

Bath and North East Somerset

# Interim Sequential and Exception Tests for Strategic Sites



Core Strategy Information Paper  
December 2009

**Planning** tomorrow today

**Bath & North East  
Somerset Council**

**L D F**  
Bath and North East Somerset  
Local Development Framework

|            | <b>Contents</b>                                   | <b>Page</b> |
|------------|---|-------------|
| 1          | Introduction                                      | 1           |
| 2          | National Planning Context                         | 1           |
| 3          | B&NES Assessment of Flood Risk                    | 3           |
| 4          | B&NES Core Strategy                               | 4           |
| 5          | Strategic Sites and Development Information       | 4           |
| 6          | Sequential Test                                   | 5           |
| 7          | Exception Test                                    | 11          |
| 8          | Conclusion  | 13          |
| 9          | Next Step   | 14          |
|            |   |             |
| Appendices | The River Corridor, Bath                          |             |
|            | West of Twerton, Urban Extension to Bath          |             |
|            | Odd Down / South Stoke, Urban Extension to Bath   |             |
|            | Keynsham Town Centre                              |             |
|            | Whitchurch, Urban Extension to South East Bristol |             |
|            | Midsomer Norton Town Centre                       |             |
|            | Radstock Town Centre                              |             |

## Glossary

|       |   |
|-------|---|
| DPD   | Development Plan Document                           |
| GDS   | General Development Site, B&NES Local Plan Oct 2007 |
| LDF   | Local Development Framework                         |
| PDL   | Previously Development Land                         |
| PPS   | Planning Policy Statement                           |
| RDP   | Regeneration Delivery Plan                          |
| RSS   | Regional Spatial Strategy                           |
| SFRA  | Strategic Flood Risk Assessment                     |
| SHLAA | Strategic Housing Land Availability Assessment      |

## 1. Introduction

This paper sets out the sequential test relating to the proposed Strategic Site allocations through the Core Strategy Spatial Options (Oct 2009). The methodology is based on guidance and requirements as set out within Planning Policy Statement 25 (PPS25): Development and Flood Risk (2006), and the accompanying Practice Guide. This methodology has been discussed with and agreed by the Environment Agency.

This is an 'Interim' report using the best information and concepts available at the time. As new information and concepts become available the report will be finalised to inform the Core Strategy Submission document. It is the responsibility of the reader to be satisfied that they are using the most up-to-date information.

## 2. National Policy Context

PPS25 sets the national planning policy context for consideration of flood risk. It sets out an avoid, reduce and manage approach by requiring decisions on plans to take full account of present and future flood risk, which is both the probability and potential consequences (para 4 PPS25), and the wider implications of flood risk. The aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk (Para 5). Flood risk should also be considered against other spatial planning issues, such as transport, housing economic growth, natural resources, regeneration, biodiversity historic environment and the management of hazards (para 7).

PPS25 sets out that Local Planning Authorities allocating land in Local Development Documents should apply the sequential test to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed. 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.

### 2.1 Sequential Test

The sequential test requires that sites should be selected sequentially starting with Zone 1. Only if there are no reasonably available sites within Zone 1 should sites in Zone 2 be considered and the flood risk vulnerability of land use be taken into account (set out in Table D3 of PPS25), applying the Exception test if required. Only where there are no reasonably available sites in Zone 2 should Zone 3 be considered.

**Table 1 PPS25 Flood Risk Vulnerability and Flood Zone 'Compatibility'**

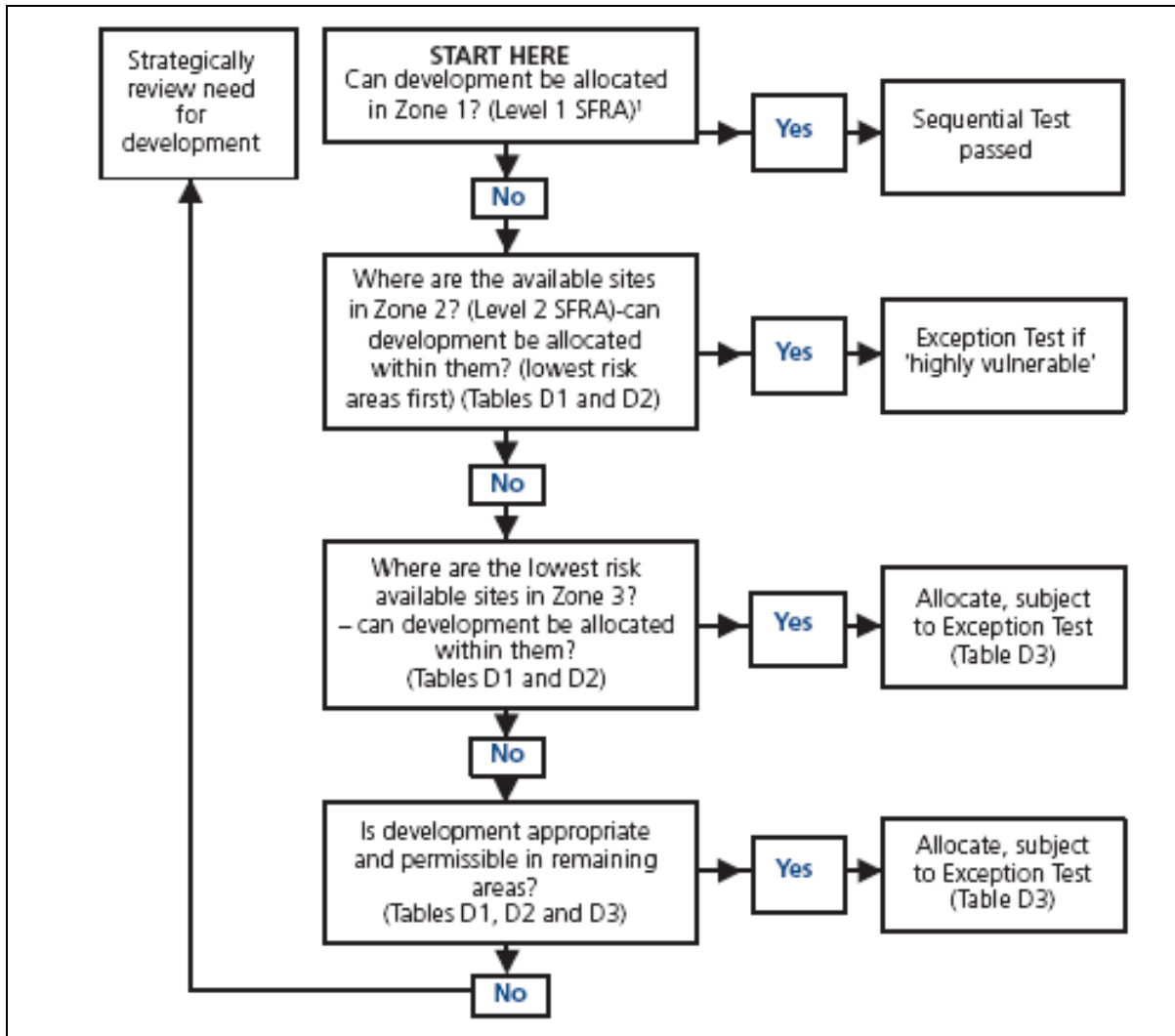
<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps25/>

| Flood risk Vulnerability classification | Essential Infrastructure | Water Compatible | Highly Vulnerable       | More Vulnerable         | Less Vulnerable |
|---|--------------------------|------------------|-------------------------|-------------------------|-----------------|
| <b>Zone 1</b>                           | √                        | √                | √                       | √                       | √               |
| <b>Zone 2</b>                           | √                        | √                | Exception Test required | √                       | √               |
| <b>Zone 3a</b>                          | Exception Test required  | √                | X                       | Exception Test required | √               |
| <b>Zone 3b</b>                          | Exception Test required  | √                | X                       | X                       | X               |

The Flowchart below identifies the series of questions that need to be answered in undertaking a sequential test and identifies the corresponding question numbers used within this document.

**Table 2 PPS 25 Practice Guide 'Application of the Sequential Test at the local level for LDD preparation**

<http://www.communities.gov.uk/publications/planningandbuilding/pps25guideupdate>



**2.2 The Exception Test:**

To Pass the Exception Test the following three requirements need to be satisfied:

- a) It must be demonstrated that development provides community sustainability benefits that outweigh flood risk e.g. a town centre site very well located for public transport, services and facilities (lower emissions, higher employment, etc).
- b) Development should be on developable previously-developed land (PDL) or, if it is not, there should be no reasonably available sites on developable PDL (PPS3 para. 54 to 56 defines developable as: available (now), suitable (close to facilities) and achievable (within 5 years).
- c) A Flood Risk Assessment (FRA) is required to demonstrate that development will be safe, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

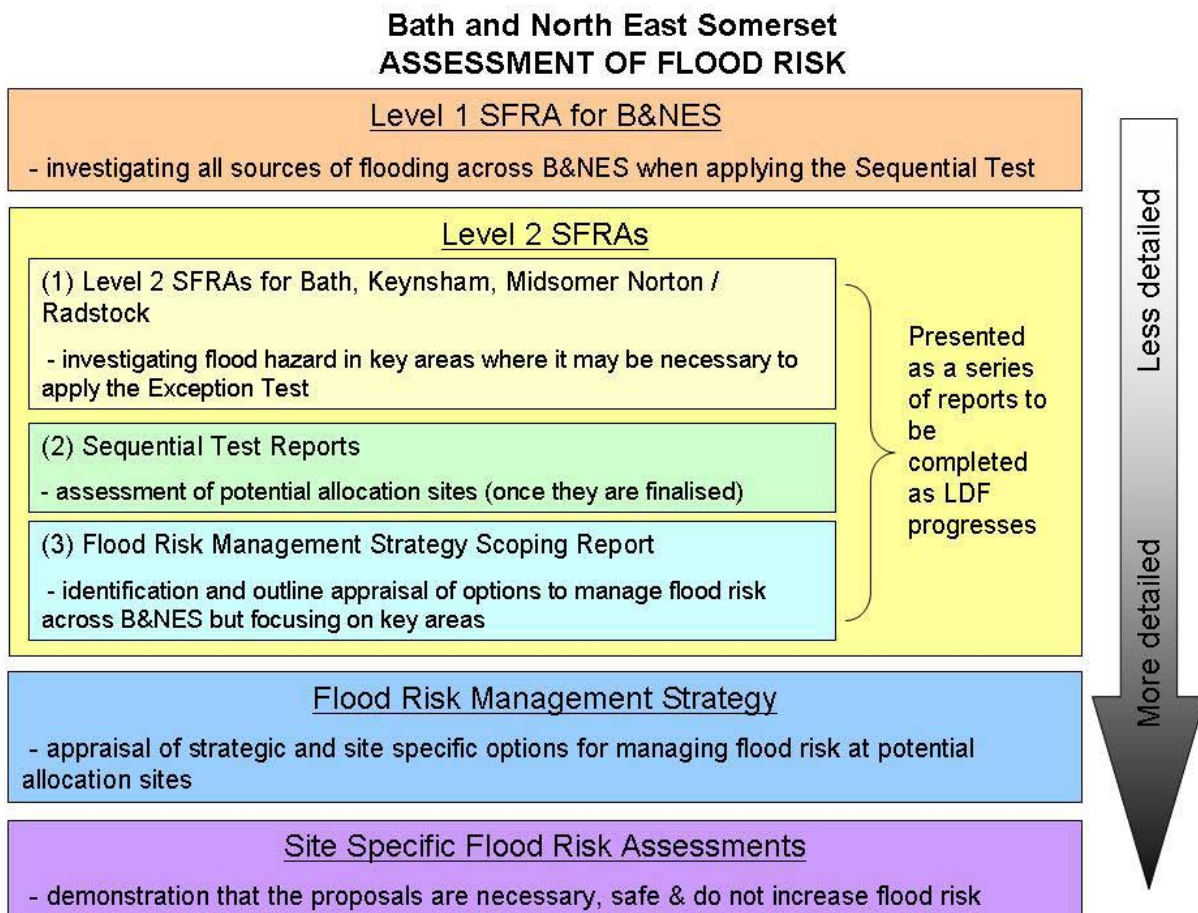
### 3. B&NES Assessment of Flood Risk

In preparing B&NES Local Development Framework (LDF), the Strategic Flood Risk Assessment (SFRA) level 1 for Bath and North East Somerset (April 2008) was prepared by Capita Symonds on behalf of the council to provide flood risk information across the whole district. PPS 25 says that where the Level 1 SFRA demonstrates that land in Flood Zone 1 cannot accommodate the necessary development then the Exception Test needs to be applied. A more detailed Level 2 SFRA will need to be carried out, including further data collection and/or analysis.

The Level 2 SFRA corresponds to the ‘increased scope’ SFRA referred to in paragraph E6 of PPS25. The principal purpose of a Level 2 SFRA is to facilitate application of the Sequential and Exception Tests. The level 2 SFRA were prepared for Bath (July 2009), Keynsham (May 2009) and Midsomer Norton and Radstock (July 2009). This has allowed the council to follow a risk-based sequential approach in identifying land as options for development by attempting to allocate new development in areas which are less likely to flood, and managing flood risk elsewhere. In doing so, the process of identifying land for development is consistent with the requirements outlined in PPS25.

The table below shows the Council’s approach toward dealing with flood risk in the district.

**Table 3 Bath and North East Somerset Assessment of Flood Risk**



#### 4. B&NES Core Strategy

The Core Strategy will set out the long term spatial vision for B&NES up to 2026 and provide the context for other development plan documents in the LDF. It also sets out the broad locations for new housing, employment and other strategic developments.

Planning Policy Statement 12 allows the allocation of strategic sites for development through Core Strategies. These should be those sites considered central to achievement of the strategy and where investment requires a long lead-in.

The Core Strategy Spatial Options document considers 7 areas for Strategic Site allocations. (Please see appendix for site details)

- The River Corridor, Bath
- West of Twerton, Urban Extension to Bath
- Odd Down / South Stoke, Urban Extension to Bath
- Keynsham Town Centre
- Whitchurch, Urban Extension to South East Bristol
- Midsomer Norton Town Centre
- Radstock Town Centre

The Core Strategy Spatial Options document was published for consultation, which started on the 19<sup>th</sup> October and comments submitted by 15<sup>th</sup> January 2010.

#### 5. Strategic Sites and Development Information

Detailed site and development information is set out in Table 4. It also includes Flood Zone, climate change information as well as existing and proposed uses. The flood vulnerability classification in the last column is based on guidance in Table D3 Flood Risk Vulnerability and Flood Zone 'Compatibility' of PPS 25.

**Table 4 Analysis of areas for potential strategic development**

| No | Site name/<br>address                            | Flood Zone   | Climate<br>Change    | Existing<br>use/s  | Proposed<br>use/s  | Flood<br>Vulnerability<br>Classification   |
|----|--|--|----------------------|--|--|--|
| 1  | The River Corridor<br>(Approx:136ha)             | FZ 1: 88ha<br>FZ 2: 26ha<br>FZ 3a:11ha<br><br>FZ 3b:11ha | yes                  | retail,<br>offices,<br>industrial,<br>housing,<br>leisure<br>educational | retail,<br>offices,<br>industrial,<br>housing,<br>leisure<br>educational | Less vulnerable<br>Less vulnerable<br>Less vulnerable<br>More vulnerable<br>Less vulnerable<br>More vulnerable<br><br>water compatible<br>use only |
| 2  | West of Twerton<br>(Approx: 102 ha)              | FZ 1: 95 ha<br>FZ 2/3: 7ha                               | No data<br>available | Greenfield   | retail,<br>housing,<br>community<br>facilities                           | Less vulnerable<br>More vulnerable<br>Less/More<br>vulnerable  |
| 3  | Odd Down/South<br>Stoke Plateau<br>(Approx:75ha) | FZ 1: 75ha   | no                   | Greenfield   | retail,<br>housing,<br>community<br>facilities                           | Less vulnerable<br>More vulnerable<br>Less/More<br>vulnerable  |

## Interim B&NES Sequential Test

|   |  |  |     |  |  |   |
|---|--|--|-----|--|--|---|
| 4 | Keynsham Town Centre<br>(Approx: 62ha)           | FZ 1: 47.6ha<br>FZ 2: 10ha<br>FZ 3a:0.8ha<br><br>FZ 3b:3.6ha   | yes | retail,<br>offices,<br>industrial,<br>housing,<br>leisure                            | retail,<br>offices,<br>industrial,<br>housing,<br>leisure                            | Less vulnerable<br>Less vulnerable<br>Less vulnerable<br>More vulnerable<br>Less vulnerable<br><br>water compatible<br>use only               |
| 5 | Whitchurch Urban Extension to South East Bristol | FZ1  | no  | Greenfield   | retail,<br>housing,<br>community<br>facilities                                       | Less vulnerable<br>More vulnerable<br>Less/More<br>vulnerable   |
| 6 | Midsomer Norton Town Centre<br>(Approx:36 ha)    | FZ1: 36 ha   | no  | retail,<br>offices,<br>industrial,<br>housing,<br>leisure<br>community<br>facilities | retail,<br>offices,<br>industrial,<br>housing,<br>leisure<br>community<br>facilities | Less vulnerable<br>Less vulnerable<br>Less vulnerable<br>More vulnerable<br>Less vulnerable<br>Less/More<br>vulnerable                        |
| 7 | Radstock Town Centre<br>(Approx:14ha)            | FZ 1: 11.1ha<br>FZ 2: 1.3ha<br>FZ 3a:0.3ha<br>FZ 3b:0.3 ha<br><br>No FZ3a/b<br>data<br>available:<br>1ha | yes | retail,<br>offices,<br>housing,<br>leisure<br>community<br>facilities                | retail,<br>offices,<br>housing,<br>leisure<br>community<br>facilities                | Less vulnerable<br>Less vulnerable<br>More vulnerable<br>Less vulnerable<br>Less/More<br>vulnerable<br><br>Further<br>assessment<br>required. |

## 6. Sequential Test

The Sequential Tests have been applied to all of the Strategic Site allocations. This is further supported by the Sustainability Appraisal, which provides some of the further detail required for the Exceptions Test, referred to in Section 7 below.

|  |  |
|--|--|
| <b>Question 1</b><br><b>Can development be allocated in Flood Zone 1</b> |  |
| <b>Yes;</b>  | <p><b>Odd Down / South Stoke, urban Extension to Bath</b><br/><b>Whitchurch, Urban Extension to South East Bristol</b><br/><b>Midsomer Norton Town Centre</b></p> <p><b>West of Twerton, Urban Extension to Bath</b><br/>There is no data available to define FZ 3b therefore the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b unless further work is undertaken. Only a very small proportion of this site falls within FZs 2 and 3 along the Newton Brook, therefore it is suggested that all residential development should be located within FZ 1. The higher flood risk area, adjacent to the Newton Brook, should be reserved for Water Compatible development such as landscaping or amenity space, which is permitted in FZ 3. Therefore the Exception Test is not required.</p> |

|                               | <p><i>These sites are appropriate and there is no need to proceed with the Sequential Test.</i></p>   |                                     |              |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|-------------------------------|---|-------------------------------------|--------------|---------------------|--|-------------------------------------|----------|-------------------------------|--------|-----|-----|--------|-------|-------|---------|-----|-----|---------|---|---|--------------|--------------|--------------|------------|--------|-------|-------|--------------|--------------|--------------|--------------|--|--------------|--------------|
| <b>No;</b>                    | <p><b>The River Corridor, Bath<br/>Keynsham Town Centre<br/>Radstock Town Centre</b></p> <p><b><i>Justifications for proceeding to Questions 2, ie why development can not be accommodated within Flood Zone 1.</i></b></p> <p><b>The River Corridor, Bath:</b></p> <p>Bath is a SSCT (Strategically Significant Cities and Towns) proposed by the draft Regional Spatial Strategy for South West and plays an important role in West of England's economy, so the successful delivery of the residential, social and commercial aspects of the city's growth will also play a vital role in the future prosperity of the sub-region. The Draft RSS proposes that 6000 homes should be delivered within the Bath city boundary. Draft RSS proposes about 17, 000 jobs should be created in the District, and the Core Strategy Options paper considers that about 10,450 to 12,250 jobs should be created within the Bath city boundary.</p> <p>The forthcoming draft Strategic Housing Land Availability Assessment (SHLAA) considers potential sites within Bath that could contribute to housing delivery by 2026. It indicates that about 2700 dwellings (River Corridor: 100 dwellings and Outer Bath: 2600 dwellings) can be accommodated within FZ1.</p> <p><b>Table 5 Forthcoming draft SHLAA analysis for the River Corridor in Bath</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Area</th> <th rowspan="2">Flood Zone</th> <th colspan="2">Dwellings Potential</th> </tr> <tr> <th>Not taking in into account defences</th> <th>Defended</th> </tr> </thead> <tbody> <tr> <td rowspan="5">River Corridor Strategic Site</td> <td>Zone 1</td> <td>100</td> <td>100</td> </tr> <tr> <td>Zone 2</td> <td>2,900</td> <td>3,250</td> </tr> <tr> <td>Zone 3a</td> <td>700</td> <td>350</td> </tr> <tr> <td>Zone 3b</td> <td>0</td> <td>0</td> </tr> <tr> <td><b>Total</b></td> <td><b>3,700</b></td> <td><b>3,700</b></td> </tr> <tr> <td rowspan="2">Outer Bath</td> <td>Zone 1</td> <td>2,600</td> <td>2,600</td> </tr> <tr> <td><b>Total</b></td> <td><b>2,600</b></td> <td><b>2,600</b></td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>6,300</b></td> <td><b>6,300</b></td> </tr> </tbody> </table> <p>*Note: 2281 of the dwellings potential in the river corridor strategic site is accounted for by the Crest Outline planning application for Bath Western Riverside.</p> <p>Sequential approach should be taken within the River Corridor Strategic Site.</p> <p>The River Corridor is located in and close to the centre of Bath and is accessible to a variety of services offered by a major city linked by a sustainable transport mode.</p> <p>The Council has identified the River Corridor as a regeneration priority area which is a key to the success of the city, and a Regeneration Delivery Plan is being prepared alongside the Core Strategy. There are no alternative areas elsewhere in the district</p> | Area                                | Flood Zone   | Dwellings Potential |  | Not taking in into account defences | Defended | River Corridor Strategic Site | Zone 1 | 100 | 100 | Zone 2 | 2,900 | 3,250 | Zone 3a | 700 | 350 | Zone 3b | 0 | 0 | <b>Total</b> | <b>3,700</b> | <b>3,700</b> | Outer Bath | Zone 1 | 2,600 | 2,600 | <b>Total</b> | <b>2,600</b> | <b>2,600</b> | <b>Total</b> |  | <b>6,300</b> | <b>6,300</b> |
| Area                          | Flood Zone  |                                     |              | Dwellings Potential |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               |   | Not taking in into account defences | Defended     |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
| River Corridor Strategic Site | Zone 1  | 100                                 | 100          |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               | Zone 2  | 2,900                               | 3,250        |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               | Zone 3a   | 700                                 | 350          |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               | Zone 3b   | 0                                   | 0            |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               | <b>Total</b>  | <b>3,700</b>                        | <b>3,700</b> |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
| Outer Bath                    | Zone 1  | 2,600                               | 2,600        |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
|                               | <b>Total</b>  | <b>2,600</b>                        | <b>2,600</b> |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |
| <b>Total</b>                  |   | <b>6,300</b>                        | <b>6,300</b> |                     |  |                                     |          |                               |        |     |     |        |       |       |         |     |     |         |   |   |              |              |              |            |        |       |       |              |              |              |              |  |              |              |



which could facilitate the level of development required.

Also the Council has made it clear that regeneration of previously developed land within the urban areas should be the priority before the development of greenfield land.

**Keynsham Town Centre:**

The Core Strategy must identify those settlements which play the role of market towns (RSS Policy B towns) and where there is an existing concentration of facilities and services. These towns will be the focus for locally significant development aimed at increasing their self containment. In light of its roles and functions, it is proposed that Keynsham be defined as RSS Policy B 'market town'.

Keynsham is located seven miles to the west of Bath and five miles to the east of Bristol city centre. The A4 links Keynsham to Bristol and Bath and the town has a bypass which links it to the Avon ring road, giving easy access to Bristol and beyond. The town provides important services such as shopping, employment, leisure, cultural and health facilities to local residents and surrounding communities.

The site includes:

- Keynsham town centre, including the historic High Street;
- 24 hectare Cadbury's Somerdale Factory site; and
- The transitional area between the northern end of the High Street and the Somerdale factory, which includes Keynsham mainline rail station.

The Draft RSS for the South West did not propose a specific dwellings requirement for Keynsham. The Core Strategy options document (October, 2009) proposes between 1,350 and 1,600 dwellings within Keynsham (including a Local Plan greenfield allocation, GDS.1/K2, c. 530 units). No further incursions into the green belt around Keynsham are being proposed in the Core Strategy Options document.

The only potential housing site affected by flood risk is Somerdale, a site of 25ha, of which 10ha falls within flood zone 2 with a fringe of the site within flood zone 3a. The forthcoming draft SHLAA indicates an estimated housing potential of this site as being about 500 units as part of a mixed use development.

Master planning for the Somerdale site has yet to be concluded. A number of options are being considered. The preferred layout may or may not involve placing residential uses within flood zone 2. Theoretically the site could yield 500 units beyond flood zone 2 but this may not make optimum use of the site from an urban design perspective. Sequential approach should be taken within the site.

The Council has identified Keynsham Town Centre as a regeneration priority area which is key to the success of the local economy and the district as a whole. Therefore a Regeneration Delivery Plan is being prepared alongside the Core Strategy. There are no alternative areas to facilitate the level of development required to support regeneration of Keynsham Town Centre.

**Radstock Town Centre:**

The Core Strategy must identify those settlements which play the role of market towns (RSS Policy B towns) and where there is an existing concentration of facilities and services. These towns will be the focus for locally significant development aimed

at increasing their self containment. In light of its role and function, it is proposed that Radstock be defined as RSS Policy B 'market town'.

Radstock is located approximately 12 miles south west of Bath and 16 miles south east of Bristol. The town is connected to Bath by A367 and to Bristol via A362 and A37. Radstock lies only 8 miles from Frome and Shepton Mallet. The town, together with Midsomer Norton provides important services such as shopping, employment, cultural and health facilities to local residents and the surrounding communities.

The site includes:

- Radstock town centre,
- Radstock Railway Land
- Sustainable transport routes

The draft RSS for the South West does not set out a specific dwellings requirement for Radstock. The Core Strategy options document (October, 2009) proposes between 1,000 and 1,700 dwellings within the wider Midsomer Norton and Radstock area. No greenfield development or development into the surrounding countryside is envisaged (aside from on existing Local Plan allocations).

Radstock Railway Land (Local Plan site GDS.1/NR2) forms part of the proposed Core Strategy strategic site for Radstock. Part of the site falls within flood zones 2 and 3a. This site already has outline planning permission for residential development.

1.3 ha of the proposed Radstock Strategic Site lie within FZ 2 and the draft SHLAA indicates about 20 dwellings may be located within FZ 2. There is no data available to define FZ 3b for the North part of the site, therefore the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b unless further work is undertaken. Master planning for the Radstock town centre has yet to be concluded. A number of options are being considered. The preferred layout may or may not involve placing residential uses within flood zone 2. Sequential approach should be taken within the site.

The Council has identified Radstock Town Centre as a regeneration priority area which is the key to the success of the local economy and the district as a whole. Therefore a Regeneration Delivery Plan is being prepared alongside the Core Strategy. There are no alternative areas to facilitate the level of development required to support regeneration of the town centre.

***Proceed question 2***

| <b>Question 2</b><br><b>Where are the available sites in Flood Zone2? - can development be allocated within them? (lowest risk areas first) (Table D1 and D2)</b> |  |
|---|--|
| <b>Yes</b>  | <p>No sites</p> <p><i>Exception Test if 'highly vulnerable'. Otherwise appropriate development.</i></p>  |
| <b>No</b>   | <p><b>The River Corridor, Bath</b><br/><b>Keynsham Town Centre</b><br/><b>Radstock Town Centre</b></p> <p><b><i>Justifications for proceeding to Question 3, ie why development can not be accommodated within Flood Zone 2.</i></b></p> <p><b>Bath</b></p> <p>The principles of Bath's strategic importance outlined in question 1 apply to question 2.</p> <p>According to Table 5 above, about 2,700 dwellings can be accommodated within the FZ1 and 2,900 dwellings within the FZ2 (without defences) and 3,250 dwellings (defended) leaving 700 dwellings (without defences) and 350 dwellings (defended). Master planning for the River Corridor (along Lower Bristol Road) is being prepared and this will help to identify the best land use for the area. Sequential approach should be taken within the site.</p> <p>There are no alternative areas elsewhere in the district which could facilitate the level of development required.</p> <p><b>Keynsham Town Centre</b></p> <p>The principles of Keynsham's strategic importance and the Somerdale site outlined in question 1 apply to question 2. However, FZ3 only follows a fringe of the Somerdale site and along the River Chew, therefore no residential development should be located within FZ3. Sequential approach should be taken within the site.</p> <p><b>Radstock Town Centre</b></p> <p>The principles of Radstock's strategic importance outlined in question 1 apply to question 2. 1.3 ha of the proposed Radstock Strategic Site lie within FZ 2 and the draft SHLAA indicates about 20 dwellings may be located within FZ 2. Sequential approach should be taken within the site. Sequential approach should be taken within the site.</p> <p>There are no alternative areas elsewhere in the district which could facilitate the level of development required.</p> <p><b><i>Proceed question 3</i></b></p> |

| <b>Question 3</b><br><b>Where are the lowest risk available sites in Flood Zone 3? – can development be allocated within them? (Table D1 and D2)</b> |  |
|--|--|
| <b>Yes</b>   | <p><b>The River Corridor, Bath</b><br/> <b>Keynsham Town Centre</b><br/> <b>Radstock Town Centre</b></p> <p><b>Bath</b></p> <p>The forthcoming draft SHLAA indicates about 700 dwellings (without defences) and 350 dwellings (defended) may be located within FZ3a . Master planning for the River Corridor (along Lower Bristol Road) is being prepared and this will help to identify the best land use for the area. Sequential approach should be taken within the site.</p> <p><b>Keynsham Town Centre</b></p> <p>FZ3 only follows a fringe of the Somerdale site and along the River Chew therefore no residential development should be located within FZ3.</p> <p><b>Radstock Town Centre</b></p> <p>There is no data available to define FZ 3b for the north part of the proposed site, therefore the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b unless further work is undertaken. Sequential approach should be taken within the site.</p> <p><i>Exception Test required for these sites. Please see section 7</i></p> |
| <b>No</b>  | <p>No sites</p> <p>No need to proceed Question 4</p>   |

| <b>Question 4</b><br><b>Is development appropriate and permissible in remaining areas? (Table D1, D2 and D3)</b> |  |
|--|--|
| N/A  |  |

### 7. Exception Test

The Sequential Test above indicates that the proposed developments in the following study sites can not be located in zones of lower probability of flooding therefore the Exception Tests are applied.

- The River Corridor, Bath
- Keynsham Town Centre
- Radstock Town Centre

#### 7.1 The River Corridor, Bath

##### Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The area will provide the majority of new office and commercial space for the district, contributing to economic prosperity.
- The area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district.
- The site will provide the opportunity to protect and enhance the linear nature of the river corridors multi functional role e.g. wildlife habitat, public access and recreation and sustainable cycle routes.
- The site will help to maintain Bath as a tourist destination.

##### Exception test b)

*The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and*

- This site is located on previously developed land.
- This site is considered to be developable.

##### Exception Test c)

*A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.*

- The Council has completed the Flood Risk Management Strategy Scoping Study in July 2009 which considers potential mitigation options for Bath including raised defences and floodplain storage. Development within the Strategic Site must refer to the mitigations agreed in the emerging Flood Risk Management Strategy.
- The sequential approach should be taken within the site.
- The sequential approach should be taken within the site, ideally, all commercial development will be located within Flood Zones 1 and 2, and only in Zone 3a if necessary.
- SUDS techniques should be incorporated into drainage design.
- Site Specific Flood Risk Assessment should be undertaken.

## Interim B&NES Sequential Test

### 7.2 Keynsham

#### Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The development within the site will help revitalise the town centre, improving the shopping environment and creating more employment.
- The site helps to enhance the Conservation Area,
- The site assists in the regeneration of the large Somerdale factory site
- The area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district.

#### Exception test b)

*The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and*

- This site is located on previously developed land.
- This site is considered to be developable.

#### Exception Test c)

*A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.*

- The Council has completed the Flood Risk Management Strategy Scoping Study in July 2009 which considers potential mitigation options for Keynsham including raised defences and floodplain storage. The development within the Strategic Site must refer to the mitigations agreed in the emerging Flood Risk Management Strategy.
- The sequential approach should be taken within the site, and ideally all residential development will be located within Flood Zone 1 and 2.
- The sequential approach should be taken within the site, ideally, all commercial development will be located within Flood Zones 1 and 2, and only if is necessary Zone 3a.
- SUDS techniques should be incorporated into drainage design.
- Site Specific Flood Risk Assessment should be undertaken.

### 3) Radstock

#### Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The development within the site will help revitalise the town centre, improving the shopping environment and creating more jobs.
- The development helps to consolidate social and community facilities.
- The site helps to enhance the Conservation Area,
- The site helps to facilitate a better transport interchange and will improve links to sustainable transport routes
- The area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district.

## Interim B&NES Sequential Test

### Exception test b)

*The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and*

- This site is located on previously developed land.
- This site is considered to be developable.

### Exception Test c)

*A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.*

- The Council has completed the Flood Risk Management Strategy Scoping Study in July 2009 which considers potential mitigation options for Radstock including raised defences and floodplain storage. The development within the Strategic Site must refer to the mitigations agreed in the emerging Flood Risk Management Strategy.
- The sequential approach should be taken within the site, and ideally all residential development will be located within Flood Zone 1 and 2.
- The sequential approach should be taken within the site, ideally, all commercial development will be located within Flood Zones 1 and 2, and only if is necessary Zone 3a.
- There is no data available to define FZ 3b therefore the precautionary principle should be applied.
- SUDS techniques should be incorporated into drainage design.
- Site Specific Flood Risk Assessment should be undertaken.

## 8. Conclusion

The Sequential Test has been applied to 7 Strategic Sites proposed through the Core Strategy Spatial Options (Oct 2009).

|  | FZ    | Sequential Test | Exception Test | Further notes   |
|--|-------|-----------------|----------------|---|
| Odd Down / South Stoke, Urban Extension to Bath<br><br>Whitchurch, Urban Extension to Bristol<br><br>Midsomer Norton Town Centre | 1     | Pass            | N/A            | Deemed suitable for residential and mixed use development without the need for further consideration apart from sustainable urban drainage. |
| West of Twerton, Urban Extension to Bath – avoid development along the Newton Brook  | 1,2,3 | Pass            | N/A            | Avoid development along Newton Brook.<br>Consider sustainable urban drainage  |
| The River Corridor, Bath<br><br>Keynsham Town Centre   | 1,2,3 | Pending         | Pending        | Apply a sequential approach within the areas.<br>Consider Sustainable Urban Drainage (SUDS)<br>Implement flood risk scheme                  |

## Interim B&NES Sequential Test

|                      |  |  |  |   |
|----------------------|--|--|--|---|
| Radstock Town Centre |  |  |  | agreed by the emerging Flood Risk Management Strategy Site Specific Flood Risk Assessment should be undertaken. |
|----------------------|--|--|--|---|

### 9. Next Step

To manage the flood risk identified, the Council commissioned a Scoping Study for the preparation of a Flood Risk Management Strategy. The Study (May 2009) identifies a wide range of possible options for flood risk management and provides an initial assessment of these options.

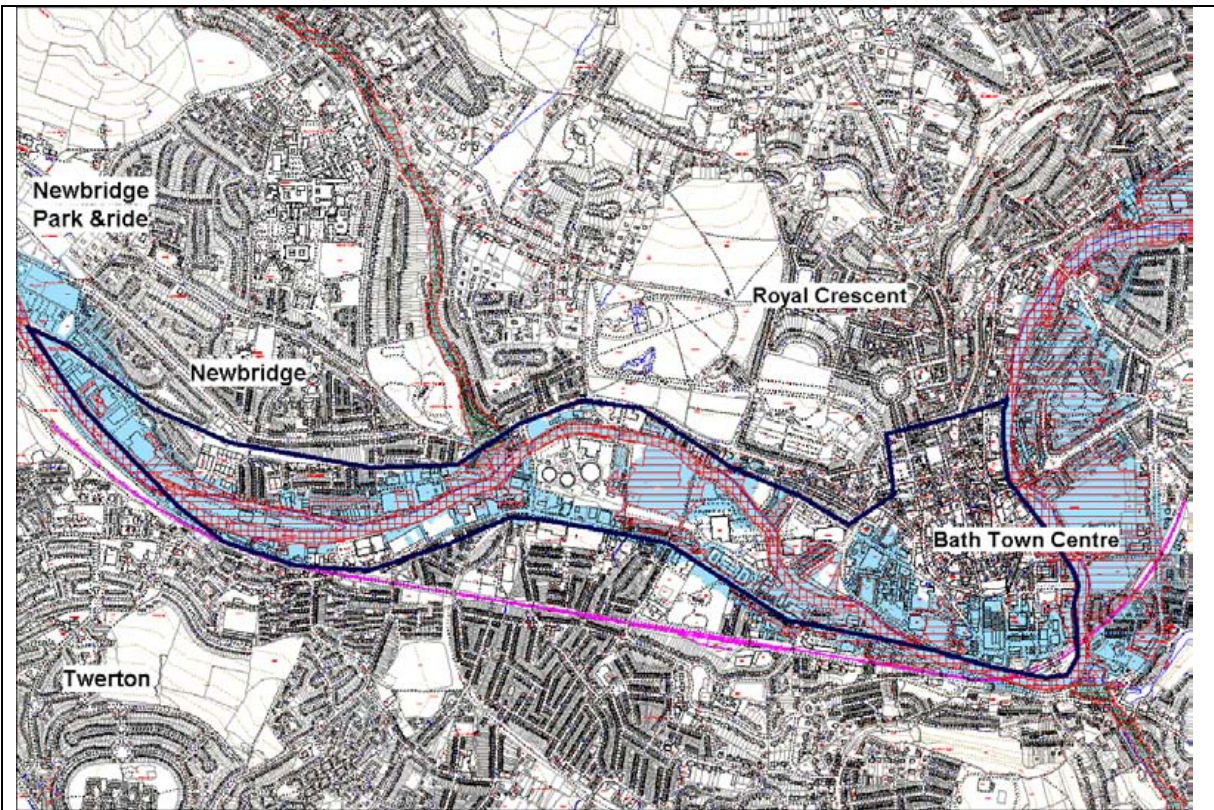
Following the Scoping Study, the Flood Risk Management Strategy is currently being prepared to provide key evidence to test question c) of the Exception Test for the Bath River Corridor, Keynsham Town Centre, Radstock Town Centre Strategic Sites. Once the Flood Risk Management Strategy is completed and agreed by the Council, a final Sequential Test report will be prepared to inform the Core Strategy submission document.



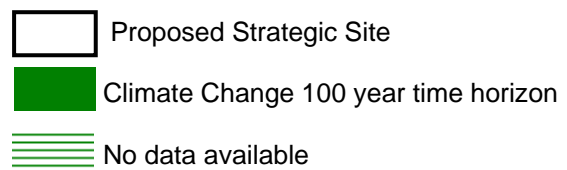
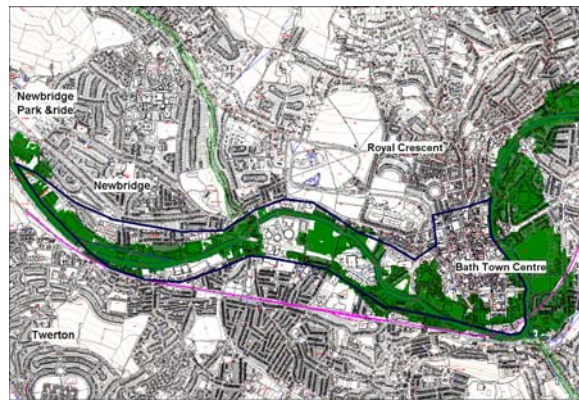
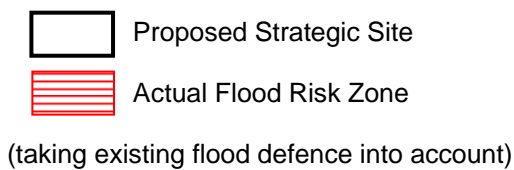
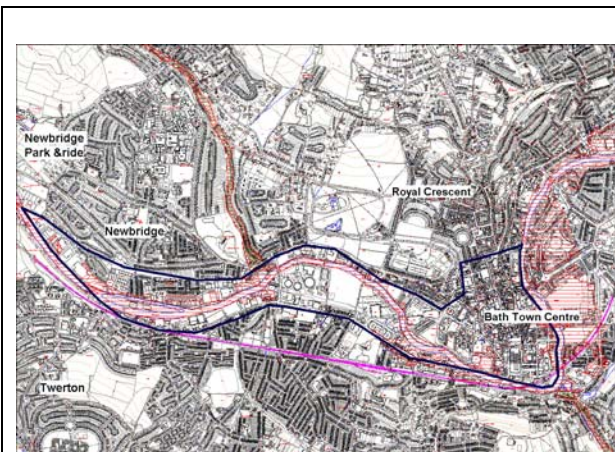
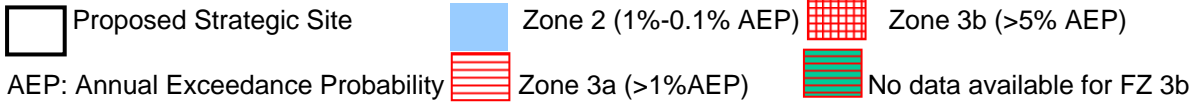
## **Appendix**

### **Site Analysis**

1. The River Corridor, Bath

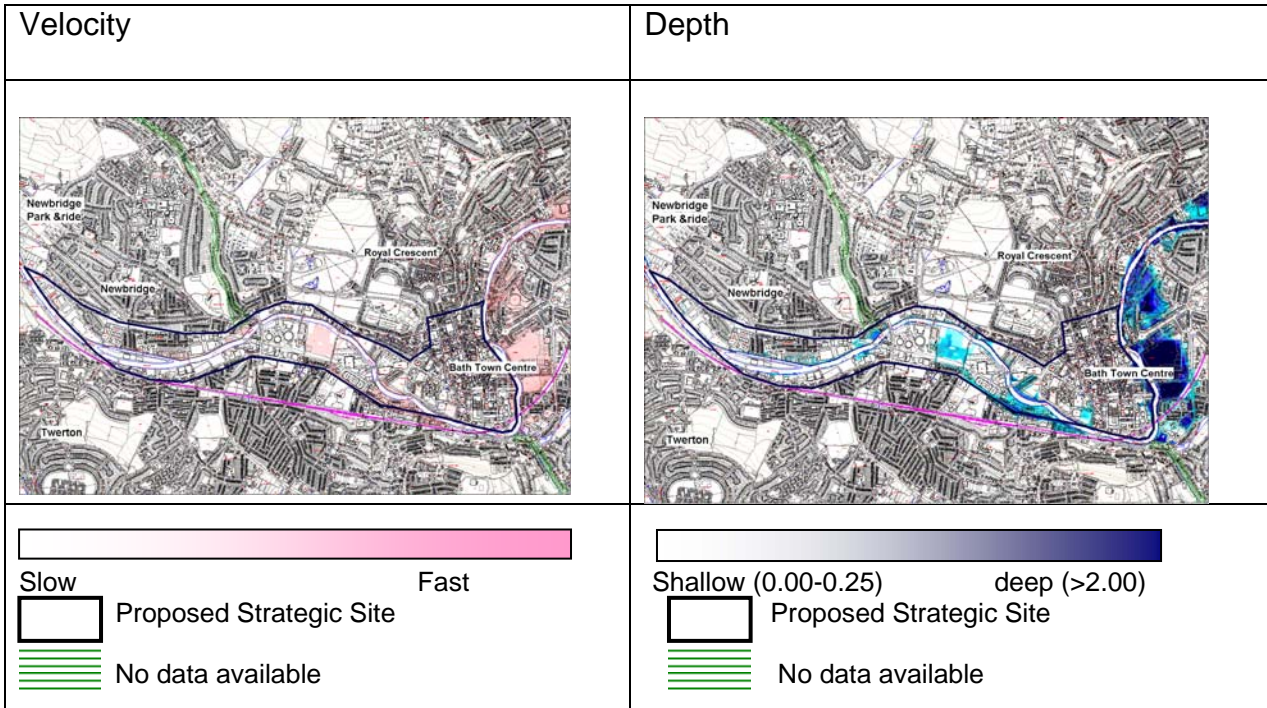


**SFRA Flood Zones**





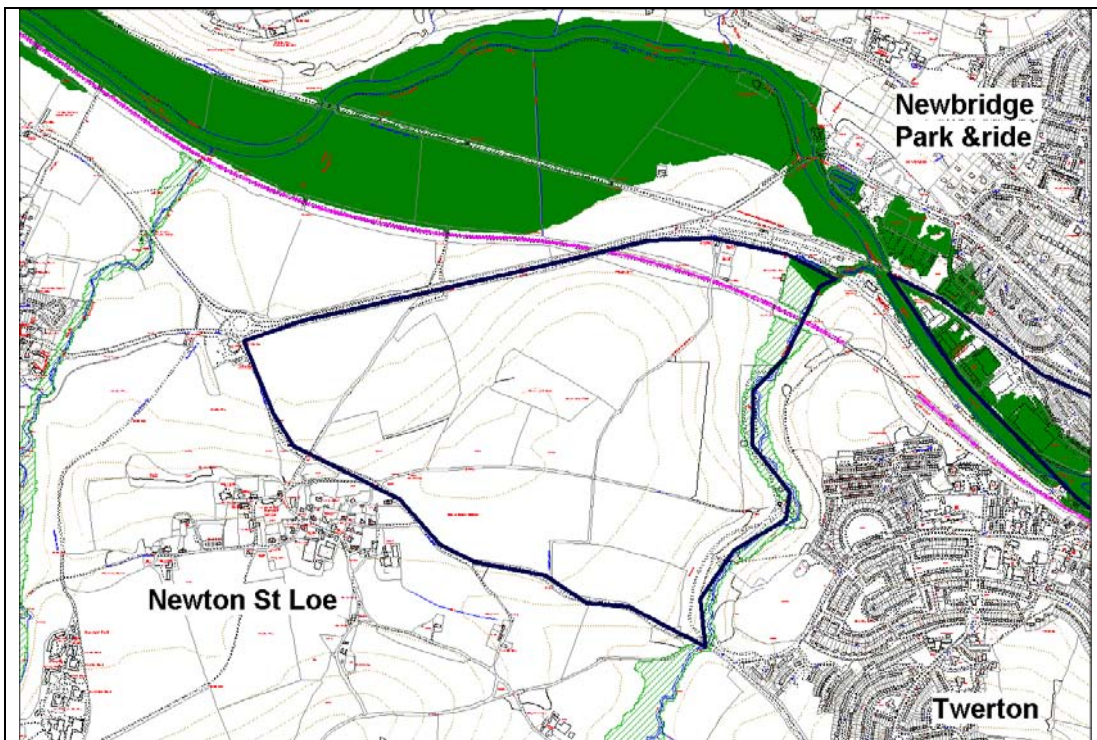
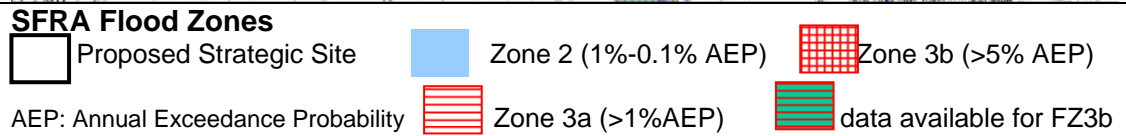
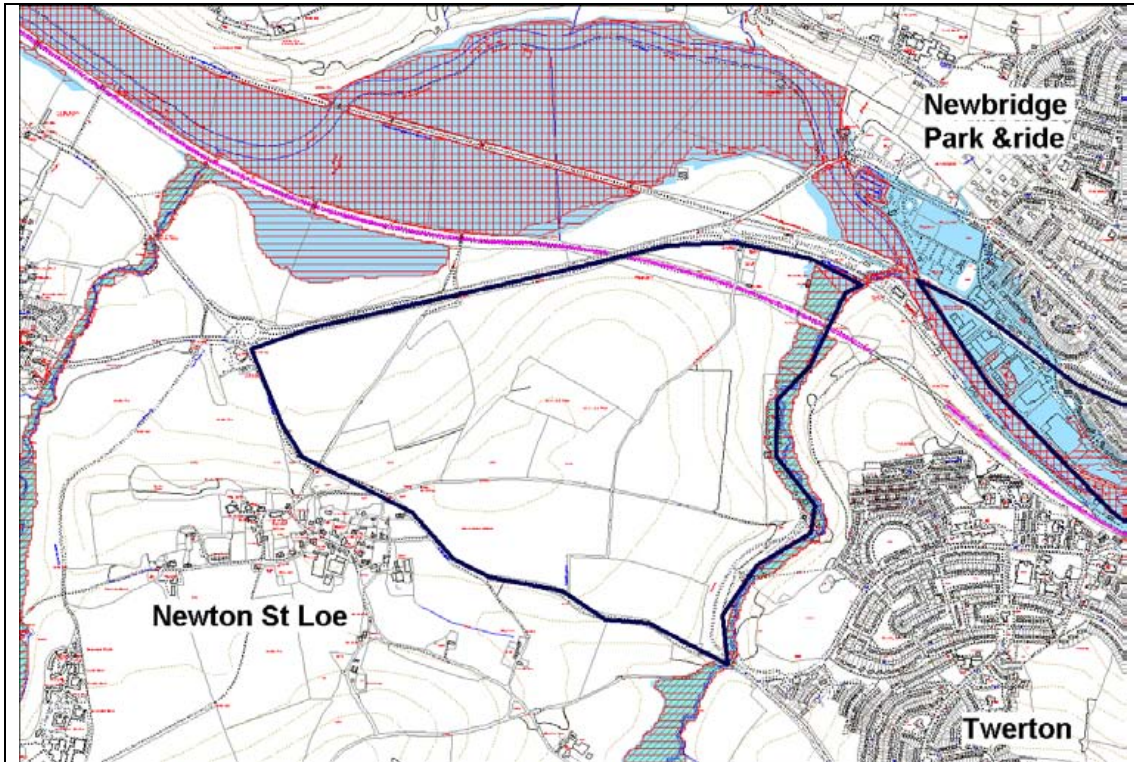
Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites



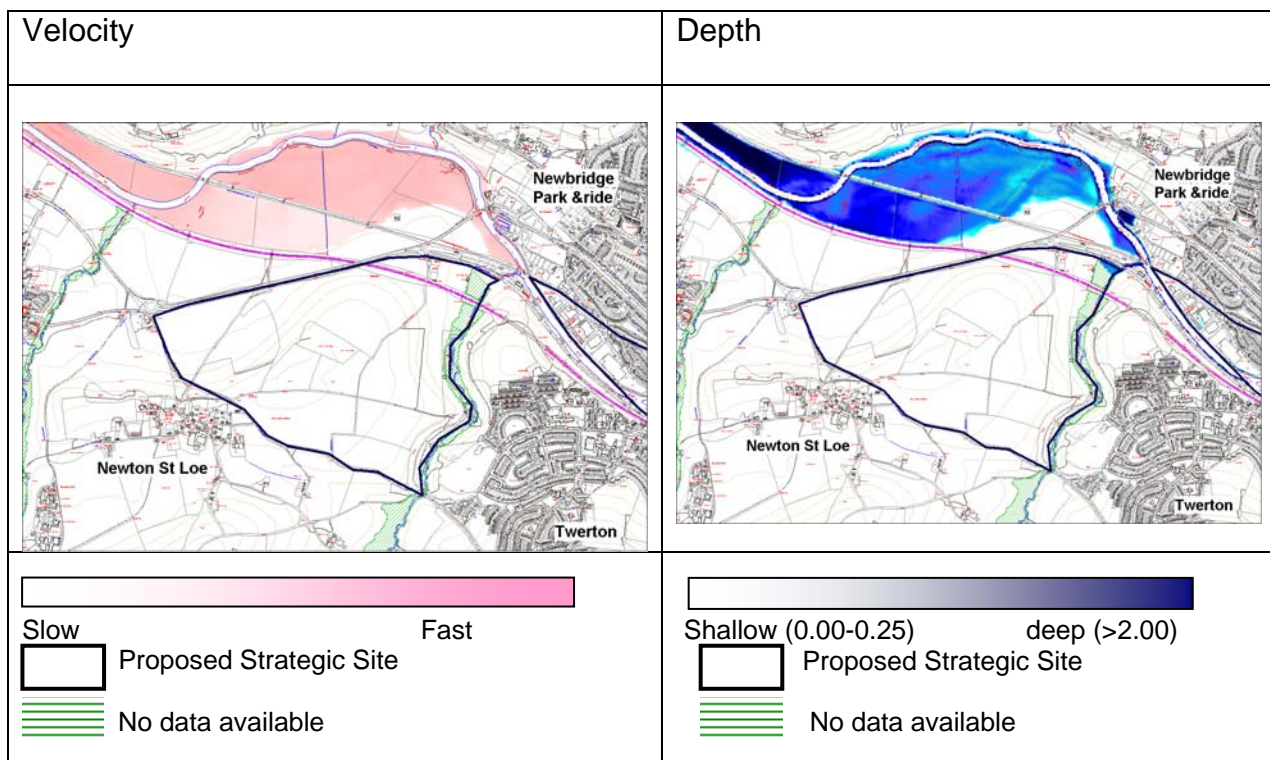
|                                       |   |                      |   |
|---------------------------------------|---|----------------------|---|
| <b>Site details</b>                   | Bath Central Zone   | <b>Site area</b>     | 136 ha  |
| <b>Flood Zones</b>                    | FZ 1: 88ha<br>FZ 2: 26ha<br>FZ 3a:11ha<br>FZ 3b:11ha  | <b>Data based on</b> | SFRA Level 2  |
| <b>Surface Water Flooding</b>         | High  |                      |   |
| <b>Proposed use and vulnerability</b> | Mixed use; include<br>Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Industrial (Less vulnerable)<br>Housing (More vulnerable)<br>Leisure (More vulnerable)<br>Educational(More vulnerable)   | <b>Current use</b>   | Mixed use; include<br>Retail,<br>Offices,<br>Industrial<br>Housing,<br>Leisure<br>Educational |
| <b>Key site characteristics</b>       | Bath is a SSCT (Strategically Significant Cities and Towns) proposed by the draft Regional Spatial Strategy for South West and plays an important role in West of England's economy, so the successful delivery the residential, social and commercial aspects of the city's growth will also play a vital role in the future prosperity of the sub-region. |                      |   |
| <b>Exception Test required</b>        | √   |                      |   |
| <b>Sequential Test Summary</b>        | Exception Text was applied. Sequential Approach should be taken within the Strategic Site. No development will be conducted within FZ3b and the Sequential Test will be finalised once the Flood Risk Management Strategy is completed. Site Specific Flood Risk Assessment should be prepared.   |                      |   |
| <b>Notes</b>                          | Sustainable Urban Drainage should be incorporated.<br>Subject to mitigation measures agreed by the Flood Risk Management Strategy.  |                      |   |



2. West of Twerton



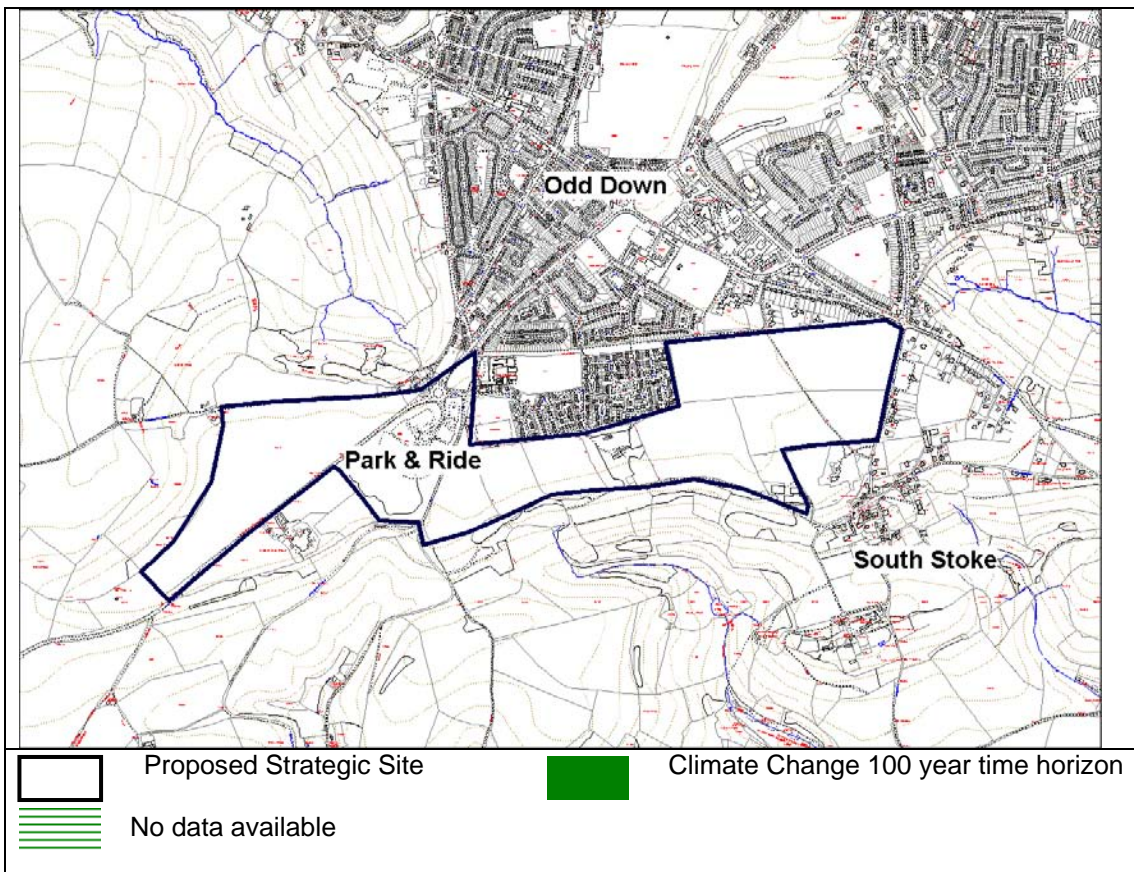
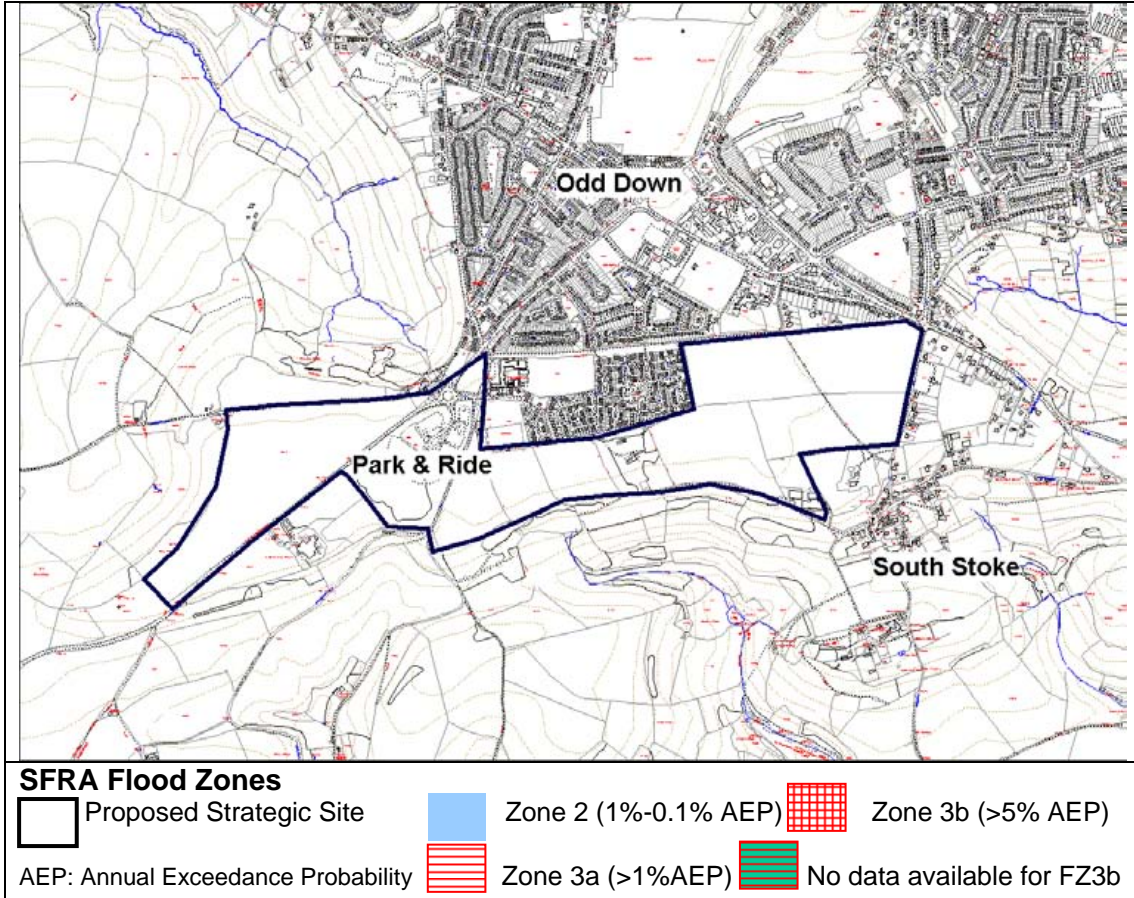
Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites



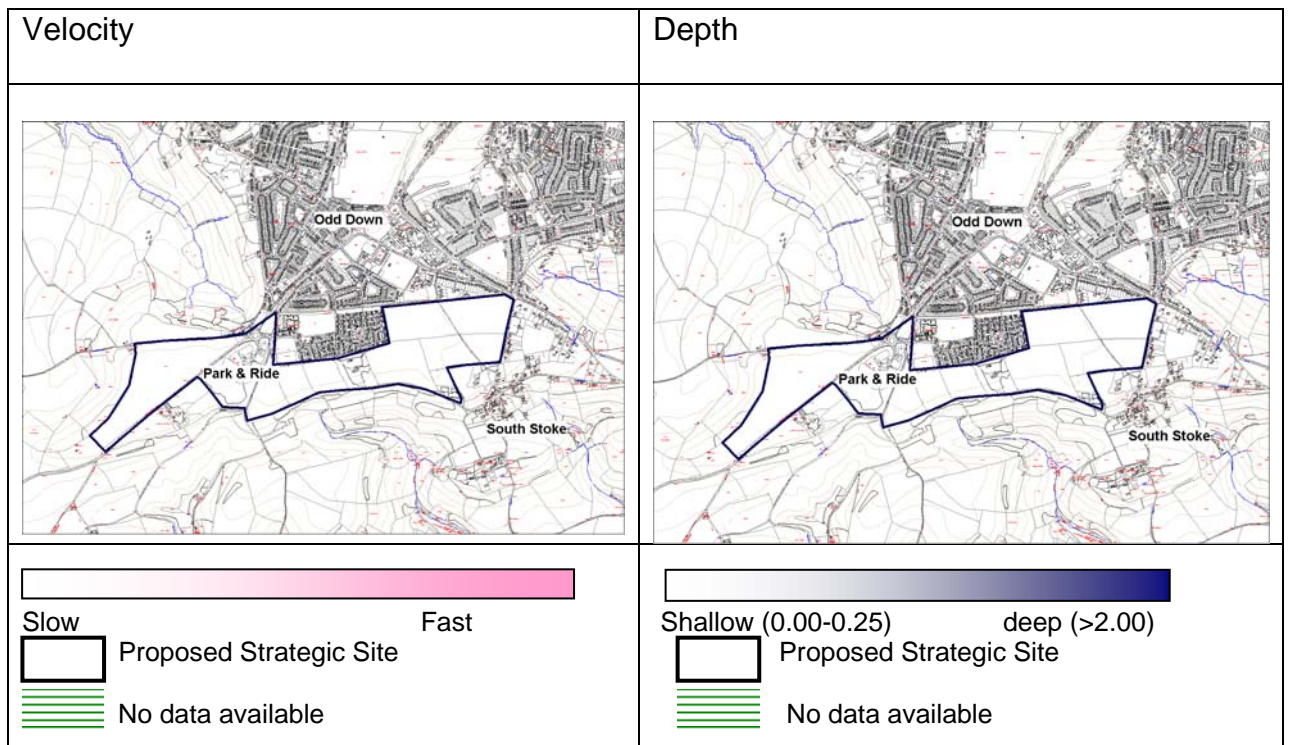
|                                       |   |                      |              |
|---------------------------------------|---|----------------------|--------------|
| <b>Site details</b>                   | West of Twerton, Bath   | <b>Site area</b>     | 102 ha       |
| <b>Flood Zones</b>                    | FZ 1: 95ha<br>FZ 2/3: 7ha   | <b>Data based on</b> | SFRA Level 2 |
| <b>Surface water flooding</b>         | Medium/High   |                      |              |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Housing (More vulnerable)  | <b>Current use</b>   | Greenfield   |
| <b>Site characteristics</b>           | <p>Greenfield<br/>Majority of site is within Flood zone 1 and only a very small proportion of this site falls within Flood Zone 2 and 3 along the Newton Brook.</p> <p>There is no data available to define FZ 3b therefore the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b unless further work is undertaken.</p>   |                      |              |
| <b>Exception Test required</b>        | <p>No<br/>Only a very small proportion of this site falls within Flood Zone 2 and 3 along the Newton Brook, therefore it is suggested that all residential development should be located within Flood Zone 1. The higher flood risk area, adjacent to the Newton Brook, should be reserved for Water Compatible development such as landscaping or amenity space, which is permitted in Flood Zone 3. Therefore the Exception Test is not required.</p> |                      |              |
| <b>Sequential Test Summary</b>        | The Sequential Test passed by limiting development within the Flood Zone 3.   |                      |              |
| <b>Notes</b>                          | The sequential approach should be taken within the site allowing only water compatible development along the Newton Brook. Sustainable Urban Drainage should be incorporated.   |                      |              |



**3. SWB Odd Down/South Stoke**



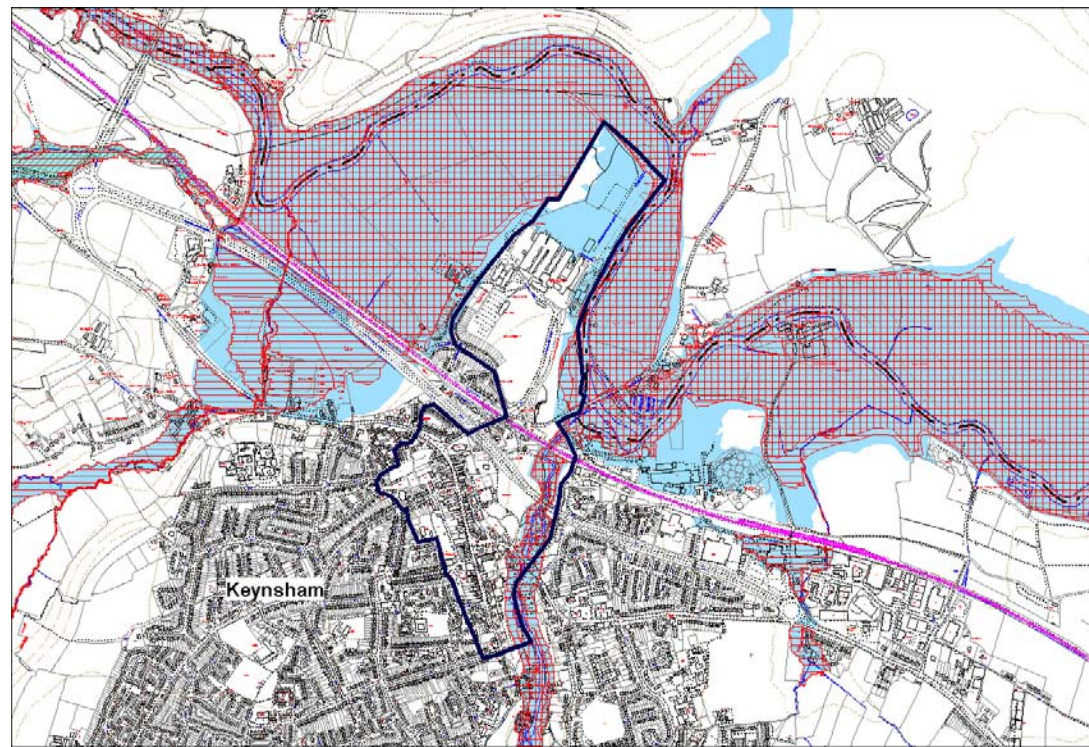
Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites



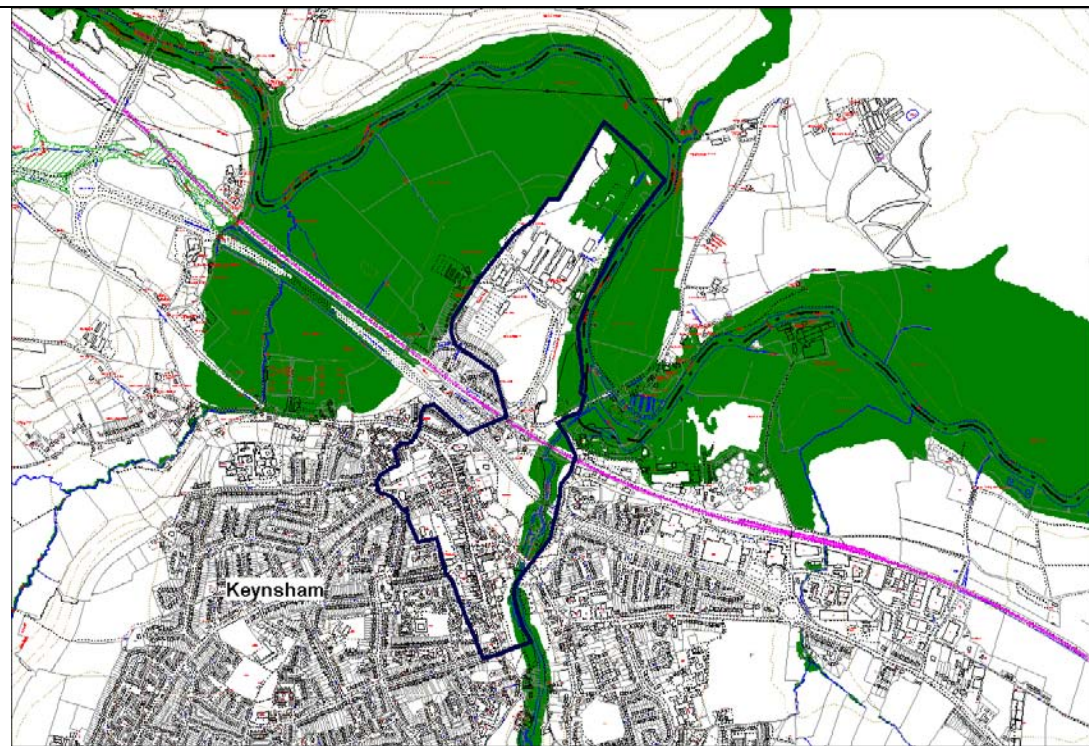
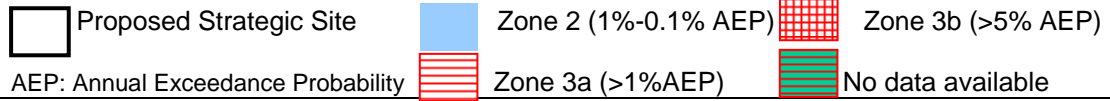
|                                       |  |                      |                   |
|---------------------------------------|--|----------------------|-------------------|
| <b>Site details</b>                   | Odd Down / South Stoke   | <b>Site area</b>     | 75 ha             |
| <b>Flood Zones</b>                    | FZ1: 75ha  | <b>Data based on</b> | SFRA Level 2 Bath |
| <b>Surface water flooding</b>         | Low/Medium   |                      |                   |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Housing (More vulnerable) | <b>Current use</b>   | Greenfield        |
| <b>Site characteristics</b>           | Greenfield<br>Park and Ride  |                      |                   |
| <b>Exception Test required</b>        | No   |                      |                   |
| <b>Sequential Test Summary</b>        | FZ1 Sequential Test passed   |                      |                   |
| <b>Notes</b>                          | Sustainable Urban Drainage should be incorporated in the development               |                      |                   |



#### 4. Keynsham Town Centre

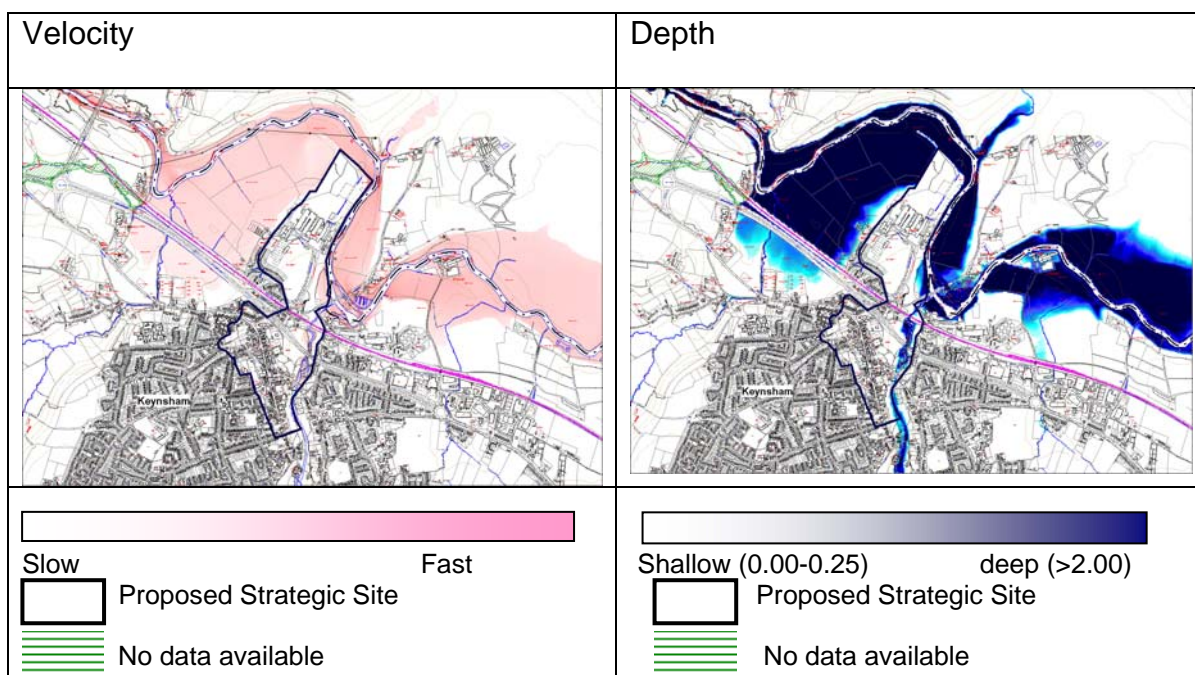


#### SFRA Flood Zones



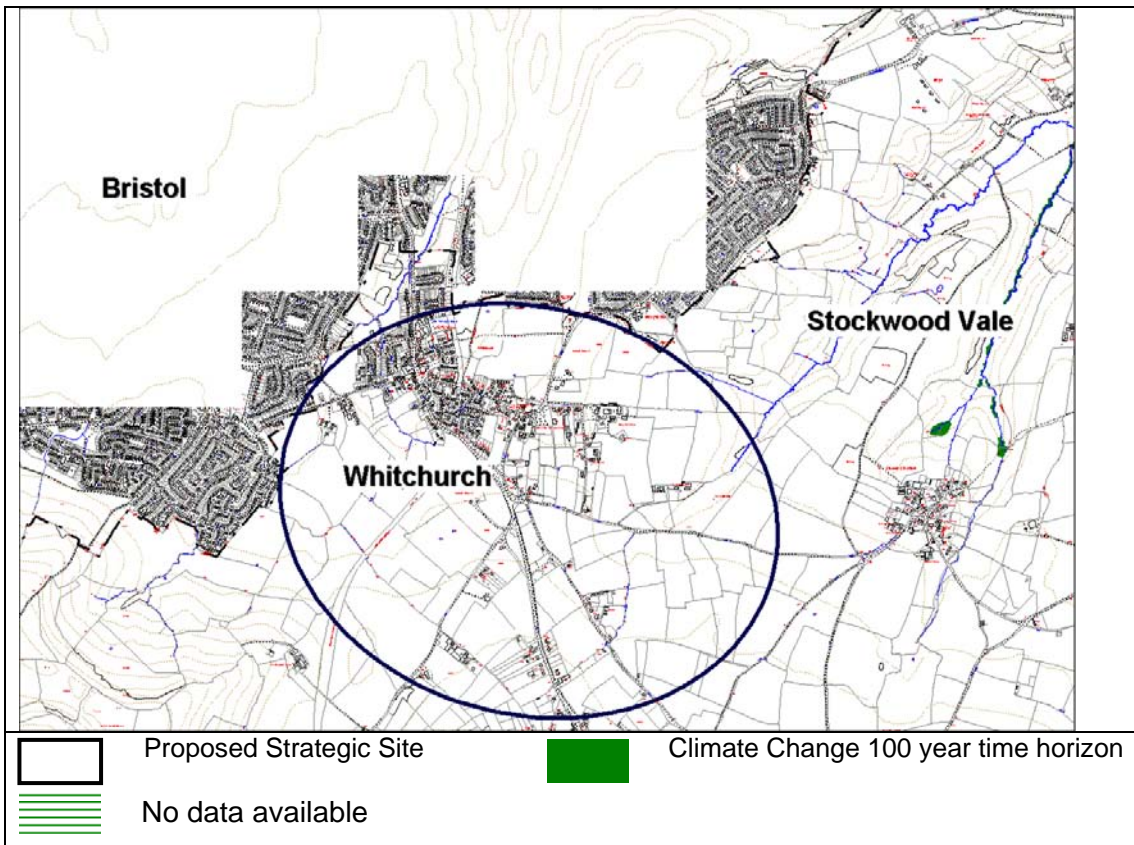
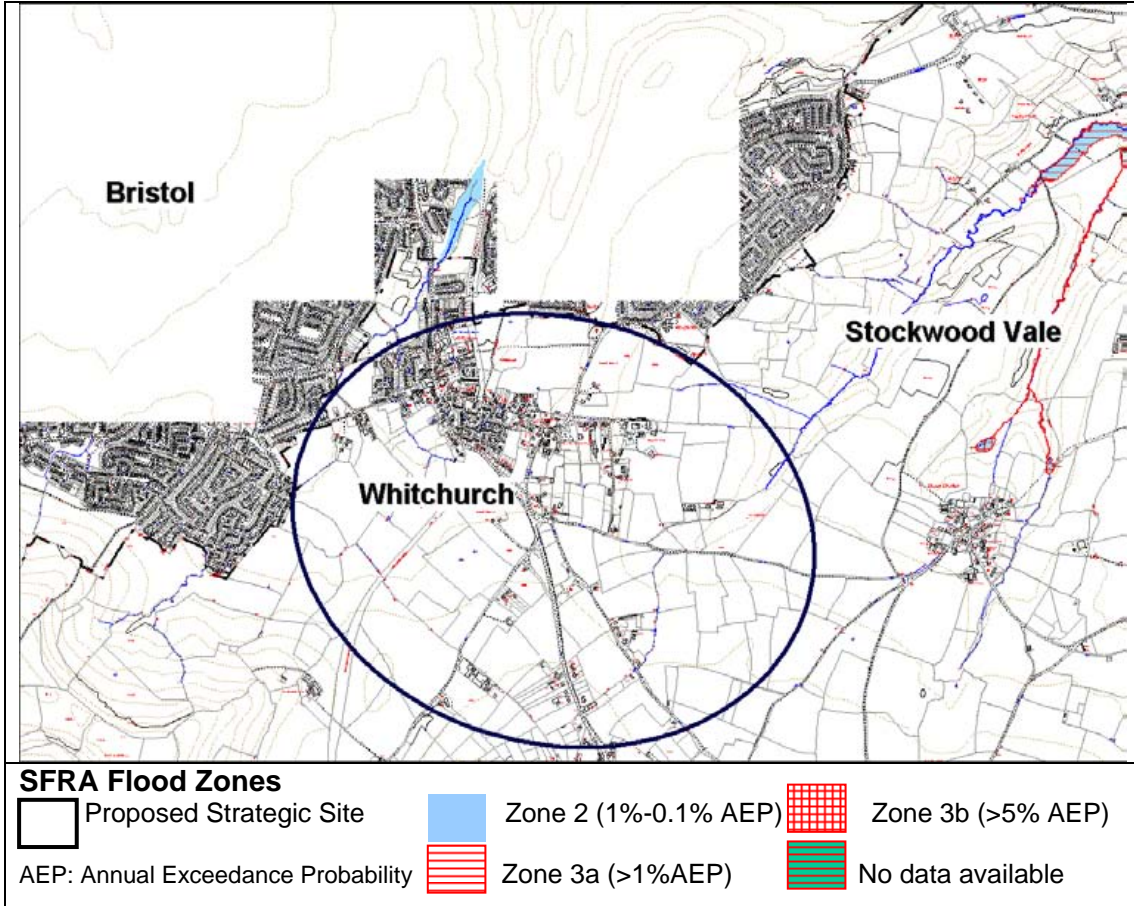


Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites

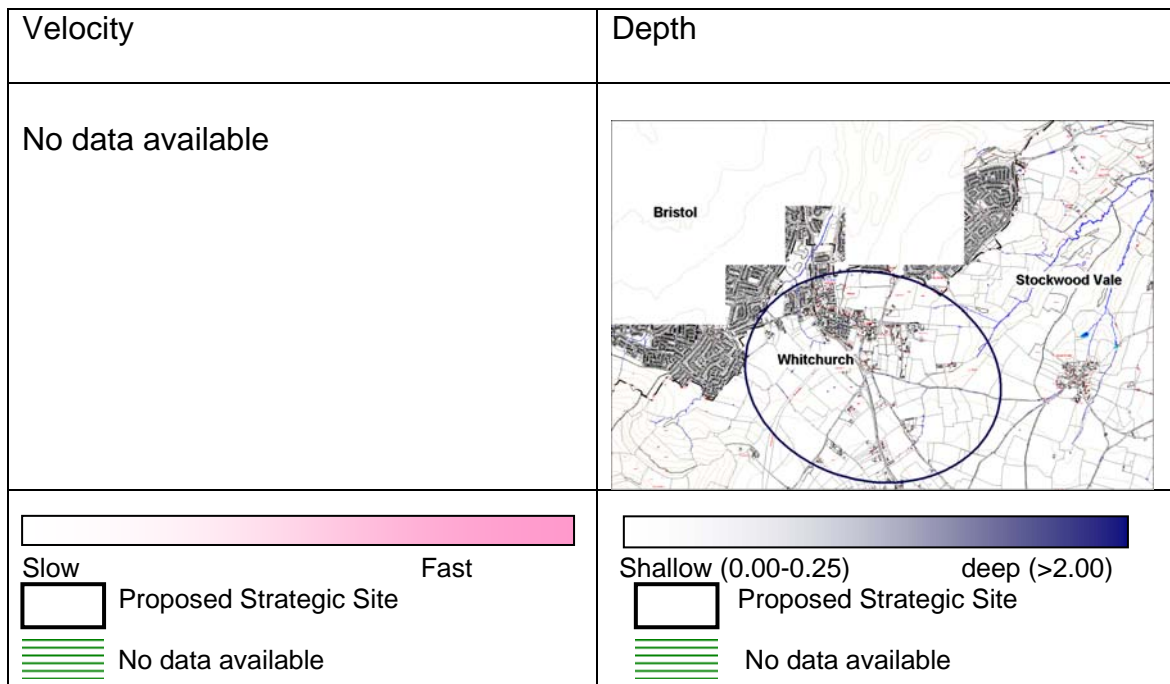


|                                       |   |                      |  |
|---------------------------------------|---|----------------------|--|
| <b>Site details</b>                   | Keynsham Town Centre  | <b>Site area</b>     | 62 ha  |
| <b>Flood Zones</b>                    | FZ 1: 47.6ha<br>FZ 2: 10ha<br>FZ 3a:0.8ha<br>FZ 3b:3.6ha  | <b>Data based on</b> | SFRA Level 2   |
| <b>Surface Water Flooding</b>         | Medium/High   |                      |  |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Industrial (Less vulnerable)<br>Housing (More vulnerable)<br>Leisure (More vulnerable)<br>Educational(More vulnerable)   | <b>Current use</b>   | retail,<br>offices,<br>industrial<br>housing, leisure<br>educational |
| <b>Site characteristics</b>           | The site includes: <ul style="list-style-type: none"> <li>• Keynsham town centre, including the historic High Street;</li> <li>• 24 hectare Cadbury's Somerdale Factory site; and</li> <li>• The transitional area between the northern end of the High Street and the Somerdale factory, which includes Keynsham mainline rail station.</li> </ul> |                      |  |
| <b>Exception Test required</b>        | yes   |                      |  |
| <b>Sequential Test Summary</b>        | Exception Text was applied. Sequential Approach should be taken within the Strategic Site. No development will be conducted within FZ3b and the Sequential Test will be finalised once the Flood Risk Management Strategy is completed. Site Specific Flood Risk Assessment should be prepared.   |                      |  |
| <b>Notes</b>                          | Subject to mitigation measures agreed by the Flood Risk Management Strategy.  |                      |  |

**5. Whitchurch Urban Extension to South East Bristol**



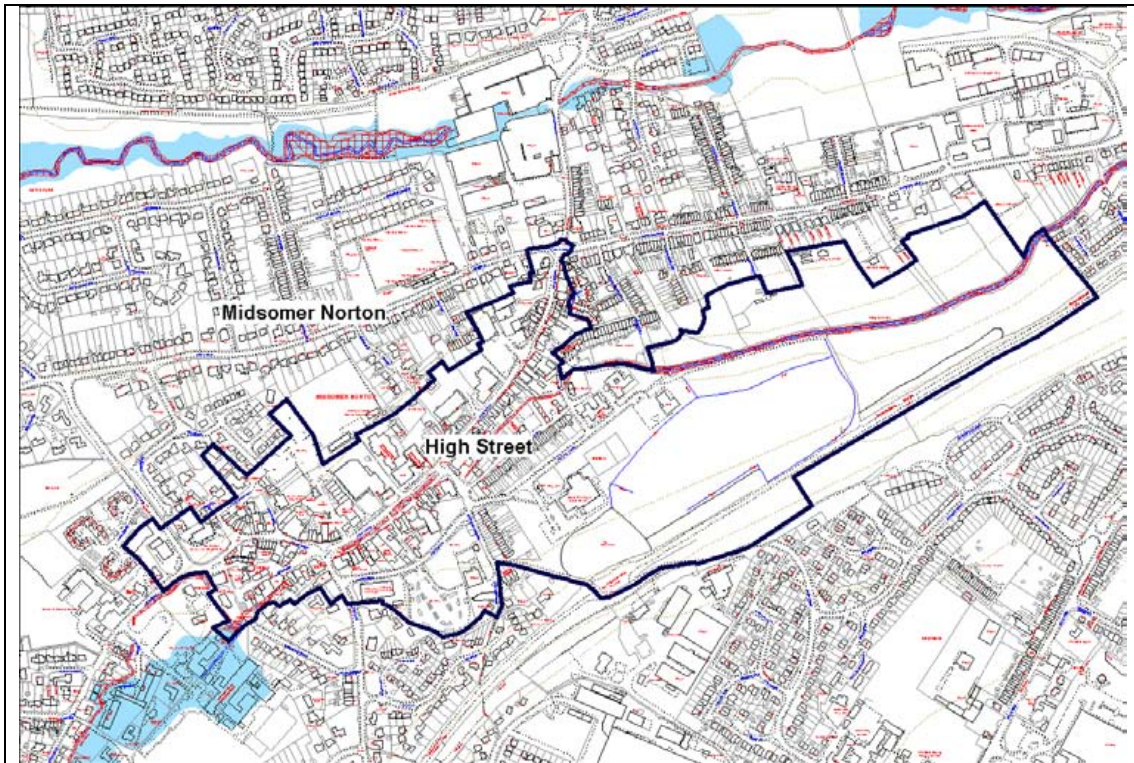
Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites



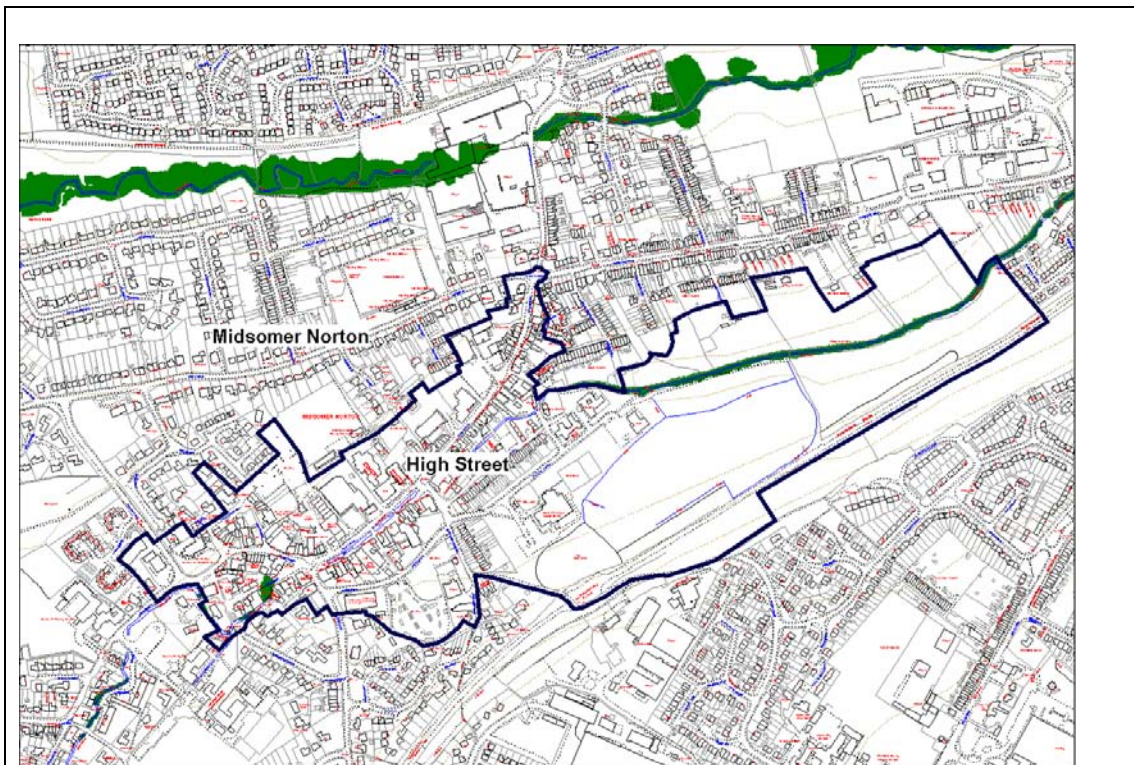
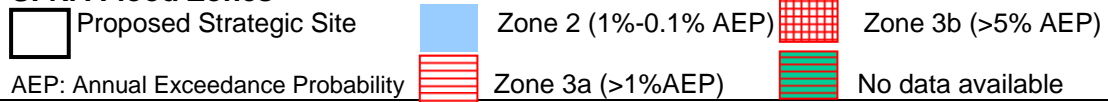
|                                       |  |                      |                   |
|---------------------------------------|--|----------------------|-------------------|
| <b>Site details</b>                   | Whitchurch   | <b>Site area</b>     |                   |
| <b>Flood Zones</b>                    | 1  | <b>Data based on</b> | SFRA Level 2 Bath |
| <b>Surface Water Flooding</b>         | Medium/High  |                      |                   |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Housing (More vulnerable) | <b>Current use</b>   | Greenfield        |
| <b>Site characteristics</b>           | Greenfield area around Whitchurch village  |                      |                   |
| <b>Exception Test required</b>        | No   |                      |                   |
| <b>Sequential Test Summary</b>        | FZ 1 Sequential Test passed  |                      |                   |
| <b>Recommendation</b>                 | Sustainable Urban Drainage should be incorporated.                                 |                      |                   |



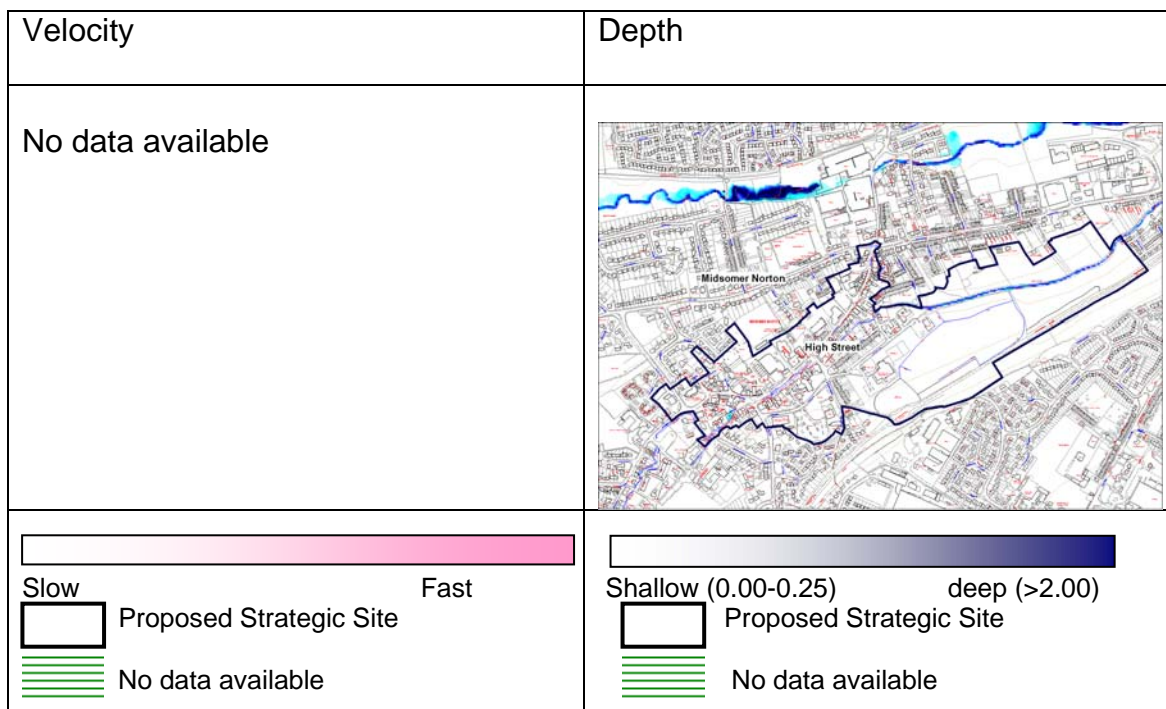
### 6. Midsomer Norton Town Centre



#### SFRA Flood Zones



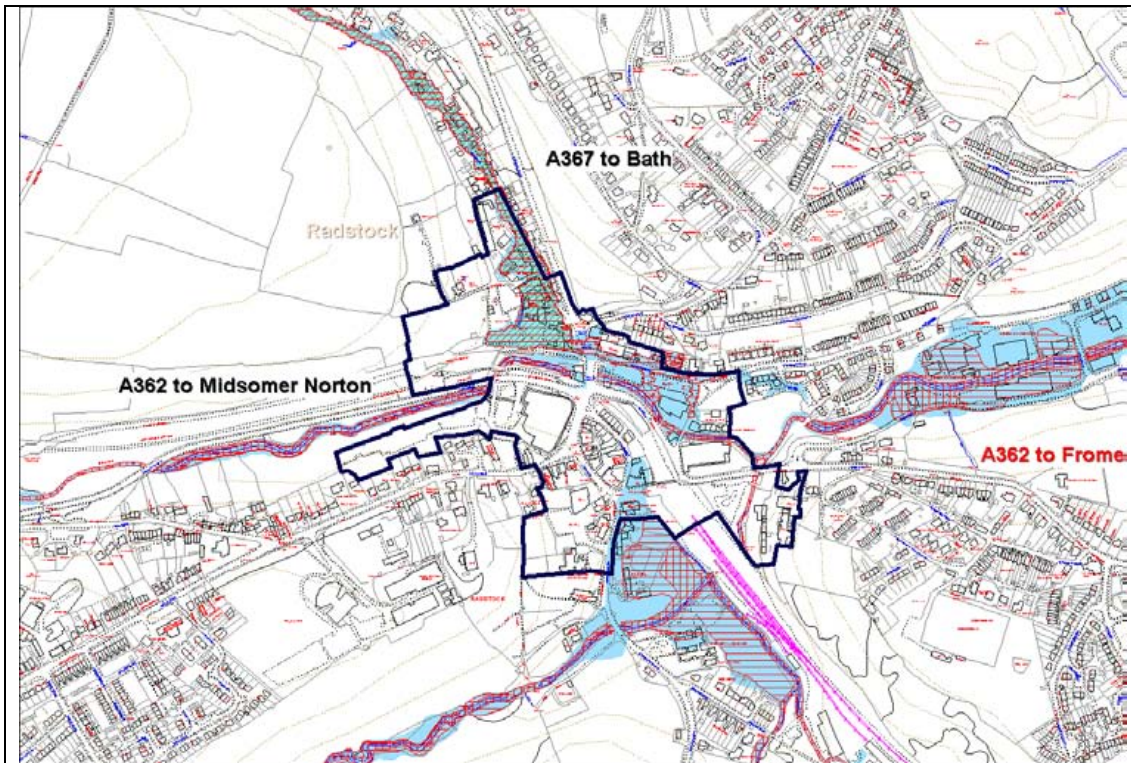
Bath and North East Somerset  
Interim Sequential and Exception Tests for Strategic Sites



|                                       |  |                      |  |
|---------------------------------------|--|----------------------|--|
| <b>Site details</b>                   | Midsomer Norton  | <b>Site area</b>     | 36 ha  |
| <b>Flood Zones</b>                    | 1  | <b>Data based on</b> | SFRA Level 2   |
| <b>Surface water flooding</b>         | High   |                      |  |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Industrial (Less vulnerable)<br>Housing (More vulnerable)<br>Leisure (More vulnerable)<br>Educational (More vulnerable) | <b>Current use</b>   | retail,<br>offices,<br>industrial<br>housing, leisure<br>educational |
| <b>Site characteristics</b>           | Town Centre and town park<br>Midsomer Norton Town Centre benefits from the culvert scheme.   |                      |  |
| <b>Exception Test required</b>        | No   |                      |  |
| <b>Sequential Test Summary</b>        | FZ 1 Sequential Test passed  |                      |  |
| <b>Recommendation</b>                 | Sustainable Urban Drainage should be incorporated.   |                      |  |



### 7. Radstock



**SFRA Flood Zones**

Proposed Strategic Site

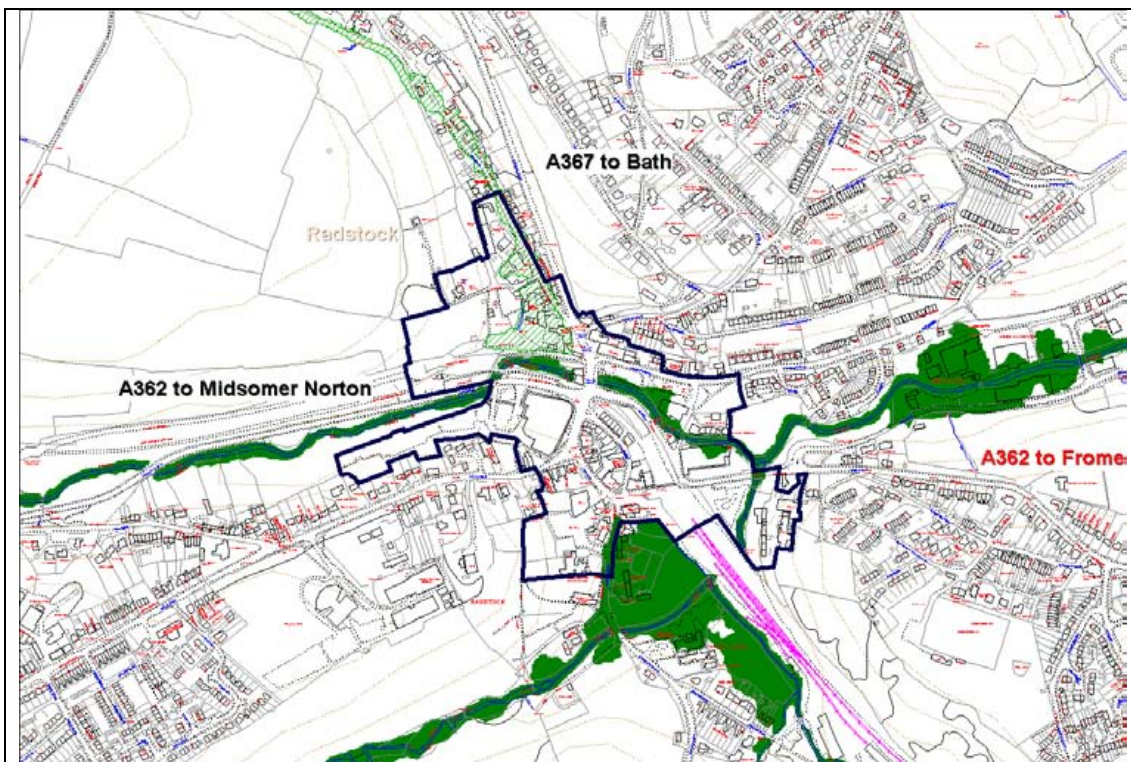
Zone 2 (1%-0.1% AEP)

Zone 3b (>5% AEP)

AEP: Annual Exceedance Probability

Zone 3a (>1%AEP)

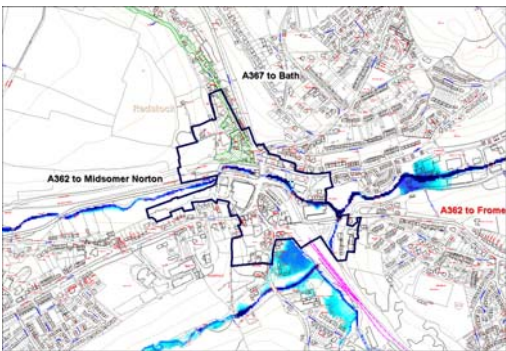
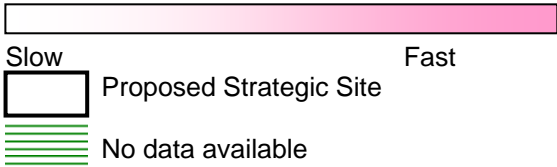
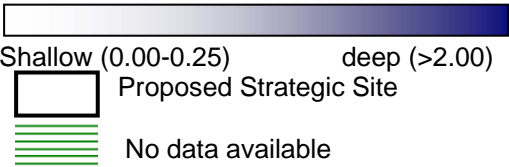
No data available for FZ 3



Proposed Strategic Site

Climate Change 100 year time horizon

No data available

|   |  |
|---|--|
| <p><b>Velocity</b></p>  | <p><b>Depth</b></p>  |
| <p>No data available</p>  |    |
|  <p>Slow <span style="float: right;">Fast</span></p> <p>Proposed Strategic Site</p> <p>No data available</p> |  <p>Shallow (0.00-0.25) <span style="float: right;">deep (&gt;2.00)</span></p> <p>Proposed Strategic Site</p> <p>No data available</p> |

|                                       |  |                      |  |
|---------------------------------------|--|----------------------|--|
| <b>Site details</b>                   | Radstock Town Centre   | <b>Site Area</b>     | 14 ha  |
| <b>Flood Zones</b>                    | FZ 1: 11.1ha<br>FZ 2: 1.3ha<br>FZ 3a:0.3ha<br>FZ 3b:0.3 ha<br>FZ 3 (No data available to define FZ3b):1ha  | <b>Data based on</b> | SFRA Level 2   |
| <b>Surface Water Flooding</b>         | Medium/High  |                      |  |
| <b>Proposed use and vulnerability</b> | Retail (Less vulnerable)<br>Offices (Less vulnerable)<br>Industrial (Less vulnerable)<br>Housing (More vulnerable)<br>Leisure (More vulnerable)<br>Educational(More vulnerable)  | <b>Current use</b>   | retail,<br>offices,<br>industrial<br>housing, leisure<br>educational |
| <b>Site information</b>               | <p>The site includes:</p> <ul style="list-style-type: none"> <li>• Radstock town centre, including major transport interchange;</li> <li>• Key local supermarkets, Co-op Radco</li> <li>• Radstock Railway development.</li> <li>• Sustainable transport routes</li> </ul>                             |                      |  |
| <b>Exception Test required</b>        | √  |                      |  |
| <b>Sequential Test Summary</b>        | <p>Exception Text was applied. Sequential Approach should be taken within the Strategic Site. No development will be conducted within FZ3b and the Sequential Test will be finalised once the Flood Risk Management Strategy is completed. Site Specific Flood Risk Assessment should be prepared.</p> |                      |  |
| <b>Recommendation</b>                 | <p>North part of the proposed site requires further work to define FZ3 a/b. Sequential Approach should be taken within the Strategic Site. Sustainable Urban Drainage should be incorporated. Subject to mitigation measures agreed by the Flood Risk Management Strategy.</p>                         |                      |  |