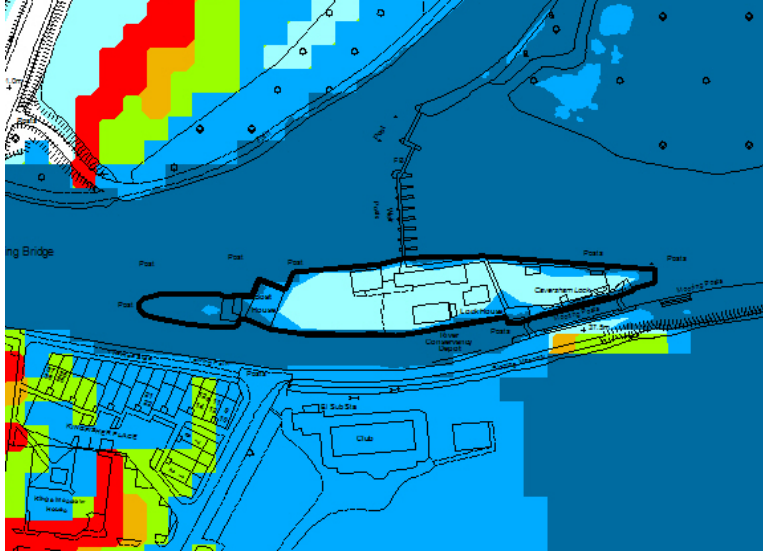
**Conclusion:**

The development passes the exception test for allocation for residential use. In line with the design recommendation, the proposed policy directs more vulnerable uses towards the area of the site at lowest risk of flooding.

**AB039: CAVERSHAM LOCK ISLAND (Local Plan Ref: CR14m)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100% Flood Zone 3 - 42% Functional floodplain - 24%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified  Within an area of 50-75% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

Draft allocation in the Local Plan for water compatible leisure and tourism uses.

**What is the need for development?**

<p>Housing need:</p>	<p>Not applicable</p>
<p>Office need:</p>	<p>Not applicable</p>
<p>Industrial &amp; warehousing need:</p>	<p>Not applicable</p>
<p>Retail need:</p>	<p>Not applicable</p>
<p>Leisure need:</p>	<p>Some limited development would be necessary to help to make the most of the River Thames for sport and recreation use (see section 2).</p>

**Potential alternative sites at lower risk of flooding to meet the need:**

The following alternative sites have been identified adjoining either the Rivers Thames or Kennet/Kennet & Avon Canal:

- AB005: Riverside
- AB014: Forbury Retail Park
- AB015: Forbury Business Park and Kenavon Drive
- AB016: Gas Holder
- AB025: The Anchorage, 35 Bridge Street
- AB043: Kings Point, 120 Kings Road
- AB056: Former Gas Works Building, Gas Works Road
- BA024: Scours Lane and Littlejohns Farm
- CA005: View Island
- KE005: Land at Scours Lane
- MI001: Fobney Mead, Island Road
- MI002: Lok N Store, 5-9 Berkeley Avenue
- MI004: 21 Rose Kiln Lane

MI010: Pulleyn Park, Rose Kiln Lane  
 MI014: Car Dealerships, Rose Kiln Lane  
 MI015: 25-29 Rose Kiln Lane  
 SO004: Land at Searles Farm  
 WH007: Land west of A33 and north of Island Road

**Assessment of potential alternative sites:**

Site	Comments
AB005: Riverside	Although there is a smaller element of the site in Flood Zone 3 than Caversham Lock Island, the area closest to the river would become part of the 1 in 100 year floodplain under the identified climate change scenarios, which would not be the case for the majority of Caversham Lock Island. This site is therefore <b>not sequentially preferable</b> .
AB014: Forbury Retail Park	There could be potential on this site for some leisure and recreation uses adjacent to the Kennet & Avon Canal. However, this part of the site is still within Flood Zone 2. If only the part of the Caversham Lock Island site within Flood Zone 2 is developed (which would be the case if development complies with the policy requirement to set development back 10 metres), this site is <b>not sequentially preferable</b> .
AB015: Forbury Business Park and Kenavon Drive	The part of the site adjacent to the Kennet & Avon Canal contains listed buildings and their setting within current leisure uses, and it is not proposed that this part of the site is developed. Development of this part of the site is therefore <b>not suitable</b> .
AB016: Gas Holder	There could be potential on this site for some leisure and recreation uses adjacent to the Kennet & Avon Canal. However, this site is still within Flood Zone 2, and a large proportion would become part of the 1 in 100 year floodplain under the 70% climate change scenario. If only the part of the Caversham Lock Island site within Flood Zone 2 is developed (which would be the case if development complies with the policy requirement to set development back 10 metres), this site is <b>not sequentially preferable</b> .
AB025: The Anchorage, 35 Bridge Street	HELAA identifies that the site is <b>not available</b> for development.
AB043: Kings Point, 120 Kings Road	Site has planning permission for a residential development, and at the time of writing was under construction and therefore <b>not available</b> .
AB056: Former Gas Works Building, Gas Works Road	Site has planning permission for a residential development and is therefore <b>not available</b> .
BA024: Scours Lane and Littlejohns Farm	The site is primarily in the functional floodplain and is therefore <b>not sequentially preferable</b> .
CA005: View Island	The site is primarily in the functional floodplain and is therefore <b>not sequentially preferable</b> .
KE005: Land at Scours Lane	The site is primarily in Flood Zone 3 and is therefore <b>not sequentially preferable</b> .

MI001: Fobney Mead, Island Road	The site is primarily in the functional floodplain and is therefore <b>not sequentially preferable</b> .
MI002: Lok N Store, 5-9 Berkeley Avenue	Site has planning permission for a residential development and is therefore <b>not available</b> .
MI004: 21 Rose Kiln Lane	Site has planning permission for a retail warehouse development, and at the time of writing was under construction and therefore <b>not available</b> .
MI010: Pulleyn Park, Rose Kiln Lane	There could be potential on this site for some leisure and recreation uses adjacent to the Kennet & Avon Canal. However, this site is still within Flood Zone 2. If only the part of the Caversham Lock Island site within Flood Zone 2 is developed (which would be the case if development complies with the policy requirement to set development back 10 metres), this site is <b>not sequentially preferable</b> .
MI014: Car Dealerships, Rose Kiln Lane	HELAA identifies that there is <b>no indication that the site is available</b> for development.
MI015: 25-29 Rose Kiln Lane	HELAA identifies that the site is <b>not suitable</b> for development.
SO004: Land at Searles Farm	The site is primarily in the functional floodplain and is therefore <b>not sequentially preferable</b> .
WH007: Land west of A33 and north of Island Road	Site has planning permission for an employment development, and at the time of writing was under construction and therefore <b>not available</b> .

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	There is already coverage of much of the island by buildings and some hardstanding. However, there are also some open areas. Whilst it may be possible for development of the site to reduce flood risk, this will depend entirely on the type and scale of development proposed, and cannot be assumed at this stage.
Minimisation:	The bulk of the site is within Flood Zone 2, and any development on the island is likely to be focused on this part of the site, where the existing buildings are located. Policy CR14m identifies a need to set development back by 10m from the river, and compliance with this clause of the policy would make development on the parts in Flood Zone 3 impossible. Therefore, it is certainly possible to arrange uses so that they reflect the level of flood risk on site.

**Suitability of development on site:**

Policy CR14m specifies that development must be water compatible. Water compatible development is considered to be appropriate in Flood Zone 3, subject to the Sequential Test being passed.

**Conclusion:**

The development passes the sequential test for allocation for residential use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. The development should be for water compatible uses, and this will mean that no Exceptions Test is required.

**EXCEPTION TEST**

None required



## 6. SEQUENTIAL AND EXCEPTION TEST FOR POTENTIAL TRAVELLER TRANSIT SITE

- 6.1 Policy WR4 identifies a site for a potential traveller transit site at Cow Lane and Richfield Avenue. The identification of this site follows a process summarised in the Gypsy and Traveller Provision Background Document. Site references in this section are therefore consistent with that Background Document. This section sets out the sequential and exception test for this site, and follows the same methodology as the previous section.

### **Stage A: Identify the need for development**

- 6.2 A Gypsy and Traveller, Travelling Showpeople and Houseboat Dweller Accommodation Assessment was carried out by arc4 on behalf of the Council, in line with national policy expectations, and reported in September 2017. This looked at the accommodation requirements for these groups in Reading, and identified the following needs based on survey work of relevant groups and consultation with stakeholders:
- Need for 10-17 permanent pitches for gypsies and travellers;
  - Need for 5 transit pitches for gypsies and travellers;
  - Need for 2 additional plots for travelling showpeople; and
  - No need for additional moorings for houseboats.
- 6.3 The small need for travelling showpeople was considered potentially capable of being accommodated within or as an extension to an existing site, and was not dealt with on a site-specific basis. The Gypsy and Traveller Provision Background Document assessed the potential to meet the remaining needs, for permanent and transit sites for gypsies and travellers, within the Borough.

### **Stage B: Identify all potential development sites and their flood risk**

- 6.4 The process of identifying sites is summarised in the Background Document. Despite several attempts to identify potential sites in private ownership, no privately owned sites were ever put forward for this use in Reading. Therefore, the assessment focused on sites in Council ownership. A total of 80 sites were identified. These are listed in Appendix 3, together with their flood risk. Once again, the flood risk is derived from the Strategic Flood Risk Assessment.

### **Stage C: Identify the level of development need that can be met in Flood Zone 1**

- 6.5 The Background Document demonstrates that no suitable sites in Flood Zone 1 for gypsy and traveller use could be identified. Appendix 3 sets out the reasons why sites at lower risk of flooding have been excluded. Therefore, none of the need can be met in Flood Zone 1.

### **Stage D: Apply Sequential Test to all sites in Flood Zone 2**

- 6.6 The sequential test has been applied to the site, and this is set out below.
- 6.7 Sites that would house caravans differ from other types of residential under the NPPF, in that housing caravans for permanent residential use in Flood

Zone 3 is not appropriate. The sequential and exception test do not provide a route to acceptability in this case. Therefore, any sites where caravans for permanent residential use would need to be located in Flood Zone 3 were not considered further.

**SITE 1: COW LANE AND RICHFIELD AVENUE (Local Plan Ref: WR4)**

**SEQUENTIAL TEST**

**What is the flood risk?**

<p>Fluvial flooding:</p>	<p>Flood Zone 2 - 100%          Flood Zone 3+ 70% - 98%          Flood Zone 3+ 35% - 87%          Flood Zone 3+ 25% - 69%          Flood Zone 3 - 32%</p>	
<p>Flooding from other sources:</p>	<p>No surface water flood risk identified           Within an area of 25-50% susceptibility to groundwater flooding.</p>	

**What are the proposed uses?**

Draft allocation in the Local Plan as a potential traveller transit site (WR4)

**What is the need for development?**

Need identified in the Gypsy and Traveller, Travelling Showpeople and Houseboat Dweller Accommodation Assessment (September 2017) for 10-17 permanent pitches for gypsies and travellers, and 5 transit pitches for gypsies and travellers.

**Potential alternative sites at lower risk of flooding to meet the need:**

The following alternative sites have been identified adjoining either the Rivers Thames or Kennet/Kennet & Avon Canal:

- 3 Land at Orts Road
- 5 Reading Family Centre, North Street
- 14 Land at Windermere Road
- 15 Land rear of The Lawns
- 16 Land rear of Monksbarn
- 17 Foxhays Road
- 18 Wentworth Avenue

19	Canterbury Road
23	Garages at Rodway Road
24	Land at Wealden Way
25	Land between Denby Way and Chelsea Close
26	South of Ridge Hall Close
30	Rear of 284-290 Wensley Road
33	Land at Coley Place
34	Land west of Swallows Croft
35	Land at Tarlon Court
36	Land at The Meadway
37	Former Tennis Courts, Bulmershe Road
38	Land at Green Road
39	Mockbeggar Allotments
40	Land west of Harveys Nurseries and north of Cemetery
41	Grove Road Green
42	Land between Lowfield Road and Milestone Way
43	Car park at the Milestone Centre
44	Land at Lowfield Road
45	Land at Hexham Road
46	Granville Road verges
47	Devil's Dip, Circuit Lane
48	Land at Fawley Road
49	Alice Burrows Home, Dwyer Road
50	Land at Holybrook Crescent
51	Playing Field, Hastings Close
54	Land west of Florian Gardens
55	Land east of Florian Gardens
56	Coronation Square
57	Land at Barn Close
58	Land at The Warren
59	Land south of Ammanford
60	Land at Gravel Hill
61	Furzeplat
62	Junction of Walnut Way and St Michaels Road
63	Downing Road Playing Field
64	Land at Lansdowne Road
65	Land at Portland Gardens
66	Wincanton Road
67	Swallowfield Drive
68	Land at Whitley Wood Lane
69	Land at Vernon Crescent
70	Land at junction of Acre Road and Basingstoke Road
71	Basingstoke Road verge between Acre and Bennet Road
72	Basingstoke Road verge between Bennet Road and Manor Farm Road
73	Southside (former Greyhound/Speedway stadium)
2	Rivermead overflow parking areas
8	Land at Elliotts Way
80	South of Sewage Treatment Works
79	South of Smallmead
10	Hills Meadow Car Park

**Assessment of potential alternative sites:**

Site	Reasons for exclusion
3 Land at Orts Road	Residential amenity Visual amenity
5 Reading Family Centre, North Street	Required for alternative use

14	Land at Windermere Road	Residential amenity Visual amenity
15	Land rear of The Lawns	No vehicular access
16	Land rear of Monksbarn	Biodiversity significance Landscape significance Topography
17	Foxhays Road	Residential amenity Visual amenity
18	Wentworth Avenue	Residential amenity Visual amenity
19	Canterbury Road	Residential amenity Visual amenity
23	Garages at Rodway Road	Required for alternative use
24	Land at Wealden Way	Biodiversity significance Landscape significance Topography
25	Land between Denby Way and Chelsea Close	Residential amenity Visual amenity Public footpath crosses site
26	South of Ridge Hall Close	Biodiversity significance Landscape significance Topography
30	Rear of 284-290 Wensley Road	Residential amenity Topography
33	Land at Coley Place	Topography
34	Land west of Swallows Croft	Biodiversity significance
35	Land at Tarlon Court	Residential amenity Visual amenity Heritage considerations
36	Land at The Meadway	Visual amenity
37	Former Tennis Courts, Bulmershe Road	Site required for alternative use
38	Land at Green Road	Site required for alternative use
39	Mockbeggar Allotments	Site required for alternative use
40	Land west of Harveys Nurseries and north of Cemetery	Site required for alternative use Landscape significance
41	Grove Road Green	Visual amenity Public footpath crosses site
42	Land between Lowfield Road and Milestone Way	Residential amenity Visual amenity
43	Car park at the Milestone Centre	Required for continued use as car park
44	Land at Lowfield Road	Site required for housing use, currently underway
45	Land at Hexham Road	Biodiversity significance Residential amenity
46	Granville Road verges	Visual amenity

47	Devil's Dip, Circuit Lane	Biodiversity significance Visual amenity
48	Land at Fawley Road	Residential amenity Visual amenity Public footpath crosses site
49	Alice Burrows Home, Dwyer Road	Site required for alternative use
50	Land at Holybrook Crescent	Residential amenity Visual amenity
51	Playing Field, Hastings Close	Site required for continued playing field use
54	Land west of Florian Gardens	No vehicular access Residential amenity
55	Land east of Florian Gardens	No vehicular access Residential amenity
56	Coronation Square	Visual amenity
57	Land at Barn Close	Residential amenity
58	Land at The Warren	Biodiversity significance Landscape significance Topography
59	Land south of Ammanford	Protected trees Residential amenity Visual amenity
60	Land at Gravel Hill	Landscape significance Residential amenity
61	Furzeplat	Biodiversity significance Protected trees Topography
62	Junction of Walnut Way and St Michaels Road	Residential amenity Visual amenity
63	Downing Road Playing Field	Site required for alternative use
64	Land at Lansdowne Road	Residential amenity Visual amenity
65	Land at Portland Gardens	Residential amenity Visual amenity Biodiversity significance
66	Wincanton Road	Residential amenity Visual amenity
67	Swallowfield Drive	Residential amenity Visual amenity
68	Land at Whitley Wood Lane	Residential amenity
69	Land at Vernon Crescent	Residential amenity Visual amenity
70	Land at junction of Acre Road and Basingstoke Road	Part of site in use, remainder too small Visual amenity

71	Basingstoke Road verge between Acre and Bennet Road	Visual amenity
72	Basingstoke Road verge between Bennet Road and Manor Farm Road	Visual amenity
73	Southside (former Greyhound/Speedway stadium)	Site required for alternative use
2	Rivermead overflow parking areas	Required for continued use as car park
8	Land at Elliotts Way	Residential amenity Visual amenity Used as part of school
80	South of Sewage Treatment Works	Site required for alternative use
79	South of Smallmead	No vehicular access Likely contaminated land
10	Hills Meadow Car Park	Required for continued use as car park Visual amenity

**If need remains, are there opportunities to reduce or minimise flood risk?**

Reduction:	The site is partly covered by hardstanding and partly by vegetation. Some element of hardstanding would continue to be required to site caravans and provide access, and some limited building for toilet facilities would be likely to be required. There is not therefore considered to be substantial scope to reduce flood risk on site from current conditions.
Minimisation:	The site includes around 30% within Flood Zone 3. The pattern of Flood Zone 3 would enable this to be used for landscaping and/or access, and there is certainly enough space within Flood Zone 2 to provide the scale of transit site needed. Indeed, ensuring that caravans are not sited within Flood Zone 3 is essential in order to comply with the NPPF.

**Suitability of development on site:**

Transit sites fall some way between permanent residential caravans (which are classed as 'highly vulnerable') and short-term let caravans (which are classified as 'more vulnerable'). A precautionary approach is taken, and these are therefore considered 'highly vulnerable' for these purposes. Within Flood Zone 2, an Exception Test would be required for highly vulnerable development to be considered to be suitable. This would be dependent on ensuring no caravans within Flood Zone 3, where highly vulnerable development is not appropriate. Transit sites fall some way between permanent residential caravans (which are classed as 'highly vulnerable') and short-term let caravans (which are classified as 'more vulnerable'). A precautionary approach is taken, and these are therefore considered 'highly vulnerable' for these purposes.

**Conclusion:**

The development passes the sequential test for allocation for traveller transit use, due to the fact that the identified development needs cannot be accommodated on sequentially preferable sites. An exception test is required.

**Stage D: Apply Exception Test where necessary**

6.8 The Exception Test has been applied to the site, and this is set out below.

**EXCEPTION TEST**

**Does the development provide wider sustainability benefits to the community that outweigh flood risk?**

This is a generally unused site, part of which is previously developed, located within an urban area.

The development has been appraised within the Sustainability Appraisal. It scored particularly

positively in terms of the following objectives:

- Objective 13 - Ensure high quality housing of a type and cost appropriate to the needs of the area.
- Objective 14 - Reduce the need for travel and transport particularly by car or lorry and facilitate sustainable travel choices
- Objective 19 - Reduce deprivation and inequality within and between communities.

Development would provide a site that would help to reduce unauthorised encampments within parts of Reading such as parks and open spaces, and would help to reduce conflicts between these communities.

**Will the development be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will it reduce flood risk overall?**

The site has been subject to a Level 2 SFRA, which was finalised in February 2018.

The Level 2 SFRA concludes that it is feasible that the site can be developed in accordance with the requirements of the NPPF to mitigate the potential flood risks.

A number of design recommendations are set out in the Level 2 SFRA to ensure that the development is safe and remains safe for its lifetime.

1. Given the proposed nature of the development the usual floor level recommendations are not applicable. It should be recommended that pitches are located outside of the present day 1 in 100 annual probability flood extent to minimise residual risk;
2. The proposed use of the site will not introduce permanent building footprint, and therefore flood storage during the 1 in 100 annual probability +35% climate change design event is not expected to be impacted through development of the site;
3. Sustainable Drainage Systems (SuDS) should be incorporated into the site to address any changes in impermeable surfacing, aiming to achieve greenfield runoff rates, if feasible, in accordance with Section 13.4 of the Level 1 SFRA. It is important that SUDS are designed with due consideration to soil and groundwater conditions. Infiltration techniques should be sought wherever possible, however are likely to be unsuitable in areas of shallow groundwater and/or impermeable soils. Further guidance on designing for groundwater is provided in Section 6.5 of the Level 1 SFRA. Landscaping should be designed within the site to avoid locking overland flow routes;
4. Safe access would be available in the current 1 in 100 annual probability flood event. The impacts on the route should be assessed for the 1 in 100 annual probability +35% climate change allowance as part of a 'Flood Management and Evacuation Plan', which should be prepared to ensure the development is in accordance with the requirements in Section 3.4 of the L2 SFRA. Future users of the site should be made aware of the potential risks of flooding, and the site operators should be registered with the EA's Flood Information Service to receive flood alerts, flood warnings and severe flood warnings well in advance of an event.

**Conclusion:**

The development passes the exception test for allocation for traveller transit use, subject to no caravans being located within Flood Zone 3. In line with the design recommendation, the proposed policy directs more vulnerable uses towards the area of the site at lowest risk of flooding.

## 7. CONCLUSIONS

7.1 The following sites have been demonstrated to pass the sequential test and, where necessary, the exception test. As such, they are proposed to be identified within the Local Plan as development allocations. However, further information, including a Flood Risk Assessment, will be required at planning application stage to justify any specific proposals.

HELAA/Sequential Test Site	Corresponding Local Plan Allocation
AB003: Station Hill	CR11c: Station Hill
AB004: North of the Station	CR11e: North of the Station
AB005: Riverside	CR11g: Riverside
AB006: Napier Road Junction	CR11h: Napier Road Junction
AB007: Napier Court, Napier Road	CR11i: Napier Court
AB008: Cattle Market	CR12a: Cattle Market
AB009: Great Knollys Street and Weldale St	CR12b: Great Knollys Street and Weldale St
AB013: Reading Prison	CR13a: Reading Prison
AB014: Forbury Retail Park	CR13b: Forbury Retail Park
AB015: Forbury Business Park and Kenavon Drive	CR13c: Forbury Business Park and Kenavon Drive
AB016: Gas Holder	CR13d: Gas Holder
AB026: The Oracle Extension, Bridge Street and Letcombe Street	CR14g: The Oracle Extension, Bridge Street and Letcombe Street
AB039: Caversham Lock Island	CR14m: Caversham Lock Island and Caversham Weir, Thames Side
AB055: Former Cox & Wyman site, Cardiff Road	WR3a: Former Cox and Wyman site, Cardiff Road
AB063: Manrose Manufacturing, Meadow Rd*	WR3b: 2 Ross Road and Part of Meadow Road
AB073: 28-30 Richfield Avenue	WR3c: 28-30 Richfield Avenue
AB075: 115-117 Caversham Road	CR11f: West of Caversham Road
AB081: Shurgard Self-Storage, 75-77 Caversham Road	CR11f: West of Caversham Road
AB093: 2 Ross Road	WR3b: 2 Ross Road and Part of Meadow Road
AB099: Network Rail Land, Napier Road*	CR11i: Napier Court
BA003: Part of Former Battle Hospital, Portman Road	WR3i: Part of Former Battle Hospital, Portman Road
CA006: Reading University Boat Club, Promenade Road*	CA1a: Reading University Boat Club, Thames Promenade
KA030: Central Club, London Street	CR14h: Central Club, London Street
MI010: Pulleyn Park, Rose Kiln Lane	SR4a: Pulleyn Park, Rose Kiln Lane
WH002: Part of Former Berkshire Brewery Site	SR4e: Part of Former Berkshire Brewery Site
WH003: Land North of Manor Farm Road	SR2: Land North of Manor Farm Road
WH010: Land bounded by Island Road, Longwater Avenue, A33 and Sewage Treatment Works	SR1c: Island Road A33 Frontage
WH017: Land South of Island Road at Smallmead	SR1a: Former Landfill, Island Road
WH020: Land adjacent to Smallmead MRF, Island Road	SR1a: Former Landfill, Island Road
WH045: 16-18 Bennet Road	SR4d: 16-18 Bennet Road
WH046: Land North of Island Road	SR1b: North of Island Road
WH047: Land South of Smallmead MRF and North of Longwater Avenue	SR1a: Former Landfill, Island Road
1: Cow Lane and Richfield Avenue	WR4: Potential Traveller Transit Site, Cow Lane

\*Subject to identification of part of site for development only



**APPENDIX 1: All Identified Potential Development Sites<sup>25</sup> and their Flood Risk**  
*(in order of flood risk, from lowest to highest) (excludes sites which were wholly under construction at 31/03/2017)*

Site Code	Site Title	Grid Ref	Ward	Size (ha)	% in Flood Zone 1 only	% in Flood Zone 2	% in Flood Zone 3 with 70% climate change	% in Flood Zone 3 with 35% climate change	% in Flood Zone 3 with 25% climate change	% in Flood Zone 3	% in Functional Floodplain
AB001	Friar Street and Station Road	SU714736	Abbey	1.36	100	0	0	0	0	0	0
AB002	Friars Walk and Greyfriars Road (reduced site)	SU713736	Abbey	0.37	100	0	0	0	0	0	0
AB010	Chatham Street	SU710735	Abbey	3.04	100	0	0	0	0	0	0
AB011	Broad Street Mall	SU712733	Abbey	2.75	100	0	0	0	0	0	0
AB012	Hosier Street	SU712732	Abbey	3.41	100	0	0	0	0	0	0
AB017	108-116 Oxford Road, 10 Eaton Place and 115-125 Chatham Street	SU708734	Abbey	1.12	100	0	0	0	0	0	0
AB018	143-145 Oxford Road	SU707733	Abbey	0.14	100	0	0	0	0	0	0
AB019	Former Reading Family Centre, North Street	SU709736	Abbey	0.23	100	0	0	0	0	0	0
AB020	9-27 Greyfriars Road	SU712737	Abbey	0.17	100	0	0	0	0	0	0
AB021	2-8 The Forbury and 19-22 Market Place	SU717735	Abbey	0.07	100	0	0	0	0	0	0
AB022	3-10 Market Place, Abbey Hall & Abbey Square	SU717734	Abbey	0.29	100	0	0	0	0	0	0
AB027	Reading College, Kings Road	SU727733	Abbey	3.54	100	0	0	0	0	0	0
AB032	173-175 Friar Street	SU716735	Abbey	0.14	100	0	0	0	0	0	0
AB039	Jacksons Corner, 1-9 Kings Road	SU717734	Abbey	0.98	100	0	0	0	0	0	0

<sup>25</sup> Excluding potential sites for gypsy and traveller provision (unless also included here)

AB049	Princes House, 73a London Road	SU723730	Abbey	0.16	100	0	0	0	0	0	0
AB053	27-32 Market Place	SU716735	Abbey	0.04	100	0	0	0	0	0	0
AB057	Central Swimming Pool, Battle Street	SU706735	Abbey	0.55	100	0	0	0	0	0	0
AB058	78 Oxford Road	SU710734	Abbey	0.03	100	0	0	0	0	0	0
AB059	149-153 Oxford Road	SU707733	Abbey	0.1	100	0	0	0	0	0	0
AB060	38-40 Oxford Road & 3-7 Cheapside	SU711734	Abbey	0.3	100	0	0	0	0	0	0
AB061	17-23 Queen Victoria Street	SU715735	Abbey	0.05	100	0	0	0	0	0	0
AB062	1-5 King Street	SU716734	Abbey	0.08	100	0	0	0	0	0	0
AB064	159 Oxford Road	SU706733	Abbey	0.033	100	0	0	0	0	0	0
AB066	Elite House, 179 Kings Road	SU725733	Abbey	0.055	100	0	0	0	0	0	0
AB067	Brunel Arcade, Station Approach	SU715737	Abbey	0.58	100	0	0	0	0	0	0
AB068	Apex Plaza, Forbury Road	SU716737	Abbey	0.93	100	0	0	0	0	0	0
AB069	37-43 Blagrove Street	SU716737	Abbey	0.04	100	0	0	0	0	0	0
AB071	Rising Sun 18 Forbury Road	SU717737	Abbey	0.024	100	0	0	0	0	0	0
AB072	The Butler PH, Chatham Street	SU709735	Abbey	0.11	100	0	0	0	0	0	0
AB074	7 Blagrove Street	SU716736	Abbey	0.015	100	0	0	0	0	0	0
AB076	187-189 Kings Road	SU725733	Abbey	0.1	100	0	0	0	0	0	0
AB079	1-3 Greyfriars Road	SU712736	Abbey	0.026	100	0	0	0	0	0	0
AB094	160-163 Friar Street	SU716735	Abbey	0.06	100	0	0	0	0	0	0
AB097	15-18 Friar Street, 2-16 Station Road and Friars Walk	SU715736	Abbey	0.31	100	0	0	0	0	0	0
AB100	Rear of 8-32 Clifton Street	SU706732	Abbey	0.16	100	0	0	0	0	0	0
AB101	Part of City Wall House, 26 West Street	SU712734	Abbey	0.05	100	0	0	0	0	0	0
AB102	Tangent House, 16 Forbury Road	SU717737	Abbey	0.05	100	0	0	0	0	0	0

BA002	Rear of 303-315 Oxford Road	SU701734	Battle	0.22	100	0	0	0	0	0	0
BA004	Land at former Battle Hospital	SU698736	Battle	0.78	100	0	0	0	0	0	0
BA006	Land at Reading West Station	SU701731	Battle	0.62	100	0	0	0	0	0	0
BA007	458-478 Oxford Road & 1-3 Chester St	SU695737	Battle	0.103	100	0	0	0	0	0	0
BA008	133-137 Wantage Road	SU692731	Battle	0.14	100	0	0	0	0	0	0
BA017	38-40 Portman Road and 103 Loverock Road	SU694741	Battle	0.99	100	0	0	0	0	0	0
BA018	Aldbury Close and 42 Portman Road	SU693741	Battle	0.98	100	0	0	0	0	0	0
BA019	Broughton Close and 44-50 Portman Road	SU692741	Battle	1.06	100	0	0	0	0	0	0
BA020	50-60 Portman Road and 117-123 Loverock Road	SU691741	Battle	1.59	100	0	0	0	0	0	0
BA025	53-55 Argyle Road	SU702732	Battle	0.07	100	0	0	0	0	0	0
CH001	University of Reading, The Chancellors Way & Shinfield Road	SU730717	Church	3	100	0	0	0	0	0	0
CH005	Land rear of 50-52 Cressingham Road	SU728710	Church	0.239	100	0	0	0	0	0	0
CH006	St Patricks Hall, Northcourt Avenue	SU727717	Church	3.39	100	0	0	0	0	0	0
KA002	Corner of Crown Street and Southampton Street	SU717728	Katesgrove	0.08	100	0	0	0	0	0	0
KA003	Corner of Crown Street and Silver Street	SU718728	Katesgrove	0.38	100	0	0	0	0	0	0
KA004	21 South Street	SU719731	Katesgrove	0.14	100	0	0	0	0	0	0
KA005	83-85 London Street	SU718730	Katesgrove	0.06	100	0	0	0	0	0	0

KA006	40 Silver Street	SU718727	Katesgrove	0.11	100	0	0	0	0	0	0
KA008	Enterprise House, 89-97 London Street	SU718729	Katesgrove	0.15	100	0	0	0	0	0	0
KA009	272-274 Elgar Road South	SU715718	Katesgrove	0.41	100	0	0	0	0	0	0
KA010	79 Silver Street	SU719727	Katesgrove	0.098	100	0	0	0	0	0	0
KA011	The Woodley Arms PH, Waldeck Street	SU718724	Katesgrove	0.088	100	0	0	0	0	0	0
KA012	75-77 London Street	SU718730	Katesgrove	0.18	100	0	0	0	0	0	0
KA013	11 Glebe Road	SU721721	Katesgrove	0.18	100	0	0	0	0	0	0
KA014	Preston Road and Nimrod Way	SU716721	Katesgrove	2.82	100	0	0	0	0	0	0
KA015	Britten Road	SU716720	Katesgrove	2.9	100	0	0	0	0	0	0
KA016	268 Elgar Road South	SU715719	Katesgrove	0.41	100	0	0	0	0	0	0
KA017	Keyline Builders Merchants, Elgar Road South	SU717717	Katesgrove	1.05	100	0	0	0	0	0	0
KA018	160 Basingstoke Road	SU718716	Katesgrove	1.11	100	0	0	0	0	0	0
KA019	Jewson & Tunbridge Jones Estate, Cradock Road	SU717716	Katesgrove	1.96	100	0	0	0	0	0	0
KA021	196 Basingstoke Road & 5 Cradock Road	SU718715	Katesgrove	0.45	100	0	0	0	0	0	0
KA022	Arkwright Road	SU717714	Katesgrove	2.61	100	0	0	0	0	0	0
KA025	19-37 Boulton Road	SU714713	Katesgrove	1.34	100	0	0	0	0	0	0

KA026	Car dealerships, north of Rose Kiln Lane	SU716713	Katesgrove	1.13	100	0	0	0	0	0	0
KA027	Hyperion Way	SU717713	Katesgrove	1.32	100	0	0	0	0	0	0
KA028	169-173 Basingstoke Road	SU719714	Katesgrove	0.8	100	0	0	0	0	0	0
KA029	Makro, Elgar Road South	SU716718	Katesgrove	3.51	100	0	0	0	0	0	0
KA034	9 Southern Court, South Street	SU719730	Katesgrove	0.04	100	0	0	0	0	0	0
KE002	1025-1027 Oxford Road	SU672752	Kentwood	0.19	100	0	0	0	0	0	0
KE006	1015 Oxford Road	SU672752	Kentwood	0.16	100	0	0	0	0	0	0
KE007	The Restoration PH, 928 Oxford Road	SU683744	Kentwood	0.187	100	0	0	0	0	0	0
KE008	Allotments and adjacent land, Kentwood Hill	SU671742	Kentwood	6.68	100	0	0	0	0	0	0
KE010	Charters Car Sales, Oxford Road	SU672753	Kentwood	0.33	100	0	0	0	0	0	0
KE016	15-21 Deacon Way	SU682746	Kentwood	1.03	100	0	0	0	0	0	0
KE017	Gresham Way Industrial Estate	SU680747	Kentwood	0.76	100	0	0	0	0	0	0
KE018	816 Oxford Road	SU688741	Kentwood	0.23	100	0	0	0	0	0	0
KE019	Norcot Community Centre, Lyndhurst Road	SU678745	Kentwood	0.13	100	0	0	0	0	0	0
MA002	20 Chazey Road	SU700754	Mapledurham	0.167	100	0	0	0	0	0	0
MA003	Outlands, Upper Warren Avenue	SU695754	Mapledurham	0.53	100	0	0	0	0	0	0
MA005	Plots A & B Gravel Hill	SU693754	Mapledurham	0.17	100	0	0	0	0	0	0
MA006	Highridge, Upper Warren Avenue	SU697752	Mapledurham	0.32	100	0	0	0	0	0	0

MA007	161 Upper Woodcote Road	SU696760	Mapledurham	0.24	100	0	0	0	0	0	0
MA008	Mapledurham Pavilion, Upper Woodcote Road, Caversham	SU698758	Mapledurham	1.41	100	0	0	0	0	0	0
MI003	34 Parkside Road	SU695729	Minster	0.3	100	0	0	0	0	0	0
MI006	1 Castle Crescent	SU709727	Minster	0.28	100	0	0	0	0	0	0
MI007	5 Westcote Road	SU698727	Minster	0.97	100	0	0	0	0	0	0
MI008	Government Offices, Coley Park, Wensley Road	SU704723	Minster	1.89	100	0	0	0	0	0	0
MI009	Webb's Close, Berkeley Avenue	SU707725	Minster	0.19	100	0	0	0	0	0	0
MI011	31 Bath Road	SU703727	Minster	0.094	100	0	0	0	0	0	0
MI012	4 Berkeley Avenue	SU710726	Minster	0.055	100	0	0	0	0	0	0
MI018	Yeomanry House, Castle Hill	SU708729	Minster	0.44	100	0	0	0	0	0	0
NO001	Dee Park (exluding 103 Dee Rd)	SU683735	Norcot	16.4	100	0	0	0	0	0	0
NO002	The Meadway Centre, Honey End Lane	SU683727	Norcot	2.99	100	0	0	0	0	0	0
NO003	16c Upton Road	SU685731	Norcot	0.16	100	0	0	0	0	0	0
NO004	2, 4, 6 Water Road and 158 Dee Road	SU686733	Norcot	0.21	100	0	0	0	0	0	0
NO005	St Georges Hall, St Georges Road	SU690736	Norcot	0.31	100	0	0	0	0	0	0
NO006	15 St Georges Road	SU690738	Norcot	0.097	100	0	0	0	0	0	0
NO007	Sterling Way Industrial Estate	SU685741	Norcot	1.55	100	0	0	0	0	0	0
NO008	Upton Road Industrial Estate	SU686731	Norcot	2.17	100	0	0	0	0	0	0
NO009	103 Dee Road	SU685733	Norcot	0.85	100	0	0	0	0	0	0
PA001	261-275 London Road	SU733733	Park	0.16	100	0	0	0	0	0	0
PA003	Land at Green Road	SU738728	Park	0.44	100	0	0	0	0	0	0
PA004	Arthur Hill Swimming Pool, 221-225 Kings Road	SU730732	Park	0.11	100	0	0	0	0	0	0

PA005	Palmer Park Car Park	SU738730	Park	0.72	100	0	0	0	0	0	0
PA006	Alexander House, Kings Road	SU729732	Park	0.16	100	0	0	0	0	0	0
PA007	131 Wokingham Road	SU740725	Park	0.15	100	0	0	0	0	0	0
PA008	Hamilton Centre, Bulmershe Road	SU737724	Park	0.35	100	0	0	0	0	0	0
PE001	Land at Lowfield Road	SU730759	Peppard	0.93	100	0	0	0	0	0	0
PE002	Part of Reading Golf Course, Kidmore End Road	SU718767	Peppard	3.75	100	0	0	0	0	0	0
PE003	Rear of 200-214 Henley Road, 12-24 All Hallows Road & 4, 7 & 8 Copse Avenue	SU728753	Peppard	0.87	100	0	0	0	0	0	0
PE004	Rear of 13-14a Hawthorne Road & 282-292 Henley Road	SU733756	Peppard	0.37	100	0	0	0	0	0	0
PE007	Rear of 9 Chalgrove Way, Emmer Green	SU721767	Peppard	0.22	100	0	0	0	0	0	0
PE008	58 Crawshay Drive, Emmer Green	SU717773	Peppard	0.21	100	0	0	0	0	0	0
PE009	Caversham Park	SU724762	Peppard	38.28	100	0	0	0	0	0	0
RE001	Royal Berkshire Hospital, London Road	SU724729	Redlands	0.47	100	0	0	0	0	0	0
RE005	1a Upper Redlands Road	SU734723	Redlands	0.53	100	0	0	0	0	0	0
RE008	252 Kings Road	SU726732	Redlands	0.18	100	0	0	0	0	0	0
RE009	Land adjacent to 17 Craven Road	SU726727	Redlands	0.27	100	0	0	0	0	0	0
RE010	3-29 Newcastle Road	SU723717	Redlands	0.47	100	0	0	0	0	0	0
RE011	46 Redlands Road	SU725723	Redlands	0.24	100	0	0	0	0	0	0
RE012	78-86 London Road	SU728730	Redlands	0.28	100	0	0	0	0	0	0
RE013	Warwick House, Warwick Road	SU722719	Redlands	0.15	100	0	0	0	0	0	0
RE014	Rear of 8-26 Redlands Road	SU724726	Redlands	0.74	100	0	0	0	0	0	0

RE015	Land adjacent to 40 Redlands Road	SU725724	Redlands	0.43	100	0	0	0	0	0	0
RE016	Dingley House, 3-5 Craven Road	SU725729	Redlands	0.33	100	0	0	0	0	0	0
RE017	13-15 Craven Road	SU726728	Redlands	0.11	100	0	0	0	0	0	0
RE018	Land rear of 8-14 Allcroft Road	SU722724	Redlands	0.23	100	0	0	0	0	0	0
RE019	Aspen House, 300 Kings Road	SU728732	Redlands	0.29	100	0	0	0	0	0	0
SO001	Dellwood Hospital, Liebenrood Road	SU694727	Southcote	0.31	100	0	0	0	0	0	0
SO002	Elvian School, Bath Road	SU695723	Southcote	5	100	0	0	0	0	0	0
SO003	Alice Burrows Home, Dwyer Road	SU682718	Southcote	0.48	100	0	0	0	0	0	0
SO005	Garages r/o 4-10 Frilsham Road	SU685718	Southcote	0.149	100	0	0	0	0	0	0
SO006	72 Bath Road	SU696725	Southcote	0.9	100	0	0	0	0	0	0
SO007	37 Circuit Lane	SU691721	Southcote	0.21	100	0	0	0	0	0	0
SO008	Amethyst Lane	SU694726	Southcote	0.57	100	0	0	0	0	0	0
TH001	Highdown School, Surley Row	SU712763	Thames	0.28	100	0	0	0	0	0	0
TH003	Land adjacent to 54 Highdown Hill Road, Emmer Green	SU710770	Thames	0.61	100	0	0	0	0	0	0
TH004	Rear of 1 & 3 Woodcote Road & 21 St Peter's Hill	SU705751	Thames	0.33	100	0	0	0	0	0	0
TH005	153 Hemdean Road	SU713754	Thames	1.91	100	0	0	0	0	0	0
TH006	142 Kidmore Road, Caversham	SU707760	Thames	0.21	100	0	0	0	0	0	0
TH007	The Arthur Clark Home, Dovedale Close	SU709751	Thames	0.48	100	0	0	0	0	0	0
TI001	Park Lane Primary School, The Laurels and Downing Road	SU668737	Tilehurst	3.36	100	0	0	0	0	0	0



TI003	Land at Conwy Close/Meadway Comprehensive School	SU677730	Tilehurst	1.24	100	0	0	0	0	0	0
TI004	3-19 The Triangle, Tilehurst	SU667736	Tilehurst	0.52	100	0	0	0	0	0	0
WH001	Worton Grange	SU715693	Whitley	8.79	100	0	0	0	0	0	0
WH004	Little Chef, Basingstoke Road	SU716692	Whitley	0.31	100	0	0	0	0	0	0
WH015	177 Basingstoke Road	SU718713	Whitley	0.4	100	0	0	0	0	0	0
WH021	St Paul's Church and Hall	SU718695	Whitley	0.22	100	0	0	0	0	0	0
WH023	448-452 Basingstoke Road	SU716705	Whitley	7.6	100	0	0	0	0	0	0
WH024	472 Basingstoke Road, Transcental and Bennet Court, Bennet Road	SU715701	Whitley	2.55	100	0	0	0	0	0	0
WH025	14 Bennet Road	SU714701	Whitley	0.66	100	0	0	0	0	0	0
WH029	Commercial Road East	SU714703	Whitley	3.17	100	0	0	0	0	0	0
WH030	464-468 Basingstoke Road	SU716703	Whitley	2.2	100	0	0	0	0	0	0
WH031	Acre Business Park	SU715699	Whitley	0.7	100	0	0	0	0	0	0
WH032	478 Basingstoke Road	SU716700	Whitley	1.32	100	0	0	0	0	0	0
WH038	SEGRO Industrial site, Imperial Way	SU716696	Whitley	1.46	100	0	0	0	0	0	0
XX001	Confidential Site 1		Not specified	0.51	100	0	0	0	0	0	0
XX002	Confidential Site 2		Not specified	0.34	100	0	0	0	0	0	0
XX003	Confidential Site 3		Not specified	0.19	100	0	0	0	0	0	0
XX005	Confidential Site 5		Not specified	0.032	100	0	0	0	0	0	0
XX006	Confidential Site 6		Not specified	0.69	100	0	0	0	0	0	0
XX008	Confidential Site 8		Not specified	0.091	100	0	0	0	0	0	0

XX009	Confidential Site 9		Not specified	0.26	100	0	0	0	0	0	0
XX011	Confidential Site 11		Not specified	0.34	100	0	0	0	0	0	0
XX012	Confidential Site 12		Not specified	0.2	100	0	0	0	0	0	0
XX013	Confidential Site 13		Not specified	0.09	100	0	0	0	0	0	0
XX014	Confidential Site 14		Not specified	0.15	100	0	0	0	0	0	0
XX016	Confidential Area Regen 1		Not specified	9.9	100	0	0	0	0	0	0
XX018	Confidential Area Regen 3		Not specified	2.05	100	0	0	0	0	0	0
XX020	Confidential Area Regen 5		Not specified	7.36	100	0	0	0	0	0	0
XX021	Confidential Area Regen 6		Not specified	2.96	100	0	0	0	0	0	0
XX022	Confidential Area Regen 7		Not specified	18.68	100	0	0	0	0	0	0
XX024	Confidential Area Regen 9		Not specified	6.36	100	0	0	0	0	0	0
XX025	Confidential Area Regen 10		Not specified	8.51	100	0	0	0	0	0	0
XX026	Confidential Area Regen 11		Not specified	2.88	100	0	0	0	0	0	0
XX027	Confidential Area Regen 12		Not specified	11.76	100	0	0	0	0	0	0
XX028	Confidential Area Regen 13		Not specified	14.59	100	0	0	0	0	0	0
WH048	Unit 4 Brunel Retail Park	SU714711	Whitley	0.23	99	1	0	0	0	0	0

KA023	2-12 and 3-17 Boulton Road	SU715714	Katesgrove	2.29	98	2	0	0	0	0	0
XX007	Confidential Site 7		Not specified	1.35	97	3	0	0	0	0	0
WH003	Land north of Manor Farm Road	SU716708	Whitley	13.69	95	5	0	0	0	0	0
WH036	Office buildings, Worton Drive and Imperial Way	SU714695	Whitley	3.98	94	6	0	0	0	0	0
AB013	Reading Prison	SU720735	Abbey	1.44	92	8	0	0	0	0	0
AB095	3-4 Wesley Gate, Queens Road	SU721732	Abbey	0.07	87	13	0	0	0	0	0
WH034	Arena Business Park, Acre Road	SU713699	Whitley	2.45	85	15	0	0	0	0	0
KE015	1-11 and 6-12 Deacon Way	SU684745	Kentwood	2.49	82	18	0	0	0	0	0
AB014	Forbury Retail Park	SU722736	Abbey	6.99	81	20	0	0	0	0	0
KA033	Car Park, East Street	SU718731	Katesgrove	0.13	79	21	0	0	0	0	0
WH040	Reading International Business Park	SU713690	Whitley	7.67	78	22	0	0	0	0	0
WH011	Foudry Place and 22 Commercial Road	SU711703	Whitley	3.4	74	26	0	0	0	0	0
KA024	14-22 and 39-47 Boulton Road and 11 & 15 Cradock Road	SU714714	Katesgrove	1.57	71	29	0	0	0	0	0
WH045	16-18 Bennet Road	SU713701	Whitley	0.74	69	31	0	0	0	0	0
KA030	Central Club, London Street	SU717731	Katesgrove	0.05	66	34	0	0	0	0	0
KE014	Io Trade Centre, Deacon Way	SU684744	Kentwood	0.66	55	45	0	0	0	0	0
WH028	Smallmead Road	SU711703	Whitley	1.33	43	57	0	0	0	0	0
AB041	Havell House, 62-66 Queens Road	SU721732	Abbey	0.06	48	62	0	0	0	0	0
KA020	Reading Approach & Chancery Gate Business Park, Cradock Road	SU714716	Katesgrove	2.36	29	71	0	0	0	0	0

WH022	Land south of the M4	SU711687	Whitley	3.84	28	72	0	0	0	0	0
WH002	Part of former Berkshire Brewery Site	SU713691	Whitley	3.7	27	73	0	0	0	0	0
AB036	60 Queens Road	SU721731	Abbey	0.22	20	80	0	0	0	0	0
WH010	Land bounded by Island Road, Longwater Avenue, A33 and Sewage Treatment Works	SU715706	Whitley	9.7	12	88	0	0	0	0	0
AB026	The Oracle Extension, Bridge Street and Letcombe Street	SU716731	Abbey	1.67	10	90	0	0	0	0	0
AB087	Weighbridge Row	SU707741	Abbey	0.35	2	98	0	0	0	0	0
AB098	Clarendon House 59-75 Queens Road	SU721732	Abbey	0.21	0	100	0	0	0	0	0
KA031	Building 1, New Century Place, East Street	SU718732	Katesgrove	0.13	0	100	0	0	0	0	0
KA032	Building 2, New Century Place, East Street	SU719732	Katesgrove	0.17	0	100	0	0	0	0	0
WH012	Madejski Stadium, Royal Way	SU708697	Whitley	17.7	0	100	0	0	0	0	0
AB089	1-3 & 13-14 Cremyll Road	SU708743	Abbey	0.81	0	100	0	0	0	0	0
KA001	25-31 London Street	SU718731	Katesgrove	0.1	0	100	0	0	0	0	0
KE009	2-4 Deacon Way	SU685743	Kentwood	0.58	0	100	0	0	0	0	0
MI014	Car dealerships, Rose Kiln Lane	SU713722	Minster	1.17	0	100	0	0	0	0	0
WH027	Darwin Close and 9-21 Bennet Road	SU713703	Whitley	4.3	66	34	1	0	0	0	0
BA014	24 Portman Road and 75-77 Loverock Road	SU697740	Battle	0.69	98	2	2	0	0	0	0
BA016	Battle Farm Trading Estate and 60 and 85 Loverock Road	SU695740	Battle	1.56	98	2	2	0	0	0	0
WH016	Kennet Island Phase 3, Manor Farm Road	SU716706	Whitley	5.46	91	9	2	0	0	0	0

WH020	Land adjacent to Smallmead MRF, Island Road	SU704707	Whitley	2.34	81	19	3	0	0	0	0
BA015	28 Portman Road and 83 Loverock Road	SU696740	Battle	0.3	96	4	4	0	0	0	0
AB093	2 Ross Road	SU710742	Abbey	0.28	95	5	5	0	0	0	0
AB077	20-22 Richfield Avenue	SU708744	Abbey	0.37	0	100	5	0	0	0	0
AB090	18 Richfield Avenue	SU707743	Abbey	0.33	0	100	5	0	0	0	0
AB003	Station Hill (wider site)	SU713737	Abbey	2.87	93	0	7	0	0	0	0
WH037	Worton Drive industrial sites	SU713697	Whitley	10.28	54	46	13	0	0	0	0
AB055	Former Cox & Wyman site, Cardiff Road	SU709741	Abbey	1.31	81	19	19	0	0	0	0
KE001	784-794 Oxford Road	SU688740	Kentwood	0.22	79	0	21	0	0	0	0
AB009	Great Knollys Street and Weldale Street	SU710736	Abbey	3.02	74	26	26	0	0	0	0
AB016	Gas Holder	SU729737	Abbey	0.71	0	100	28	0	0	0	0
BA022	Bridgewater Close	SU691740	Battle	1.37	69	11	31	0	0	0	0
BA012	14 Portman Road and the Portman Centre	SU699740	Battle	1.67	64	21	36	0	0	0	0
AB085	Trafford Road	SU705742	Abbey	0.99	0	100	40	0	0	0	0
AB078	Land at Regent Court, Great Knollys Street	SU711738	Abbey	0.021	45	55	55	0	0	0	0
BA009	2-4 Bridgewater Close	SU691740	Battle	0.24	27	73	73	0	0	0	0
AB008	Cattle Market	SU710738	Abbey	2.46	18	60	82	0	0	0	0
WH035	Mayfield Trading Estate, Acre Road	SU711699	Whitley	1.29	0	100	83	0	0	0	0
AB065	Queens Arms PH, Great Knollys Street	SU709737	Abbey	0.065	0	100	100	0	0	0	0
BA013	16-22 Portman Road and 47-73 Loverock Road	SU698740	Battle	1.18	99	1	1	1	0	0	0

CA003	St Martin's Precinct, Church Street	SU713747	Caversham	1.71	58	28	42	3	0	0	0
AB086	100-124 Cardiff Road and Bennet Court	SU706742	Abbey	3.19	0	100	36	4	0	0	0
AB091	24-26 Richfield Avenue	SU708744	Abbey	0.66	0	100	21	5	0	0	0
AB084	140-146 Cardiff Road	SU704741	Abbey	0.69	0	100	35	6	0	0	0
AB073	28-30 Richfield Avenue	SU709744	Abbey	0.78	0	100	98	41	0	0	0
XX019	Confidential Area Regen 4		Not specified	46.39	99	0	1	1	1	0	0
MI002	Lok n Store, 5-9 Berkeley Avenue	SU713726	Minster	0.63	0	100	22	2	2	0	0
AB088	2-12 Richfield Avenue	SU704743	Abbey	1.235	0	100	75	8	2	0	0
WH005	400 Longwater Avenue	SU699697	Whitley	2.6	65	35	16	5	3	0	0
AB080	Land adjacent Crowne Plaza Hotel, Richfield Avenue	SU710745	Abbey	0.45	0	100	100	80	3	0	0
BA003	Part of former Battle Hospital, Portman Road	SU699739	Battle	2.77	5	95	86	75	4	0	0
AB052	The Oracle Shopping Centre, Yield Hall Place	SU715732	Abbey	0.04	59	41	41	12	12	0	0
AB070	Land at Richfield Avenue and Tessa Road	SU707742	Abbey	3.66	0	100	22	13	12	0	0
KE004	Land adjacent to Stadium Way	SU686742	Kentwood	0.498	66	34	22	16	13	0	0
AB005	Riverside	SU715741	Abbey	1.24	20	80	80	26	13	0	0
AB007	Napier Court	SU719738	Abbey	1.1	10	90	90	29	13	0	0
AB092	Milford Road	SU709743	Abbey	1.61	16	84	39	15	14	0	0
AB063	Manrose Manufacturing, Meadow Road	SU709741	Abbey	0.34	62	38	38	23	17	0	0
BA011	Ashmere Terrace, 8-12 Portman Road and 7-11 Loverock Road	SU701739	Battle	1.4	0	100	100	29	21	0	0

MI017	Land west of A33 and south of Berkeley Avenue	SU713725	Minster	0.41	0	100	61	42	42	0	0
XX004	Confidential Site 4		Not specified	0.12	0	100	100	92	43	0	0
AB083	131-215 Cardiff Road	SU704740	Abbey	1.233	0	100	100	88	52	0	0
AB081	Shurgard Self Storage, 75-77 Caversham Road	SU712741	Abbey	0.57	0	100	100	68	53	0	0
AB004	North of the Station	SU714740	Abbey	6.71	11	89	89	77	62	0	0
AB006	Napier Road Junction	SU718738	Abbey	0.49	4	96	96	78	65	0	0
BA010	2-6 Portman Road and 1-5 Loverock Road	SU701738	Battle	1.05	0	100	100	70	69	0	0
AB075	115-117 Caversham Road	SU712741	Abbey	0.35	0	100	100	85	70	0	0
XX017	Confidential Area Regen 2		Not specified	4.88	73	27	1	1	1	1	0
AB015	Forbury Business Park and Kenavon Drive	SU724736	Abbey	2.89	8	92	7	1	1	1	0
WH039	Tesco Distribution Centre, Imperial Way	SU710693	Whitley	19.48	4	96	2	2	2	2	0
WH041	100-350 Longwater Avenue	SU701700	Whitley	9.84	15	85	9	8	8	3	0
BA023	Wigmore Lane	SU693743	Battle	0.73	0	100	65	27	21	3	0
WH047	Land south of Smallmead MRF and north of Longwater Avenue	SU705705	Whitley	3.79	1	99	5	3	3	4	0
AB034	Land West of Rivermead Car Park	SU707745	Abbey	0.44	0	100	70	28	14	4	0
PE005	199-219 Henley Road	SU730752	Peppard	1.51	50	50	32	22	21	6	0
WH046	Land north of Island Road	SU707709	Whitley	1.81	76	24	8	8	8	8	0
MI005	Reading Link Retail Park, Rose Kiln Lane	SU712722	Minster	2.42	0	100	58	29	9	9	0
WH014	Land west of Longwater Avenue	SU700705	Whitley	3.54	21	79	57	28	28	10	0

KE012	64 Portman Road and 127 Loverock Road	SU689742	Kentwood	0.74	69	31	32	28	24	13	0
AB056	Former Gas Works Building, Gas Works Road	SU723734	Abbey	0.064	70	30	18	18	18	18	0
KE013	Stadium Way	SU687743	Kentwood	4.08	0	100	98	94	91	33	0
AB025	The Anchorage, 34 Bridge Street	SU715730	Abbey	0.15	0	100	34	34	34	34	0
MI013	Kilnbrook House, Cadogan House and Rose Kiln Lane Court	SU713723	Minster	1.07	0	100	85	69	64	38	0
MA004	Land at Chazey Court Farm	SU691750	Mapledurham	0.29	0	100	100	54	54	43	0
CA001	Unit 1, Paddock Road Industrial Estate	SU725744	Caversham	0.4	0	100	100	100	100	57	0
CA011	Former Caversham Nursery, 82 Gosbrook Road	SU717747	Caversham	0.16	0	100	100	100	100	87	0
AB096	Great Brighams Mead	SU713742	Abbey	1.04	0	100	100	99	97	92	0
CA007	Cantay House, Ardler Road, Caversham	SU721747	Caversham	0.33	0	100	100	100	100	100	0
CA012	64 St John's Road	SU722748	Caversham	0.15	0	100	100	100	100	100	0
XX010	Confidential Site 10		Not specified	0.13	0	100	100	100	100	100	0
XX015	Confidential Site 15		Not specified	0.12	0	100	100	100	100	100	0
AB082	Tesco, Napier Road	SU726739	Abbey	5.51	0	100	91	57	22	6	2
KE005	Land at Scours Lane	SU683746	Kentwood	0.56	0	100	100	89	89	79	2
WH017	Land south of Island Road at Smallmead	SU701706	Whitley	26	61	39	7	6	5	3	3
WH033	1-4 Acre Road	SU712700	Whitley	4.6	65	35	36	33	24	3	3
PE006	241-251 Henley Road	SU732753	Peppard	0.79	39	61	39	31	30	21	3
AB099	Network Rail Land, Napier Road	SU724738	Abbey	3.36	42	58	52	41	37	31	3



MI015	25-29 Rose Kiln Lane	SU713720	Minster	3.07	0	100	28	17	5	5	5
MI010	Pulleyn Park, Rose Kiln Lane	SU714723	Minster	1.29	0	100	13	11	10	10	5
CA004	383 Gosbrook Road	SU723745	Caversham	0.17	0	100	100	100	98	98	5
CA009	4-6 Send Road	SU724744	Caversham	0.13	0	100	100	100	100	100	6
WH018	Land at the Madejski Stadium	SU706697	Whitley	19	0	100	5	4	4	6	7
AB024	Reading Central Library, Abbey Square	SU718734	Abbey	0.1	43	57	39	39	39	39	7
CA002	72 George Street	SU718739	Caversham	0.45	0	100	100	100	100	60	8
WH042	100-400 Brook Drive	SU704700	Whitley	9.2	0	100	10	10	10	10	10
WH043	450-500 Brook Drive	SU701697	Whitley	2.54	0	100	30	11	8	8	14
CA006	Reading University Boat Club, Promenade Road	SU713746	Caversham	0.56	0	100	100	93	92	61	16
CA010	Paddock Road	SU726745	Caversham	1.23	0	100	90	82	75	39	17
WH008	Green Park Village, Longwater Avenue	SU698702	Whitley	24.65	0	100	80	69	64	55	17
WH026	20-40 Bennet Road	SU711701	Whitley	3.03	1	99	65	40	30	28	18
XX023	Confidential Area Regen 8		Not specified	16.2	2	98	94	80	72	58	22
AB029	Caversham Lock Island	SU720740	Abbey	0.45	0	100	42	42	42	42	24
WH044	550 South Oak Way	SU703696	Whitley	1.02	0	100	38	38	38	19	25
MI016	8-12 Rose Kiln Lane	SU711720	Minster	1.79	0	100	89	89	84	49	32
MA001	Chazey Farm, The Warren	SU691752	Mapledurham	2	0	100	71	43	38	38	36
MI001	Fobney Mead, Island Road	SU705711	Minster	2.18	0	100	64	60	53	58	65
WH009	Plot 17, 500-600 Longwater Avenue	SU698698	Whitley	4.08	0	100	89	84	82	75	66

BA024	Scours Lane and Littlejohn's Farm	SU690745	Battle	101.1	0	100	99	97	96	90	67
WH006	Plot 8, 600 South Oak Way	SU700695	Whitley	3.16	0	100	87	87	87	87	81
CA008	3 Send Road	SU723745	Caversham	0.16	0	100	100	100	100	100	88
CA005	View Island	SU720740	Caversham	1.62	0	100	100	100	100	100	89
SO004	Land at Searles Farm	SU690711	Southcote	93.7	3	97	95	94	93	91	94

## APPENDIX 2: Potential for Sites to Accommodate Development

(in order of flood risk, from lowest to highest) (excludes sites which were wholly under construction at 31/03/2017)

Site Code	Site Title	Suitability conclusion	Availability conclusion	Achievability conclusion	Resi (units)	Office (sq m)	Ind/Wh sg (sq m)	Retail etc (sq m)	Leisure (sq m)	Hotel (sq m)	Community (sq m)	Other (sq m)
AB001	Friar Street and Station Road	Suitable	Available	Achievable	123	-4775	0	0	0	0	0	0
AB002	Friars Walk and Greyfriars Road (reduced site)	Suitable	Potentially available	Potentially achievable	77	-4061	0	-1114	0	0	0	0
AB010	Chatham Street	Suitable	Potentially available	Unachievable	0	0	0	0	0	0	0	0
AB011	Broad Street Mall	Suitable	Available	Potentially achievable	200	-2126	0	0	0	0	0	0
AB012	Hosier Street	Suitable	Available	Achievable	615	1600	0	4442	0	0	0	-8897
AB017	108-116 Oxford Road, 10 Eaton Place and 115-125 Chatham Street	Suitable	Potentially available	Potentially achievable	186	-5130	-2109	-470	0	0	-381	-947
AB018	143-145 Oxford Road	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
AB019	Former Reading Family Centre, North Street	Suitable	Available	Achievable	17	0	0	0	0	0	0	0
AB020	9-27 Greyfriars Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
AB021	2-8 The Forbury and 19-22 Market Place	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB022	3-10 Market Place, Abbey Hall & Abbey Square	Suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
AB027	Reading College, Kings Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB032	173-175 Friar Street	Suitable	Available	Achievable	34	-926	0	100	0	0	0	0
AB039	Jacksons Corner, 1-9 Kings Road	Suitable	Available	Achievable	26	0	0	-1855	0	0	0	0
AB049	Princes House, 73a London Road	Suitable	Potentially available	Potentially achievable	23	-2044	0	0	0	0	0	0
AB053	27-32 Market Place	Suitable	Available	Achievable	14	-275	0	-237	0	0	0	0

AB057	Central Swimming Pool, Battle Street	Potentially suitable	Potentially available	Achievable	87	0	0	0	-2358	0	0	0
AB058	78 Oxford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB059	149-153 Oxford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB060	38-40 Oxford Road & 3-7 Cheapside	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB061	17-23 Queen Victoria Street	Suitable	Available	Potentially achievable	12	-454	0	0	0	0	0	0
AB062	1-5 King Street	Suitable	Potentially available	Potentially achievable	16	0	0	-1368	0	0	0	0
AB064	159 Oxford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB066	Elite House, 179 Kings Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB067	Brunel Arcade, Station Approach	Suitable	Potentially available	Potentially achievable	138	12936	0	1531	0	0	0	-2842
AB068	Apex Plaza, Forbury Road	Suitable	Potentially available	Potentially achievable	183	-8858	0	0	0	0	0	0
AB069	37-43 Blagrove Street	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
AB071	Rising Sun 18 Forbury Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB072	The Butler PH, Chatham Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB074	7 Blagrove Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB076	187-189 Kings Road	Suitable	Available	Potentially achievable	22	-739	0	0	0	0	0	0
AB079	1-3 Greyfriars Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB094	160-163 Friar Street	Suitable	Potentially available	Potentially achievable	25	-2228	0	0	0	0	0	0
AB097	15-18 Friar Street, 2-16 Station Road and Friars Walk	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB100	Rear of 8-32 Clifton Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB101	Part of City Wall House, 26 West Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB102	Tangent House, 16 Forbury Road	Potentially	Availability	N/A	0	0	0	0	0	0	0	0

		suitable	unknown									
BA002	Rear of 303-315 Oxford Road	Suitable	Potentially available	Potentially achievable	13	0	0	0	0	0	0	0
BA004	Land at former Battle Hospital	Suitable	Potentially available	Achievable	10	0	0	0	0	0	0	0
BA006	Land at Reading West Station	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA007	458-478 Oxford Road & 1-3 Chester St	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA008	133-137 Wantage Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA017	38-40 Portman Road and 103 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA018	Aldbury Close and 42 Portman Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA019	Broughton Close and 44-50 Portman Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA020	50-60 Portman Road and 117-123 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA025	53-55 Argyle Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CH001	University of Reading, The Chancellors Way & Shinfield Road	Suitable	Available	Potentially achievable	0	0	0	0	0	10972	0	0
CH005	Land rear of 50-52 Cressingham Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CH006	St Patricks Hall, Northcourt Avenue	Suitable	Available	Potentially achievable	107	0	0	0	0	0	0	0
KA002	Corner of Crown Street and Southampton Street	Suitable	Available	Achievable	14	0	0	0	0	0	0	0
KA003	Corner of Crown Street and Silver Street	Suitable	Available	Achievable	76	-882	0	0	0	0	0	0
KA004	21 South Street	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0

KA005	83-85 London Street	Suitable	Potentially available	Achievable	10	-767	0	0	0	0	0	0
KA006	40 Silver Street	Suitable	Available	Achievable	13	0	-549	0	0	0	0	0
KA008	Enterprise House, 89-97 London Street	Suitable	Potentially available	Achievable	8	-642	0	0	0	0	0	0
KA009	272-274 Elgar Road South	Potentially suitable	Potentially available	Potentially achievable	27	0	-1093	0	0	0	0	0
KA010	79 Silver Street	Suitable	Potentially available	Potentially achievable	14	-394	0	-386	0	0	0	0
KA011	The Woodley Arms PH, Waldeck Street	Suitable	Available	Achievable	29	0	0	-360	0	0	0	0
KA012	75-77 London Street	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
KA013	11 Glebe Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
KA014	Preston Road and Nimrod Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA015	Britten Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA016	268 Elgar Road South	Potentially suitable	Potentially available	Potentially achievable	27	0	-1781	0	0	0	0	0
KA017	Keyline Builders Merchants, Elgar Road South	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
KA018	160 Basingstoke Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA019	Jewson & Tunbridge Jones Estate, Cradock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA021	196 Basingstoke Road & 5 Cradock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA022	Arkwright Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

KA025	19-37 Boulton Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA026	Car dealerships, north of Rose Kiln Lane	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA027	Hyperion Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA028	169-173 Basingstoke Road	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
KA029	Makro, Elgar Road South	Potentially suitable	Potentially available	Potentially achievable	211	0	0	-7729	0	0	0	0
KA034	9 Southern Court, South Street	Suitable	Potentially available	Potentially achievable	14	-288	0	0	0	0	0	0
KE002	1025-1027 Oxford Road	Suitable	Potentially available	Achievable	11	0	0	0	0	0	0	0
KE006	1015 Oxford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE007	The Restoration PH, 928 Oxford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE008	Allotments and adjacent land, Kentwood Hill	Potentially suitable	Available	Achievable	60	0	0	0	0	0	0	0
KE010	Charters Car Sales, Oxford Road	Suitable	Potentially available	Potentially achievable	12	0	0	0	0	0	0	-466
KE016	15-21 Deacon Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE017	Gresham Way Industrial Estate	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE018	816 Oxford Road	Suitable	Available	Achievable	15	0	0	0	0	0	0	-1076
KE019	Norcot Community Centre, Lyndhurst Road	Suitable	Potentially available	Potentially achievable	15	0	0	0	0	0	0	0
MA002	20 Chazey Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MA003	Outlands, Upper Warren Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MA005	Plots A & B Gravel Hill	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

MA006	Highridge, Upper Warren Avenue	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
MA007	161 Upper Woodcote Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MA008	Mapledurham Pavilion, Upper Woodcote Road, Caversham	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
MI003	34 Parkside Road	Suitable	Available	Potentially achievable	0	-302	0	138	391	0	325	0
MI006	1 Castle Crescent	Suitable	Available	Potentially achievable	11	0	0	0	0	0	0	0
MI007	5 Westcote Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI008	Government Offices, Coley Park, Wensley Road	Suitable	Available	Achievable	40	0	0	0	0	0	0	0
MI009	Webb's Close, Berkeley Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI011	31 Bath Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI012	4 Berkeley Avenue	Suitable	Potentially available	Achievable	10	0	0	0	0	0	0	-102
MI018	Yeomanry House, Castle Hill	Suitable	Available	Potentially achievable	11	-616	0	0	0	0	0	0
NO001	Dee Park (excluding 103 Dee Rd)	Suitable	Available	Achievable	98	0	0	0	0	0	4250	0
NO002	The Meadway Centre, Honey End Lane	Suitable	Available	Achievable	0	0	0	3908	0	0	0	0
NO003	16c Upton Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
NO004	2, 4, 6 Water Road and 158 Dee Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
NO005	St Georges Hall, St Georges Road	Suitable	Available	Achievable	11	0	0	0	0	0	-106	0
NO006	15 St Georges Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
NO007	Sterling Way Industrial Estate	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
NO008	Upton Road Industrial Estate	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
NO009	103 Dee Road	Suitable	Potentially available	Achievable	34	0	0	0	0	0	-1741	0



PA001	261-275 London Road	Suitable	Potentially available	Potentially achievable	10	0	0	320	0	0	0	-508
PA003	Land at Green Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
PA004	Arthur Hill Swimming Pool, 221-225 Kings Road	Potentially suitable	Potentially available	Achievable	6	0	0	0	-547	0	0	0
PA005	Palmer Park Car Park	Potentially suitable	Potentially available	Potentially achievable	0	0	0	0	800	0	0	0
PA006	Alexander House, Kings Road	Suitable	Available	Achievable	56	-2041	0	0	0	0	0	0
PA007	131 Wokingham Road	Suitable	Potentially available	Achievable	8	0	0	360	0	0	0	-173
PA008	Hamilton Centre, Bulmershe Road	Suitable	Potentially available	Achievable	14	0	0	0	0	0	-1570	0
PE001	Land at Lowfield Road	Suitable	Potentially available	Achievable	27	0	0	0	0	0	0	0
PE002	Part of Reading Golf Course, Kidmore End Road	Potentially suitable	Potentially available	Potentially achievable	113	0	0	0	0	0	900	0
PE003	Rear of 200-214 Henley Road, 12-24 All Hallows Road & 4, 7 & 8 Copse Avenue	Suitable	Potentially available	Potentially achievable	17	0	0	0	0	0	0	0
PE004	Rear of 13-14a Hawthorne Road & 282-292 Henley Road	Suitable	Potentially available	Achievable	10	0	0	0	0	0	0	0
PE007	Rear of 9 Chalgrove Way, Emmer Green	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
PE008	58 Crawshay Drive, Emmer Green	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
PE009	Caversham Park	Potentially suitable	Available	Achievable	32	0	0	0	0	0	0	-10217
RE001	Royal Berkshire Hospital, London Road	Suitable	Available	Potentially achievable	0	0	0	0	0	0	10797	0
RE005	1a Upper Redlands Road	Suitable	Available	Achievable	6	0	0	0	0	0	0	0
RE008	252 Kings Road	Suitable	Available	Achievable	0	0	0	0	0	0	0	0
RE009	Land adjacent to 17 Craven Road	Suitable	Potentially available	Achievable	0	0	0	0	0	0	1123	0

RE010	3-29 Newcastle Road	Suitable	Potentially available	Achievable	18	0	0	0	0	0	0	0
RE011	46 Redlands Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
RE012	78-86 London Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
RE013	Warwick House, Warwick Road	Suitable	Available	Achievable	9	0	0	0	0	0	0	0
RE014	Rear of 8-26 Redlands Road	Potentially suitable	Potentially available	Achievable	9	0	0	0	0	0	0	0
RE015	Land adjacent to 40 Redlands Road	Suitable	Available	Achievable	26	0	0	0	0	0	-371	0
RE016	Dingley House, 3-5 Craven Road	Suitable	Available	Potentially achievable	17	0	0	0	0	0	-1101	0
RE017	13-15 Craven Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
RE018	Land rear of 8-14 Allcroft Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
RE019	Aspen House, 300 Kings Road	Suitable	Potentially available	Potentially achievable	70	-2595	0	0	0	0	0	0
SO001	Dellwood Hospital, Liebenrood Road	Suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
SO002	Elvian School, Bath Road	Suitable	Available	Potentially achievable	83	0	0	0	0	0	-3131	0
SO003	Alice Burrows Home, Dwyer Road	Suitable	Available	Achievable	20	0	0	0	0	0	0	0
SO005	Garages r/o 4-10 Frilsham Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
SO006	72 Bath Road	Suitable	Available	Achievable	12	0	0	0	10	-504	0	41
SO007	37 Circuit Lane	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
SO008	Amethyst Lane	Suitable	Available	Achievable	36	0	0	0	0	0	-1548	0
TH001	Highdown School, Surley Row	Suitable	Potentially available	Achievable	0	0	0	0	0	0	1080	0

TH003	Land adjacent to 54 Highdown Hill Road, Emmer Green	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
TH004	Rear of 1 & 3 Woodcote Road & 21 St Peter's Hill	Potentially suitable	Potentially available	Potentially achievable	8	0	0	0	0	0	0	0
TH005	153 Hemdean Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
TH006	142 Kidmore Road, Caversham	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
TH007	The Arthur Clark Home, Dovedale Close	Suitable	Available	Achievable	39	0	0	0	0	0	0	0
TI001	Park Lane Primary School, The Laurels and Downing Road	Potentially suitable	Available	Achievability unknown	0	0	0	0	0	0	0	0
TI003	Land at Conwy Close/Meadway Comprehensive School	Suitable	Available	Achievable	57	0	0	0	0	0	0	0
TI004	3-19 The Triangle, Tilehurst	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH001	Worton Grange	Suitable	Available	Achievable	163	0	2452	4402	0	4134	0	2510
WH004	Little Chef, Basingstoke Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
WH015	177 Basingstoke Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH021	St Paul's Church and Hall	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH023	448-452 Basingstoke Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH024	472 Basingstoke Road, Transcental and Bennet Court, Bennet Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH025	14 Bennet Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH029	Commercial Road East	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH030	464-468 Basingstoke Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH031	Acre Business Park	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH032	478 Basingstoke Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH038	SEGRO Industrial site, Imperial Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

XX001	Confidential Site 1	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX002	Confidential Site 2	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX003	Confidential Site 3	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
XX005	Confidential Site 5	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX006	Confidential Site 6	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
XX008	Confidential Site 8	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX009	Confidential Site 9	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
XX011	Confidential Site 11	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX012	Confidential Site 12	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX013	Confidential Site 13	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX014	Confidential Site 14	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX016	Confidential Area Regen 1	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
XX018	Confidential Area Regen 3	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX020	Confidential Area Regen 5	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
XX021	Confidential Area Regen 6	Potentially suitable	Potentially available	Unachievable	0	0	0	0	0	0	0	0
XX022	Confidential Area Regen 7	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

XX024	Confidential Area Regen 9	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
XX025	Confidential Area Regen 10	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX026	Confidential Area Regen 11	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
XX027	Confidential Area Regen 12	Potentially suitable	Potentially available	Achievability unknown	0	0	0	0	0	0	0	0
XX028	Confidential Area Regen 13	Potentially suitable	Potentially available	Unachievable	0	0	0	0	0	0	0	0
WH048	Unit 4 Brunel Retail Park	Suitable	Potentially available	Potentially achievable	0	0	0	948	0	0	0	0
KA023	2-12 and 3-17 Boulton Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX007	Confidential Site 7	Suitable	Available	Potentially achievable	0	0	0	0	0	0	1530	0
WH003	Land north of Manor Farm Road	Suitable	Potentially available	Potentially achievable	684	-15920	-21950	0	-2593	0	2000	0
WH036	Office buildings, Worton Drive and Imperial Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB013	Reading Prison	Suitable	Available	Potentially achievable	72	0	0	0	825	0	0	-9000
AB095	3-4 Wesley Gate, Queens Road	Suitable	Potentially available	Potentially achievable	13	-749	0	0	0	0	0	0
WH034	Arena Business Park, Acre Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE015	1-11 and 6-12 Deacon Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB014	Forbury Retail Park	Suitable	Potentially available	Potentially achievable	980	0	0	0	0	0	0	0
KA033	Car Park, East Street	Potentially suitable	Potentially available	Potentially achievable	12	0	0	0	0	0	0	0
WH040	Reading International Business Park	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH011	Foudry Place and 22 Commercial Road	Suitable	Available	Potentially achievable	0	2295	0	0	0	1400	0	0

KA024	14-22 and 39-47 Boulton Road and 11 & 15 Cradock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH045	16-18 Bennet Road	Potentially suitable	Available	Achievable	0	-518	2184	0	0	0	0	-1256
KA030	Central Club, London Street	Potentially suitable	Potentially available	Achievable	8	0	0	0	0	0	-400	0
KE014	Io Trade Centre, Deacon Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH028	Smallmead Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB041	Havell House, 62-66 Queens Road	Suitable	Available	Potentially achievable	12	-806	0	0	0	0	0	0
KA020	Reading Approach & Chancery Gate Business Park, Cradock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH022	Land south of the M4	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
WH002	Part of former Berkshire Brewery Site	Suitable	Available	Potentially achievable	0	0	9709	0	0	0	0	0
AB036	60 Queens Road	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
WH010	Land bounded by Island Road, Longwater Avenue, A33 and Sewage Treatment Works	Suitable	Available	Potentially achievable	0	0	23622	0	0	0	0	0
AB026	The Oracle Extension, Bridge Street and Letcombe Street	Suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
AB087	Weighbridge Row	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB098	Clarendon House 59-75 Queens Road	Suitable	Potentially available	Potentially achievable	44	-2264	0	0	0	0	0	0
KA031	Building 1, New Century Place, East Street	Suitable	Potentially available	Potentially achievable	68	-2282	0	0	0	0	0	0
KA032	Building 2, New Century Place, East Street	Suitable	Potentially available	Potentially achievable	52	-1778	0	0	0	0	0	0
WH012	Madejski Stadium, Royal Way	Suitable	Potentially available	Achievability unknown	0	0	0	0	0	0	0	0

AB089	1-3 & 13-14 Cremyll Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KA001	25-31 London Street	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
KE009	2-4 Deacon Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI014	Car dealerships, Rose Kiln Lane	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
WH027	Darwin Close and 9-21 Bennet Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA014	24 Portman Road and 75-77 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA016	Battle Farm Trading Estate and 60 and 85 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH016	Kennet Island Phase 3, Manor Farm Road	Suitable	Available	Achievable	52	0	0	0	0	0	0	0
WH020	Land adjacent to Smallmead MRF, Island Road	Potentially suitable	Available	Achievable	0	0	6908	0	0	0	0	0
BA015	28 Portman Road and 83 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB093	2 Ross Road	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
AB077	20-22 Richfield Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB090	18 Richfield Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB003	Station Hill (wider site)	Suitable	Available	Achievable	451	116090	0	12825	2090	0	0	760
WH037	Worton Drive industrial sites	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB055	Former Cox & Wyman site, Cardiff Road	Suitable	Available	Achievable	80	0	-8865	0	0	0	0	0
KE001	784-794 Oxford Road	Suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
AB009	Great Knollys Street and Weldale Street	Suitable	Available	Potentially achievable	296	-120	-713	-3912	0	0	0	0
AB016	Gas Holder	Suitable	Available	Potentially achievable	46	0	0	0	0	0	0	0

BA022	Bridgewater Close	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA012	14 Portman Road and the Portman Centre	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB085	Trafford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB078	Land at Regent Court, Great Knollys Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA009	2-4 Bridgewater Close	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB008	Cattle Market	Suitable	Potentially available	Potentially achievable	405	0	0	9520	0	0	0	-4773
WH035	Mayfield Trading Estate, Acre Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB065	Queens Arms PH, Great Knollys Street	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA013	16-22 Portman Road and 47-73 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CA003	St Martin's Precinct, Church Street	Suitable	Potentially available	Potentially achievable	36	0	0	923	587	0	0	0
AB086	100-124 Cardiff Road and Bennet Court	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB091	24-26 Richfield Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB084	140-146 Cardiff Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB073	28-30 Richfield Avenue	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
XX019	Confidential Area Regen 4	Potentially suitable	Potentially available	Achievability unknown	0	0	0	0	0	0	0	0
MI002	Lok n Store, 5-9 Berkeley Avenue	Suitable	Available	Achievable	112	0	0	0	0	0	0	0
AB088	2-12 Richfield Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH005	400 Longwater Avenue	Suitable	Available	Achievable	0	27207	0	0	0	0	0	0
AB080	Land adjacent Crowne Plaza Hotel, Richfield Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0



BA003	Part of former Battle Hospital, Portman Road	Suitable	Available	Achievable	157	0	0	0	0	0	0	-7465
AB052	The Oracle Shopping Centre, Yield Hall Place	Suitable	Available	Achievability unknown	0	0	0	0	0	0	0	0
AB070	Land at Richfield Avenue and Tessa Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE004	Land adjacent to Stadium Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB005	Riverside	Suitable	Potentially available	Potentially achievable	204	-3223	0	0	1029	0	0	0
AB007	Napier Court	Suitable	Potentially available	Potentially achievable	154	-4261	0	0	0	0	0	0
AB092	Milford Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB063	Manrose Manufacturing, Meadow Road	Potentially suitable	Availability unknown	N/A	0	0	0	0	0	0	0	0
BA011	Ashmere Terrace, 8-12 Portman Road and 7-11 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI017	Land west of A33 and south of Berkeley Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX004	Confidential Site 4	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
AB083	131-215 Cardiff Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB081	Shurgard Self Storage, 75-77 Caversham Road	Potentially suitable	Potentially available	Potentially achievable	51	0	-2777	0	0	0	0	0
AB004	North of the Station	Suitable	Potentially available	Potentially achievable	539	53704	0	1503	425	8500	0	-8735
AB006	Napier Road Junction	Suitable	Available	Achievable	284	0	0	0	0	0	0	-1245
BA010	2-6 Portman Road and 1-5 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB075	115-117 Caversham Road	Potentially suitable	Potentially available	Potentially achievable	26	-178	-1762	-89	0	0	0	0
XX017	Confidential Area Regen 2	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

AB015	Forbury Business Park and Kenavon Drive	Suitable	Available	Achievable	140	0	-8495	-788	0	0	0	0
WH039	Tesco Distribution Centre, Imperial Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH041	100-350 Longwater Avenue	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
BA023	Wigmore Lane	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH047	Land south of Smallmead MRF and north of Longwater Avenue	Potentially suitable	Available	Achievable	0	0	11188	0	0	0	0	0
AB034	Land West of Rivermead Car Park	Suitable	Available	Achievable	0	0	0	425	0	0	0	0
PE005	199-219 Henley Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH046	Land north of Island Road	Potentially suitable	Available	Achievable	0	0	9960	0	0	0	0	0
MI005	Reading Link Retail Park, Rose Kiln Lane	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
WH014	Land west of Longwater Avenue	Suitable	Available	Achievable	0	0	0	0	0	0	0	6106
KE012	64 Portman Road and 127 Loverock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB056	Former Gas Works Building, Gas Works Road	Suitable	Available	Potentially achievable	18	0	-482	0	0	0	0	0
KE013	Stadium Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB025	The Anchorage, 34 Bridge Street	Suitable	Not available	N/A	0	0	0	0	0	0	0	0
MI013	Kilnbrook House, Cadogan House and Rose Kiln Lane Court	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MA004	Land at Chazey Court Farm	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CA001	Unit 1, Paddock Road Industrial Estate	Suitable	Potentially available	Potentially achievable	0	0	1419	0	0	0	0	0
CA011	Former Caversham Nursery, 82 Gosbrook Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
AB096	Great Brighams Mead	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

CA007	Cantay House, Ardlar Road, Caversham	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CA012	64 St John's Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX010	Confidential Site 10	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
XX015	Confidential Site 15	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
AB082	Tesco, Napier Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
KE005	Land at Scours Lane	N/A	N/A	N/A	0	0	0	0	0	0	0	0
WH017	Land south of Island Road at Smallmead	Potentially suitable	Available	Achievable	0	0	76752	0	0	0	0	0
WH033	1-4 Acre Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
PE006	241-251 Henley Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
AB099	Network Rail Land, Napier Road	Potentially suitable	Potentially available	Potentially achievable	55	0	-1610	0	0	0	0	0
MI015	25-29 Rose Kiln Lane	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI010	Pulleyn Park, Rose Kiln Lane	Potentially suitable	Potentially available	Potentially achievable	78	0	-477	0	0	0	0	-2517
CA004	383 Gosbrook Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
CA009	4-6 Send Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
WH018	Land at the Madejski Stadium	Suitable	Available	Achievable	556	1775	0	1735	20732	21245	0	15570
AB024	Reading Central Library, Abbey Square	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
CA002	72 George Street	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
WH042	100-400 Brook Drive	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH043	450-500 Brook Drive	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0

CA006	Reading University Boat Club, Promenade Road	Potentially suitable	Potentially available	Achievable	18	0	0	0	-571	0	0	0
CA010	Paddock Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
WH008	Green Park Village, Longwater Avenue	Suitable	Available	Achievable	559	16000	0	684	0	0	190	0
WH026	20-40 Bennet Road	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
XX023	Confidential Area Regen 8	Potentially suitable	Not available	N/A	0	0	0	0	0	0	0	0
AB029	Caversham Lock Island	Suitable	Potentially available	Potentially achievable	-1	0	0	0	800	0	0	-525
WH044	550 South Oak Way	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MI016	8-12 Rose Kiln Lane	Unsuitable	N/A	N/A	0	0	0	0	0	0	0	0
MA001	Chazey Farm, The Warren	Suitable	Available	Potentially achievable	35	0	0	0	0	0	0	0
MI001	Fobney Mead, Island Road	N/A	N/A	N/A	0	0	0	0	0	0	0	0
WH009	Plot 17, 500-600 Longwater Avenue	Suitable	Available	Achievable	0	22540	0	0	0	0	0	0
BA024	Scours Lane and Littlejohn's Farm	N/A	N/A	N/A	0	0	0	0	0	0	0	0
WH006	Plot 8, 600 South Oak Way	Suitable	Available	Achievable	0	20430	0	0	0	0	0	0
CA008	3 Send Road	Suitability unknown	N/A	N/A	0	0	0	0	0	0	0	0
CA005	View Island	N/A	N/A	N/A	0	0	0	0	0	0	0	0
SO004	Land at Searles Farm	N/A	N/A	N/A	0	0	0	0	0	0	0	0

**APPENDIX 3: Sites Assessed for Gypsy and Traveller Provision, their Flood Risk and Reasons for Exclusion**  
*(in order of flood risk, from lowest to highest)*

Site Code	Site Title	Grid Ref	Ward	Size (ha)	% in Flood Zone 1 only	% in Flood Zone 2	% in Flood Zone 3 with 70% climate change	% in Flood Zone 3 with 35% climate change	% in Flood Zone 3 with 25% climate change	% in Flood Zone 3	% in Functional Floodplain	Reason for rejection
3	Land at Orts Road	SU727734	Abbey	0.18	100	0	0	0	0	0	0	Residential amenity Visual amenity
5	Reading Family Centre, North Street	SU709736	Abbey	0.22	100	0	0	0	0	0	0	Required for alternative use
14	Land at Windermere Road	SU728710	Church	0.38	100	0	0	0	0	0	0	Residential amenity Visual amenity
15	Land rear of The Lawns	SU726710	Church	0.14	100	0	0	0	0	0	0	No vehicular access
16	Land rear of Monksbarn	SU729707	Church	0.41	100	0	0	0	0	0	0	Biodiversity significance Landscape significance Topography
17	Foxhays Road	SU726699	Church	1.12	100	0	0	0	0	0	0	Residential amenity Visual amenity
18	Wentworth Avenue	SU726697	Church	0.29	100	0	0	0	0	0	0	Residential amenity Visual amenity
19	Canterbury Road	SU720714	Katesgrove	0.24	100	0	0	0	0	0	0	Residential amenity Visual amenity
23	Garages at Rodway Road	SU675743	Kentwood	0.28	100	0	0	0	0	0	0	Required for alternative use
24	Land at Wealden Way	SU673741	Kentwood	0.47	100	0	0	0	0	0	0	Biodiversity significance Landscape significance Topography

25	Land between Denby Way and Chelsea Close	SU676740	Kentwood	0.2	100	0	0	0	0	0	0	Residential amenity Visual amenity Public footpath crosses site
26	South of Ridge Hall Close	SU750700	Mapledurham	0.44	100	0	0	0	0	0	0	Biodiversity significance Landscape significance Topography
30	Rear of 284-290 Wensley Road	SU699717	Minster	0.19	100	0	0	0	0	0	0	Residential amenity Topography
33	Land at Coley Place	SU711729	Minster	0.18	100	0	0	0	0	0	0	Topography
34	Land west of Swallows Croft	SU700720	Minster	0.49	100	0	0	0	0	0	0	Biodiversity significance
35	Land at Tarlon Court	SU675727	Norcot	0.22	100	0	0	0	0	0	0	Residential amenity Visual amenity Heritage considerations
36	Land at The Meadway	SU679729	Norcot	0.19	100	0	0	0	0	0	0	Visual amenity
37	Former Tennis Courts, Bulmershe Road	SU737725	Park	0.51	100	0	0	0	0	0	0	Site required for alternative use
38	Land at Green Road	SU740725	Park	0.49	100	0	0	0	0	0	0	Site required for alternative use
39	Mockbeggar Allotments	SU738723	Park	0.37	100	0	0	0	0	0	0	Site required for alternative use
40	Land west of Harveys Nurseries and north of Cemetery	SU723758	Peppard	0.38	100	0	0	0	0	0	0	Site required for alternative use Landscape significance
41	Grove Road Green	SU716764	Peppard	0.23	100	0	0	0	0	0	0	Visual amenity Public footpath crosses site
42	Land between Lowfield Road and Milestone Way	SU724765	Peppard	0.28	100	0	0	0	0	0	0	Residential amenity Visual amenity
43	Car park at the Milestone Centre	SU727765	Peppard	0.21	100	0	0	0	0	0	0	Required for continued use as car park

44	Land at Lowfield Road	SU730758	Peppard	0.73	100	0	0	0	0	0	0	0	Site required for housing use, currently underway
45	Land at Hexham Road	SU726715	Redlands	0.2	100	0	0	0	0	0	0	0	Biodiversity significance Residential amenity
46	Granville Road verges	SU686722	Southcote	2.61	100	0	0	0	0	0	0	0	Visual amenity
47	Devil's Dip, Circuit Lane	SU690722	Southcote	0.51	100	0	0	0	0	0	0	0	Biodiversity significance Visual amenity
48	Land at Fawley Road	SU691723	Southcote	0.18	100	0	0	0	0	0	0	0	Residential amenity Visual amenity Public footpath crosses site
49	Alice Burrows Home, Dwyer Road	SU682718	Southcote	0.48	100	0	0	0	0	0	0	0	Site required for alternative use
50	Land at Holybrook Crescent	SU682718	Southcote	0.26	100	0	0	0	0	0	0	0	Residential amenity Visual amenity
51	Playing Field, Hastings Close	SU684716	Southcote	1.46	100	0	0	0	0	0	0	0	Site required for continued playing field use
54	Land west of Florian Gardens	SU687721	Southcote	0.22	100	0	0	0	0	0	0	0	No vehicular access Residential amenity
55	Land east of Florian Gardens	SU688721	Southcote	0.16	100	0	0	0	0	0	0	0	No vehicular access Residential amenity
56	Coronation Square	SU688719	Southcote	0.58	100	0	0	0	0	0	0	0	Visual amenity
57	Land at Barn Close	SU695719	Southcote	0.34	100	0	0	0	0	0	0	0	Residential amenity
58	Land at The Warren	SU704749	Thames	1.16	100	0	0	0	0	0	0	0	Biodiversity significance Landscape significance Topography
59	Land south of Ammanford	SU706762	Thames	0.34	100	0	0	0	0	0	0	0	Protected trees Residential amenity Visual amenity
60	Land at Gravel Hill	SU710767	Thames	0.17	100	0	0	0	0	0	0	0	Landscape significance Residential amenity

61	Furzeplat	SU710765	Thames	1.46	100	0	0	0	0	0	0	Biodiversity significance Protected trees Topography
62	Junction of Walnut Way and St Michaels Road	SU667735	Tilehurst	0.21	100	0	0	0	0	0	0	Residential amenity Visual amenity
63	Downing Road Playing Field	SU665738	Tilehurst	1.17	100	0	0	0	0	0	0	Site required for alternative use
64	Land at Lansdowne Road	SU665731	Tilehurst	0.19	100	0	0	0	0	0	0	Residential amenity Visual amenity
65	Land at Portland Gardens	SU665729	Tilehurst	0.39	100	0	0	0	0	0	0	Residential amenity Visual amenity Biodiversity significance
66	Wincanton Road	SU722694	Whitley	0.6	100	0	0	0	0	0	0	Residential amenity Visual amenity
67	Swallowfield Drive	SU727688	Whitley	0.35	100	0	0	0	0	0	0	Residential amenity Visual amenity
68	Land at Whitley Wood Lane	SU722688	Whitley	0.24	100	0	0	0	0	0	0	Residential amenity
69	Land at Vernon Crescent	SU717691	Whitley	0.5	100	0	0	0	0	0	0	Residential amenity Visual amenity
70	Land at junction of Acre Road and Basingstoke Road	SU716700	Whitley	0.16	100	0	0	0	0	0	0	Part of site in use, remainder too small Visual amenity
71	Basingstoke Road verge between Acre and Bennet Road	SU706701	Whitley	0.46	100	0	0	0	0	0	0	Visual amenity
72	Basingstoke Road verge between Bennet Road and Manor Farm Road	SU717703	Whitley	0.99	100	0	0	0	0	0	0	Visual amenity
73	Southside (former Greyhound/Speedway stadium)	SU715706	Whitley	9.7	12	88	0	0	0	0	0	Site required for alternative use



2	Rivermead overflow parking areas	SU707744	Abbey	1.18	0	100	54	19	0	0	0	Required for continued use as car park
8	Land at Elliotts Way	SU716745	Caversham	0.22	0	100	90	48	30	0	0	Residential amenity Visual amenity
80	South of Sewage Treatment Works	SU706703	Whitley	1.61	14	86	1	1	1	1	0	Site required for alternative use
79	South of Smallmead	SU705705	Whitley	3.79	1	99	5	3	3	4	0	No vehicular access Likely contaminated land
10	Hills Meadow Car Park	SU719741	Caversham	1.25	0	100	74	44	36	10	0	Required for continued use as car park Visual amenity
1	Land at Junction of Cow Lane and Richfield Avenue <sup>26</sup>	SU704743	Abbey	1.47	0	100	98	87	69	32	0	Not rejected
9	Former Caversham Nursery	SU717747	Caversham	0.16	0	100	100	100	100	87	0	Flood risk
22	Land west of Riverside Park	SU684745	Kentwood	0.4	0	100	100	100	100	69	4	Flood risk Biodiversity significance
12	Nire Road	SU731749	Caversham	0.5	0	100	96	74	65	47	7	Flood risk Biodiversity significance
31	South of Coley Park Allotments	SU703719	Minster	0.99	59	41	14	10	10	6	8	Flood risk No vehicle access
13	Land at Charles Evans Way	SU726749	Caversham	0.9	1	99	83	77	72	61	12	Flood risk Biodiversity significance
75	Land north of Island Road	SU707709	Whitley	3.18	60	40	21	21	18	22	19	Site required for alternative use
32	Land rear of Arbour Close	SU707720	Minster	0.18	0	100	32	32	32	32	19	Flood risk No vehicle access Residential amenity

<sup>26</sup> This shows information for the reduced site identified within WR4. A larger site was initially considered, and this is shown in the Gypsy and Traveller Provision Background Document, but most of this is within Flood Zone 3.

74	Land east of Smallmead and south of Island Road	SU707707	Whitley	0.25	0	100	29	29	29	29	28	Flood risk
4	County Lock	SU714730	Abbey	0.25	0	100	28	28	28	28	52	Visual amenity No vehicular access
78	South of Fobney Pumping Station	SU706710	Whitley	0.6	0	100	57	57	57	45	62	Flood risk Landscape significance
11	Land west of Deans Farm	SU725742	Caversham	0.31	0	100	100	89	89	85	72	Flood risk
20	Scours Lane	SU686745	Kentwood	1.01	0	100	100	97	96	95	74	Flood risk
76	Land south of Manor Farm Cottages	SU705708	Whitley	1.16	0	100	100	91	91	84	82	Flood risk
53	Land south of Hatford Road	SU691716	Southcote	2.42	0	100	93	91	90	89	91	Flood risk Biodiversity significance
21	Land north of Scours Lane allotments	SU689747	Kentwood	3.42	0	100	100	100	100	99	98	Flood risk
77	South of Kennet and Avon Canal	SU702710	Whitley	4.3	0	100	100	100	100	100	99	Flood risk Landscape significance
6	Field at Littlejohn's Farm	SU692748	Battle	2.94	0	100	100	100	100	100	100	Flood risk Biodiversity significance Landscape significance
7	Thames Side Promenade	SU700748	Battle	2.11	0	100	100	100	100	100	100	Flood risk Biodiversity significance Landscape significance
27	East of A33	SU712716	Minster	3.26	0	100	100	100	100	100	100	Flood risk Biodiversity significance Landscape significance
28	West of A33	SU711715	Minster	6.45	0	100	100	100	100	100	100	Flood risk Biodiversity significance Landscape significance

29	Land adjacent to water treatment works	SU705713	Minster	4.59	0	100	100	100	100	100	100	Flood risk Biodiversity significance Landscape significance
52	Land east of Brunel Road allotments	SU689715	Southcote	2.31	0	100	100	100	100	100	100	Flood risk