

**HARTLEPOOL SEQUENTIAL AND EXCEPTIONS TEST**

**HARTLEPOOL BOROUGH COUNCIL**

**LOCAL DEVELOPMENT FRAMEWORK**

**September 2016**



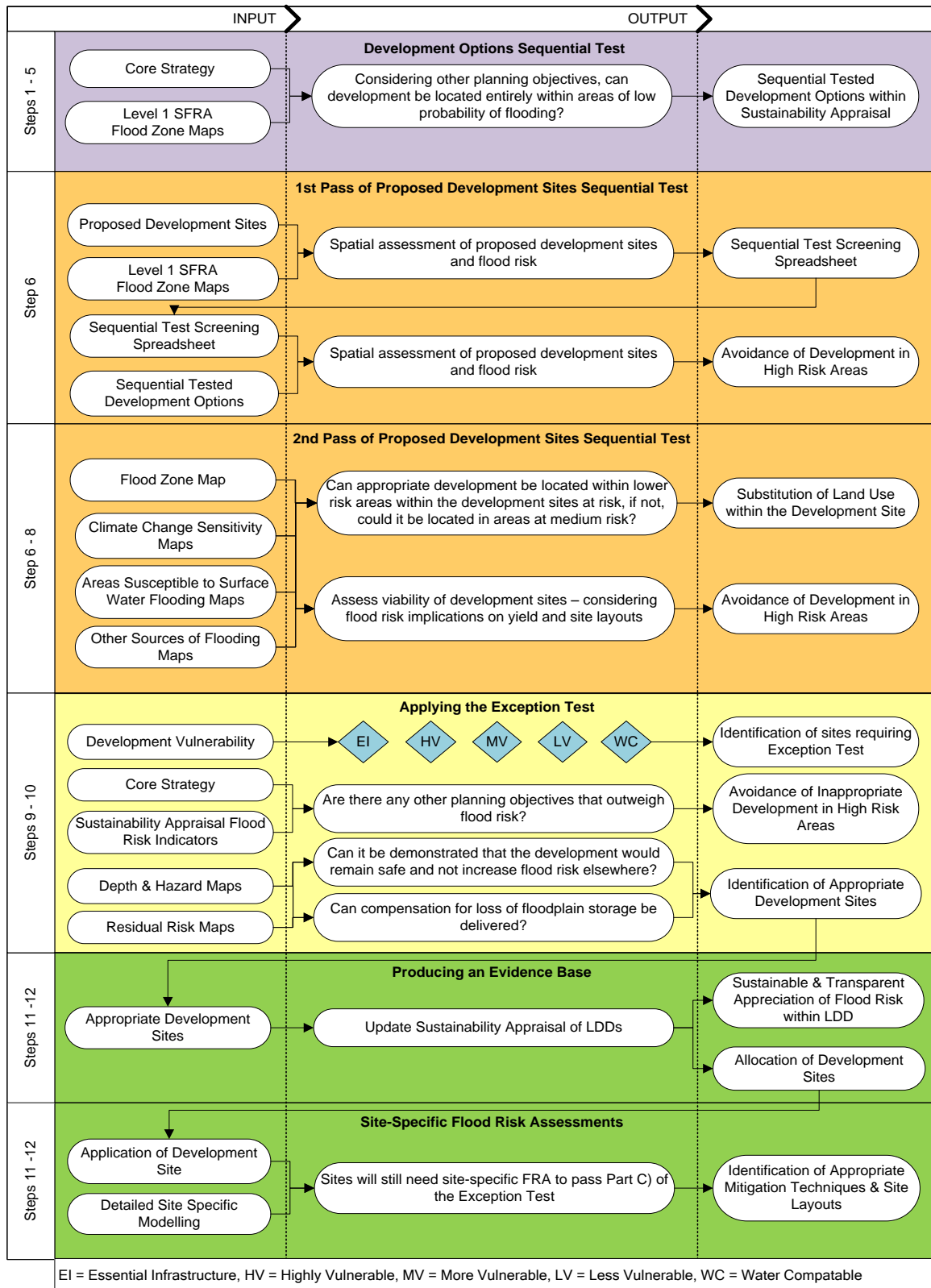
## TABLE OF CONTENTS

<b>Chapter</b>	<b>Page number</b>
1. Introduction	3
2. What is the Sequential Test?	6
3. What is the Exceptions Test?	12
4. Step 1 What is the geographical area over which the Sequential Test is applied?	13
5. Step 2 Identify Areas of Strategic Growth.	13
6. Step 3 Identify all sources of Flood Risk	14
7. Step 4 Screen Available Land	14
8. Step 5 Development Options Sequential Test. Could all development be located in lower risk areas?	14
9. Step 6 1 <sup>st</sup> Pass of Proposed Development sites Sequential Test	15
10. Step 7 2 <sup>nd</sup> Pass of the Sequential Test – Identify in which sites that the consequence of flooding can be reduced with substitution within the site.	19
11 Step 8 Assess Yield and Layout Issues on remaining high risk sites to see if viable.	21
12. Identify the likelihood of the remaining sites passing the Exception test. Steps 9 & 10	22
13. Step 11 & 12 Producing an Evidence Base & Allocate Sites in the Core Strategy - Conclusions	28
Appendix 1 Sequential test spreadsheet.	29

## **1 Introduction**

- 1.1 The Hartlepool Sequential and Exception test will use the following flow diagrams produced and recommended by JBA Consulting for Local Planning Authority Spatial Planners in applying the two tests keeping in mind the flood risk management hierarchy of avoid, substitute, control and mitigate, whilst identifying and allocating sustainable development sites. JBA consulting carried the Tees Valley Strategic Flood Risk assessment in 2007 as well as the Hartlepool Strategic Flood Risk Assessment Levels 1 and 2 in 2010.
- 1.2 Figure 1 illustrates the Sequential and Exceptions Tests as an input, process and Output flow diagram. The main inputs being the evidence provided in both the Level 1 and Level 2 SFRA and LPA Core Strategy and Sustainability Appraisal. The flow diagram begins by the assessing alternative development options at a strategic scale using the Sustainability Appraisal. This then works down using evidence provided in the Level 1 and Level 2 SFRA to avoid inappropriate development sites, substitution within the site boundary and identifying those sites requiring the Exception Test. The flow diagram ends by revisiting and updating the Sustainability Appraisal with the allocation of development sites. Figure 1 can be linked to Figure 2, which provides a more detailed descriptive step-by-step guidance of the flow process illustrated.
- 1.3 During this process there is a need to identify which sites should be avoided, substituted, those which can go forward, or once the Sequential Test has been applied how to assess if the site will remain safe during the Exception Test.

**Figure 1 - Sequential and Exception Test Flow Diagram**



**Figure 2 - Sequential and Exception tests Key Steps**

**Applying the Sequential Test during the SA of Development Options**

**Step 1** – State the **geographical area** over which the Sequential Test is to be applied.

This can be over the entire LPA area but will usually be reduced to communities to fit with functional requirements of development or objectives within RSS or Core Strategy

**Step 2** – Identify reasonably available areas of strategic growth.

**Step 3** – Identify the presence of **all sources of risk** using the evidence provided in this SFRA

**Step 4** – **Screen available land** for development in ascending order from Flood Risk Zone 1 to 3, including the subdivisions of Flood Risk Zone 3

This can be achieved using the information provided in the **Sequential Test Spreadsheet**. The screening spreadsheet provides a spatial assessment of each proposed development site provided by the LPA against Flood Zones and Environment Agency surface water susceptibility zones

**Step 5** – Could all development be located in lower risk areas? If not, move onto the next Steps.

**1st and 2nd Pass of the Proposed Development Sites Sequential Test**

Follow Figure 1 using the Sequential Test Spreadsheet to:

**Step 6** – Identify those sites which should be **avoided** where risk is considered too great and there is no strategic planning objectives identified in Core Strategy

**Step 7** – Identify those sites in which the consequence of flooding can be reduced through **substitution** within the site boundary

**Step 8** – Assess yield and layout issues for remaining high risk sites to check whether development is viable.

**Identify the Likelihood of passing the Exception Test**

Follow Key Questions imbedded within Figure 2 and SFRA evidence to identify the likelihood of those sites remaining at risk passing the Exception Test.

**Step 9** – Assess the compatibility of the **development vulnerability** using Table D.2 of PPS25 and identify the requirement of passing the **Exception Test** using Table D.3 of PPS25

**Step 10** - Using the SA to assess alternative development options by balancing flood risk against other planning constraints and wider sustainability reasons. **Proposed Sites should be avoided and removed from this process if**

- Key Questions in Figure 2 attributes a significant negative response
- Where development will require significant mitigation measures to make the site safe and to reduce impacts downstream
- Where the requirement of loss of floodplain compensation cannot be delivered

**Producing an Evidence Base**

The following steps should be used within the SA to produce the evidence that all Tests have been applied

**Step 11** – **Produce a supporting stand alone document** recording all decisions made during Steps 1 to 10. Each proposed development site should be referenced and the decisions made to avoid, substitute, or allocate the site and the evidence used.

**Step 12** – **Allocated development allocations within the Core Strategy**, including appropriate flood risk policies and development guidance on each allocated site. Guidance should include the need for appropriate site-specific FRAs.

The Environment Agency and other relevant stakeholders (such as Northumbrian Water) should be **consulted** on any policies drafted that inform the application of the Exception Test and the production of FRAs within the LPA area.

## 2 What is the Sequential Test?

- 2.1 National Planning Policy Framework (NPPF) states that the risk-based Sequential Test should be applied at all stages of planning. Its aim is to steer new development to areas at the lowest probability of flooding (Zone 1). The Flood Zones are the starting point for the sequential approach. Zones 2 and 3 are shown on the Environment Agency Flood Map with Flood Zone 1 being all the land falling outside Zones 2 and 3. These Flood Zones refer to the probability of sea and river flooding only, ignoring the presence of existing defences.
- 2.2 Strategic Flood Risk Assessments (SFRAs) will refine information on the probability of flooding, taking other sources of flooding and the impacts of climate change into account. The SFRA will provide the basis for applying the Sequential Test, on the basis of the Zones in Table 1 (of Technical Guidance to the National Planning Policy Framework). Where Table 1 indicates the need to apply the Exception Test, the scope of the SFRA will be widened to consider the impact of the flood risk management infrastructure on the frequency, impact, speed of onset, depth and velocity of flooding within the Flood Zones considering a range of flood risk management maintenance scenarios.

### Table 1: Flood zones

*(Note: These flood zones refer to the probability of river and sea flooding, ignoring the presence of defences)*

<p><b>Zone 1 - low probability</b></p> <p><b>Definition</b> This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (&lt;0.1%).</p> <p><b>Appropriate uses</b> All uses of land are appropriate in this zone.</p> <p><b>Flood risk assessment requirements</b> For development proposals on sites comprising one hectare or above the vulnerability to flooding from other sources as well as from river and sea flooding, and the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off, should be incorporated in a flood risk assessment. This need only be brief unless the factors above or other local considerations require particular attention.</p> <p><b>Policy aims</b> In this zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area and beyond through the layout and form of the development, and the appropriate application of sustainable drainage systems<sup>2</sup>.</p>
---

<sup>2</sup> Sustainable drainage systems cover the whole range of sustainable approaches to surface drainage management. They are designed to control surface water run off close to where it falls and mimic natural drainage as closely as possible.

## **Zone 2 - medium probability**

### **Definition**

This zone comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year.

### **Appropriate uses**

Essential infrastructure and the water-compatible, less vulnerable and more vulnerable uses, as set out in table 2, are appropriate in this zone. The highly vulnerable uses are *only* appropriate in this zone if the Exception Test is passed.

### **Flood risk assessment requirements**

All development proposals in this zone should be accompanied by a flood risk assessment.

### **Policy aims**

In this zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area through the layout and form of the development, and the appropriate application of sustainable drainage systems.

## **Zone 3a - high probability**

### **Definition**

This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.

### **Appropriate uses**

The water-compatible and less vulnerable uses of land (table 2) are appropriate in this zone. The highly vulnerable uses should not be permitted in this zone.

The more vulnerable uses and essential infrastructure should only be permitted in this zone if the Exception Test is passed. Essential infrastructure permitted in this zone should be designed and constructed to remain operational and safe for users in times of flood.

### **Flood risk assessment requirements**

All development proposals in this zone should be accompanied by a flood risk assessment.

### **Policy aims**

In this zone, developers and local authorities should seek opportunities to:

- reduce the overall level of flood risk in the area through the layout and form of the development and the appropriate application of sustainable drainage systems;

- relocate existing development to land in zones with a lower probability of flooding; and
- create space for flooding to occur by restoring functional floodplain and flood flow pathways and by identifying, allocating and safeguarding open space for flood storage.

### **Zone 3b - the functional floodplain**

#### **Definition**

This zone comprises land where water *has* to flow or be stored in times of flood.

Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. But land which would flood with an annual probability of 1 in 20 (5%) or greater in any year, or is designed to flood in an extreme (0.1%) flood, should provide a starting point for consideration and discussions to identify the functional floodplain.

#### **Appropriate uses**

Only the water-compatible uses and the essential infrastructure listed in table 2 that has to be there should be permitted in this zone. It should be designed and constructed to:

- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows; and
- not increase flood risk elsewhere.

Essential infrastructure in this zone should pass the Exception Test.

#### **Flood risk assessment requirements**

All development proposals in this zone should be accompanied by a flood risk assessment.

#### **Policy aims**

In this zone, developers and local authorities should seek opportunities to:

- reduce the overall level of flood risk in the area through the layout and form of the development and the appropriate application of sustainable drainage systems;
- relocate existing development to land with a lower probability of flooding.

- 2.3 The overall aim of decision-makers should be to steer new development to Flood Zone 1. Where there are no reasonably available sites in Flood Zone 1, decision-makers identifying broad locations for development and infrastructure, allocating land in spatial plans or determining applications for development at any particular location should take into account the flood risk



vulnerability of land uses and consider reasonably available sites in Flood Zone 2, applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should decision-makers consider the suitability of sites in Flood Zone 3, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.

2.4 Within each Flood Zone, new development should be directed first to sites at the lowest probability of flooding and the flood vulnerability of the intended use matched to the flood risk of the site, e.g. higher vulnerability uses located on parts of the site at lowest probability of flooding.

2.5 **Table 2 Flood Risk Vulnerability Classification** (of Technical Guidance to the National Planning Policy Framework)  
The Technical Guidance to NPPF specifies that the sequential test should be applied when allocating all land in the development plan. The Technical Guidance splits different types of land use into different categories based on the likely vulnerability of the proposed development to people and property.

**Table 2: Flood risk vulnerability classification**

<p><b>Essential infrastructure</b></p> <ul style="list-style-type: none"> <li>• Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.</li> <li>• Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood.</li> <li>• Wind turbines.</li> </ul>
<p><b>Highly vulnerable</b></p> <ul style="list-style-type: none"> <li>• Police stations, ambulance stations and fire stations and command centres and telecommunications installations required to be operational during flooding.</li> <li>• Emergency dispersal points.</li> <li>• Basement dwellings.</li> <li>• Caravans, mobile homes and park homes intended for permanent residential use<sup>3</sup>.</li> <li>• Installations requiring hazardous substances consent<sup>4</sup>. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as “essential infrastructure”)<sup>5</sup>.</li> </ul>
<p><b>More vulnerable</b></p> <ul style="list-style-type: none"> <li>• Hospitals.</li> <li>• Residential institutions such as residential care homes, children’s homes, social services homes, prisons and hostels.</li> <li>• Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.</li> <li>• Non-residential uses for health services, nurseries and educational establishments.</li> <li>• Landfill and sites used for waste management facilities for hazardous waste<sup>6</sup>.</li> <li>• Sites used for holiday or short-let caravans and camping, <i>subject to a specific warning and evacuation plan</i>.<sup>7</sup></li> </ul>
<p><b>Less vulnerable</b></p> <ul style="list-style-type: none"> <li>• Police, ambulance and fire stations which are <i>not</i> required to be operational during flooding.</li> <li>• Buildings used for shops, financial, professional and other services,</li> </ul>

<sup>3</sup> For any proposal involving a change of use of land to a caravan, camping or chalet site, or to a mobile home site or park home site, the Sequential and Exception Tests should be applied.

<sup>4</sup> See Circular 04/00: *Planning controls for hazardous substances* (paragraph 18) at: [www.communities.gov.uk/publications/planningandbuilding/circularplanningcontrols](http://www.communities.gov.uk/publications/planningandbuilding/circularplanningcontrols)

<sup>5</sup> In considering any development proposal for such an installation, local planning authorities should have regard to planning policy on pollution in the National Planning Policy Framework.

<sup>6</sup> For definition, see *Planning for Sustainable Waste Management: Companion Guide to Planning Policy Statement 10* at

[www.communities.gov.uk/publications/planningandbuilding/planningsustainable](http://www.communities.gov.uk/publications/planningandbuilding/planningsustainable)

<sup>7</sup> See footnote 3.

<p>restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non-residential institutions not included in “more vulnerable”, and assembly and leisure.</p> <ul style="list-style-type: none"> <li>• Land and buildings used for agriculture and forestry.</li> <li>• Waste treatment (except landfill and hazardous waste facilities).</li> <li>• Minerals working and processing (except for sand and gravel working).</li> <li>• Water treatment works which do <i>not</i> need to remain operational during times of flood.</li> <li>• Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).</li> </ul>
<p><b>Water-compatible development</b></p> <ul style="list-style-type: none"> <li>• Flood control infrastructure.</li> <li>• Water transmission infrastructure and pumping stations.</li> <li>• Sewage transmission infrastructure and pumping stations.</li> <li>• Sand and gravel working.</li> <li>• Docks, marinas and wharves.</li> <li>• Navigation facilities.</li> <li>• Ministry of Defence defence installations.</li> <li>• Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.</li> <li>• Water-based recreation (excluding sleeping accommodation).</li> <li>• Lifeguard and coastguard stations.</li> <li>• Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.</li> <li>• Essential ancillary sleeping or residential accommodation for staff required by uses in this category, <i>subject to a specific warning and evacuation plan</i>.</li> </ul>

**Notes to table 2:**

- This classification is based partly on Department for Environment, Food and Rural Affairs and Environment Agency research on *Flood Risks to People (FD2321/TR2)*<sup>8</sup> and also on the need of some uses to keep functioning during flooding.
- Buildings that combine a mixture of uses should be placed into the higher of the relevant classes of flood risk sensitivity. Developments that allow uses to be distributed over the site may fall within several classes of flood risk sensitivity.
- The impact of a flood on the particular uses identified within this flood risk vulnerability classification will vary within each vulnerability class. Therefore, the flood risk management infrastructure and other risk mitigation measures needed to ensure the development is safe may differ between uses within a particular vulnerability classification.

- 2.6 The test then assesses each of these classifications against the level of risk on site. The Technical Guidance to NPPF provides a matrix to indicate whether a land use would be appropriate in flood zone and whether the exception test is required after the application of the sequential test. For certain types of development, it is not appropriate to use the Exception Test to justify development. For example, highly vulnerable development cannot be justified within the high risk zone through the use of the Exception Test.

**Table 3: Flood risk vulnerability and flood zone ‘compatibility’**

Flood risk vulnerability classification (see table 2)	Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood zone (see table 1)	Zone 1	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓
	Zone 3a	Exception Test required	✓	×	Exception Test required
	Zone 3b functional floodplain	Exception Test required	✓	×	×

**Key:**      ✓ Development is appropriate.  
                  × Development should not be permitted.

**Notes to table 3:**

This table does not show:

- a. the application of the Sequential Test which guides development to Flood Zone 1 first, then Zone 2, and then Zone 3;
- b. flood risk assessment requirements; or
- c. the policy aims for each flood zone.

2.7 As previously mentioned the Sequential Test requires that sites should be selected sequentially starting with land in Flood Zone 1. Only if there are no reasonably available sites with Flood Zone 1 should sites in Flood Zone 2 be considered and the flood risk vulnerability of land use be taken into account, applying the exceptions test where necessary. Only where there are no reasonable available sites in Flood Zone 2 should Flood Zone 3 be considered

**3 What is the Exceptions Test?**

3.1 The Exception Test should be applied by decision-makers only after the Sequential Test has been applied and in the circumstances shown in Table 1 when ‘more vulnerable’ development and ‘essential infrastructure’ cannot be located in Zones 1 or 2 and ‘highly vulnerable’ development cannot be located in Zone 1. It should not be used to justify ‘highly vulnerable’ development in Flood Zone 3a, or ‘less vulnerable’; ‘more vulnerable’; and ‘highly vulnerable’ development in Flood Zone 3b.

3.2 The Exceptions test is only appropriate where there are large areas in Flood Zones 2 and 3, where the Sequential test alone cannot deliver acceptable sites, but where some continued development is necessary for wider sustainability development reasons. If following the application of the Sequential Test is not possible, consistent with wider sustainability objectives, for the development to be located in zones of lower probability of flooding

then the Exception Test may be applied in the circumstances identified in the above Table 3 but must also be consistent with the criteria set out below.

- 3.3 For the Exception Test to be passed:
- a) it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA where one has been prepared; and
  - b) a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its uses, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

#### **4 Step 1 What is the geographical area over which the Sequential Test is applied?**

- 4.1
- i. For housing the sequential test will be applied to the whole Borough to ensure that all sites are tested and most suitable sites are the preferred when considered against the tests as well as other sustainability issues.
  - ii. For Employment sites for general and specialist industry will be assessed in a more focused way in distinct areas. The largest area covers the southern part of the Borough where certain specialist industries and sites for general industry have been historically been located. Most of the sites are within existing industrial users land holdings to be used for expansion if needed in the longer term. Detailed work was commissioned as part of the SFRA level 2 regarding these sites and details of this can be found in sections 12.2-12.9 of this report.
  - iii. The employment sites at Oakesway and the Port will be considered in a separate area of search. This is because they have distinct locational requirements and the emerging economic regeneration strategy has the sites strategically linked to provide opportunities for the growing offshore oil and gas, renewable energy and advanced engineering sectors. The sites are designated as Enterprise Zones and are strategically links to provide a portfolio of sites to provide the required land to attract major investors from the aforementioned sectors to Hartlepool. Detailed work was commissioned as part of the SFRA level 2 regarding these sites and details of this can be found in section 12.10 of this report.

#### **5 Step 2 Identify Areas of Strategic Growth.**

- 5.1 Land to be considered for future allocation in the development plan was taken from the two following pieces of the Local Development Framework evidence:
- i. The Hartlepool Employment Land Review (ELR) (2008),
  - ii. Strategic Housing Land Availability Assessment (SHLAA) (2010),
  - iii. The Hartlepool Local Infrastructure Plan (2012) and the
  - iv. The Economic Regeneration Strategy 2012-22 (First draft November 2011).
- 
- i. The ELR recommended that Hartlepool should de-allocate some employment sites for other uses. The Sequential test will access all the current (Local Plan 2006) employment sites and make reference to the recommendations of the ELR.
  - ii. All of the potential 83 housing sites considered as part of the SHLAA will be assessed by the sequential test.

- iii. The Local Infrastructure plan considered the Councils preferred options for development and looking in detail of the infrastructure requirements which included flood risk mitigation and surface water drainage.
- iv. The emerging Economic Regeneration Strategy aims to provide the right conditions to attract new investment to regenerate the Borough. This includes a looking at improving the existing business infrastructure that is made up of a range of employment sites across town.

**6 Step 3 Identify all sources of Flood Risk.**

- 6.1 A level 1 Strategic Flood Risk Assessment was commissioned by HBC in August 2009. This was carried by JBA consulting and final version was agreed in May 2010. The SFRA Level 1 considers all sources of flooding in Hartlepool including tidal, fluvial, surface water, sewers, groundwater and reservoirs and other artificial sources.

**7 Step 4 Screen Available Land.**

- 7.1 All of the sites considered in the Sequential test were screened for development in ascending order from Flood Risk Zone 1 to 3 including the subdivisions of Flood Risk Zone 3. This information is demonstrated in the HBC sequential test spreadsheet. See appendix 1

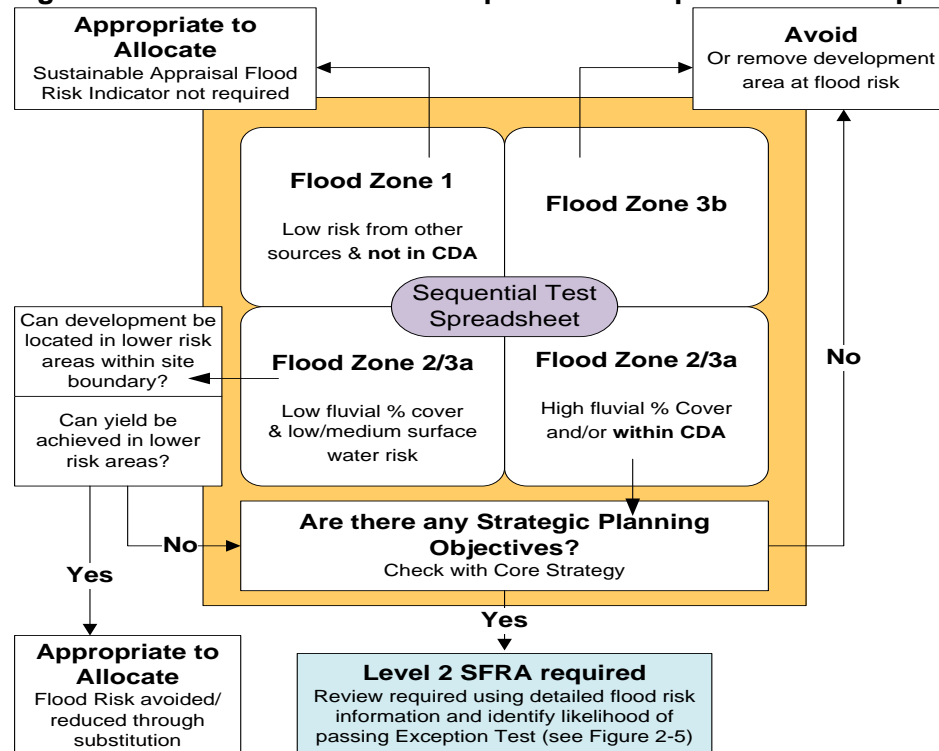
**8 Step 5 Development Options Sequential Test. Could all development be located in lower risk areas?**

- 8.1 At an early stage in plan production alternative development options and sites where considered bearing in mind the Council's overarching development strategy for compact urban growth with sustainable extensions where necessary to allow new allocations together with existing land commitments that would meet the Borough identified need for the plan period of 15 years. Using evidence base documents such as the SHLAA and ELR these options for development where considered against early sustainability appraisal, specifically focused on flood risk. The list of all the sites considered can be seen in the sequential test spreadsheet in appendix 1.
- 8.2 This was developed further while considering wider planning objectives such as the wider spatial strategy, sustainable economic growth, the long term regeneration of Hartlepool, the needs of key industries and potential growth sectors and the unique coastal location of the Borough. In considering all of the other strategic planning factors and taking account of the sequential approach to flood risk a list of sites were drawn up as preferred options to deliver the objectives of Hartlepool's development plan.
- 8.3 With potential allocations identified the first part of sequential approach to flood is to ask the question "Are all potential allocations lying outside of flood zones 2 & 3?"
  - Is yes then there is no need to for a sequential test.
  - If no then than a sequential test is necessary.
 From appendix 1 it is clear that from the sites that where minded to allocate to meet sustainable development and the Councils spatial strategy this cannot be achieved through new development located entirely within areas with a low probability of flooding in the Borough of Hartlepool.

**Therefore a Sequential test of the sites is required.**

8.2 Figure 3 provides more guidance on using the Sequential Test Spreadsheet produced in the SFRA during Steps 1 to 8

**Figure 3 - 1st and 2nd Pass of Proposed Development Sites Sequential Test**



**9 Step 6 1<sup>st</sup> Pass of Proposed Development sites Sequential Test**

9.1 i. The first pass of the sequential test will produce a list of sites where the test has been passed at step 4 (Screening) and made up entirely of lower flood risk land. These sites do not need to be considered any further. These sites are colour coded as green in the sequential test spreadsheet in the table below the sites or part of the site that were minded to be allocated are highlighted in yellow. The sites not highlighted where considered for allocation but where discounted because of wider planning objectives. An explanation of this is given in the justification/reasons column of appendix 1. This applies to the following sites:

Site ID	Site Name	Proposed Use	Area(Ha)
Emp3	West of Brenda Road	General Industry	25.57
Emp8	Queens Meadow	Higher Quality Employment	68.71
Shlaa1	Friarage Manor	Housing	0.68
Shlaa4	Hartlepool Water HQ	Housing	1.24
Shlaa5	Old Cemetery Road	Housing	0.59
Shlaa6	Britmag Small	Housing	1.19
Shlaa7	Britmag Medium	Housing	3.61
Shlaa8	Britmag Large	Housing	21.48
Shlaa9	Behind 224-246 West View Road	Housing	1.50
Shlaa10	Former St Hilds School	Housing	3.81
Shlaa11	Rear of Bruntoft Avenue	Housing	0.41
Shlaa14	Springwell School	Housing	0.51
Shlaa15	Jesmond Road School	Housing	0.50

Shlaa20	Hart Station	Housing	2.22
Shlaa21	Middlethorpe Farm	Housing	6.55
Shlaa22	Nelson Farm West	Housing	13.44
Shlaa23	Nelson Farm East	Housing	5.44
Shlaa24	North Hart Farm	Housing	8.81
Shlaa25	Butts Lane	Housing	1.36
Shlaa26	North of Voltigeur Drive	Housing	0.48
Shlaa27	East of Milbank Close	Housing	0.84
Shlaa28	North of Raby Arms Paddock	Housing	0.20
Shlaa29	Raby Arms Paddock	Housing	0.77
Shlaa30	Home Farm	Housing	2.41
Shlaa31	Glebe Farm	Housing	4.30
Shlaa32	Upper Warren West	Housing	8.48
Shlaa33	Upper Warren East	Housing	6.55
Shlaa34	Brewery Farm (part proposed to allocate)	Housing	22.34
Shlaa35	Potters Farm	Housing	11.54
Shlaa36	North of Elwick (part proposed to allocate)	Housing	3.44
Shlaa37	Quarry Farm West	Housing	19.32
Shlaa38	Quarry Farm East	Housing	22.72
Shlaa39	High Tunstall Farm	Housing	62.75
Shlaa41	Briarfields Paddock	Housing	1.81
Shlaa42	Southbrooke Farm	Housing	0.65
Shlaa44	Kipling Road	Housing	0.55
Shlaa45	West of Guliver Road	Housing	21.15
Shlaa46	Owton Grange Farm North	Housing	9.93
Shlaa48	Owton Grange Farm East	Housing	17.69
Shlaa50	Brierton Quarry	Housing	2.76
Shlaa51	Between Brierton Lane & Lyndsey Road	Housing	18.88
Shlaa52	Eaglesfield Road	Housing	3.38
Shlaa53	West of Eaglesfield Road	Housing	9.60
Shlaa54	Eskdale Road	Housing	0.46
Shlaa58	East of Queensway	Housing	3.26
Shlaa59	Greatham Allotments East	Housing	1.13
Shlaa60	Greatham land to the rear of Chestnut Row	Housing	0.38
Shlaa61	Egerton Terrace	Housing	0.10
Shlaa62	Greatham Station Terrace	Housing	1.01
Shlaa63	Hill View, Greatham	Housing	0.42
Shlaa64	Greatham West of the Grove	Housing	0.28
Shlaa68	Manor House Farm West	Housing	17.85
Shlaa70	Wynyard West	Housing	10.77
Shlaa72	Dalton Piercy North	Housing	5.12
Shlaa73	Dalton Piercy, Dalton Heights	Housing	0.11
Shlaa74	Dalton Piercy, South	Housing	2.94
Shlaa75	Three Gates Farm North	Housing	1.78
Shlaa76	Three Gates Farm South	Housing	0.95
Shlaa77	Oxford Road	Housing	0.78



Shlaa78	Clarkston Court	Housing	0.44
Shlaa79	Lealholme Road	Housing	1.06
Shlaa80	North Golden Flatts	Housing	1.98

9.2 ii. Also in this first pass of the test are sites that should be avoided and where risk is too great and there is no strategic planning objectives identified in the emerging Core Strategy. Using the sequential approach to flood risk these sites have been sieved out from been considered any further as potential allocations. These sites are colour coded in blue in the spreadsheet and are:

Site ID	Site Name	Proposed Use	Area(Ha)
Shlaa71	East of Dalton Piercy	Housing	0.97
Shlaa16	Council Depot	Housing	2.04
Shlaa65	Greatham Stockton Road	Housing	10.47
Shlaa57	Greatham Allotment West	Housing	1.65
Shlaa18	East Central Area	Housing	0.50
Shlaa65	Century Park	Housing	12.14

9.3 iii. At this stage some of the sites included a number of current employment sites that have been promoted through the SHLAA by their owners for potential housing sites. Due to this first pass of the sequential test and areas of high flood risk being identified as well as other sustainable development and planning objectives the following sites have been sieved out for consideration for housing (more vulnerable risk classification). As there are overarching strategic planning and economic regeneration strategy reasons why these sites need to be retained as part of the Borough's employment portfolio these sites have been proposed to be retained for employment use to be considered for less vulnerable employment uses (general industry allocations (B2) and business b1, docks and port related development). They will be considered further through the sequential process on this basis. This applies to the following sites and each one of them is considered in detail below:

Site ID	Site Name	Proposed Use following pass 1 of sequential test	Area(Ha)
Shlaa81	Brenda Road	General Industry	10.21
Shlaa2	Victoria Harbour East	Port Related Industry	4.51
Shlaa3	Victoria Harbour West	Port Related Industry	77.67
Shlaa12	Oaksway East	General Industry	2.78

9.4 **Brenda Road (Shlaa81):** This is a current (Local Plan) general industry allocation that has 43% of the site as part of the functional flood plain (Zone 3b) of the Stell Water course. The system is part of a critical drainage area confirmed as part of the Level 2 SFRA. This site was promoted by the owners in the Hartlepool SHLAA and has sustainability benefits given its urban location and proximity to existing services. Using the sequential test there is clearly suitable alternative sites for housing across the Borough that are at lower flood risk and no wider planning considerations that make this site critical to housing delivery. Additionally the Employment Land Review did not recommend this site for de-allocation and it is considered part of Hartlepool portfolio of available employment locations. Due to the flood risk it is proposed that this is to remain an employment allocation (less vulnerable uses) in the Core Strategy. The SFRA Technical report made

recommendations including keeping the Flood Zone 3 area free from development and retain as a green area. This site passes the Sequential Test for employment uses but would need to be considered in greater detail in a site specific FRA.

- 9.5 **Victoria Harbour East (Shlaa2) & West (Shlaa3):** The smaller East site has 4% in zone 2 86% of the site in zone 3a and the larger Western site has 2% of the site in zone 2 and 6% in zone 3a. It is a current (Local Plan) strategic mixed use site that had at one time a proposed masterplan to provide 3,500 housing units as part of a mixed use development. This masterplan has now been abandoned by the landowners as in late 2009 it became apparent that the mixed use regeneration site at Victoria Harbour was not going to deliver (in the short to medium term) any significant housing numbers. The port owners have indicated their intentions to focus on port-related development including offshore wind and sustainable energy solutions. This is fully supported by the Council. For these reasons these sites were not consider for housing as part of the sequential test. The site are a key part of the portfolio of employment land and are strategic to the economic future of Hartlepool as the economy is focused to a high value low carbon future and the working port and surrounding land that make up these sites are key to this. In March 2012 these sites were designated as Enterprise Zones. As is was proposed to allocate this land for less vulnerable employment and port which meets the sequential related uses these sites were not assessed in detail in the SFRA level 2.
- 9.6 **Oakesway East (Shlaa12):** 68% of this site is part of the functional floodplain Zone 3b as a result of the Middle Warren Watercourse overtopping Easington Road and following the topography and natural flow path along Holdforth Road to the site and wider industrial estate. This is attributed to debris build up on the trash screen of the watercourse culvert inlet to the Northern Area main drain. This site was considered for housing in the SHLAA for the emerging core strategy as it was recommended for de-allocation in the employment review. Using the sequential test there is clearly suitable alternative sites for housing across the Borough that are at lower flood risk. The site is wholly brownfield. The site and its associated flood risk was considered in more detail in the SFRA level 2. The level 2 SFRA made recommendations to mitigate this flood risk by maintenance to the trash screen or improvements to its design. However Oaksway East will be part of one of Hartlepool's Enterprise Zones and the Core Strategy will now allocated the site for less vulnerable employment uses as part of the wider industrial estate.
- 9.7 iv. One site was identified as having flood risk but was considered no further in the sequential test as the in the emerging spatial strategy the Council has identified this employment site for a water compatible use as a strategic multifunctional green wedge which would create a buffer between existing industry and housing and provide recreational and biodiversity improvements as well as reducing flood risk on site and potentially down stream of the watercourse located on site.
- 9.8 **Golden Flats (Emp7)** This is a currently (Local Plan) higher quality industrial allocation that has 7.35% of the site in the functional floodplain (Zone 3b) and is Council owned. While the SFRA level 1 only found a narrow corridor adjacent to the watercourse is shown within flood zone 3 it highlighted that the development of this site is an important consideration as it may increase

runoff into the Stell watercourse, potentially increasing flood risk down stream. The Council decided to use this land for recreation and to designate it as an urban green wedge which is to feature substantial tree planting. As this land is now to be used for water compatible development it is considered no further in the sequential test. It is likely that the tree planting and other work to this site will reduce the risk of surface water runoff into the Stell watercourse and be beneficial to flood risk in the longer term and on site down stream.

**10 Step 7 2<sup>nd</sup> Pass of the Sequential Test – Identify in which sites that the consequence of flooding can be reduced with substitution within the site.**

10.1 The following SHLAA sites were considered in the first pass of the sequential test and were found to have areas of flood risk (Zones 2 & 3) contained within these sites. As the Council wanted to explore them further as potential allocations to meet strategic housing and development need a second pass of the sequential test looked at whether substitution of land use within the sites could alleviate flood risk. Many of these SHLAA sites are large sites where only some of the overall developable area was ever considered for allocation in the Local Plan for housing. Many of the SHLAA sites in one particular area form part of what was suggested at preferred options stage to be Hartlepool's one strategic housing site for new housing. The SFRA level 1 did not suggest that any of these potential housing sites would need to be considered further in a level 2 study or that they were in danger of not meeting the requirements of the sequential test.

10.2 At this stage of the sequential test and due to flood risk and other planning considerations the Valley Drive and Manor Farm East (highlighted) sites were not considered any further for a potential allocation. Given the number of available sites identified with no flood risk (see 9.1) it is hard to justify taking these two sites further as there are sequentially preferable sites that have been rejected earlier in the process.

Site ID	Site Name	Total Area	Zone1 %	Zone2 %	Zone 3a%	Zone 3b%
Shlaa55	Claxton Farm West	71.22	98.12	0.08	0	1
Shlaa69	Wynyard North	140.54	94.83	0.49	0	4.68
Shlaa56	Claxton Farm East	29.84	87.45	2.92	0	9.63
Shlaa40	Valley Drive	35.24	95.79	2.11	0.72	1.37
Shlaa47	Owton Grange Farm West	18.39	90.96	1.11	0	7.93
Shlaa49	Owton Grange Farm South	14.09	94.25	1.46	0	4.29
Shlaa67	Manor House Farm East	95.1	96.34	2.36	0.09	1.21
Shlaa83	Coronation Drive	1.79	85.21	12.90	1.89	0
Shlaa43	Claremont Flats	0.63	96.37	2.93	0	0.71

10.3 Of the remaining 7 sites with flood risk the sequential test now considers if there are any alternative sites located elsewhere where flood risk is lower and has the potential to deliver these quantum's of development.

10.4 The four SHLAA sites 47, 49, 55, 56 must be considered together as they with four other SHLAA sites with no identified flood risk (46, 48, 52 and 53) make up the proposed strategic south western extension. This proposal is to provide 2,500 new homes in a masterplanned new community with its own

facilities, services and strategic multifunctional green wedge. This strategic site more than any other is critical to the delivery of the spatial vision and future growth of Hartlepool in the most sustainable way possible. While it is acknowledged that elements of this allocation could be located on sites with no flood risk this would lead to piecemeal development across the Borough which has been rejected for wider planning reasons, but mainly on the grounds of sustainability. Therefore taken in the context of the plan strategy it would be impossible to find a site or sites more sustainable to deliver the housing need that is being met at the south western extension.

- 10.5 For SHLAA site 69 Wynyard North it is proposed that only a very small element of this site is to be considered for housing. The identified flood risk areas are located in the area proposed to be retained for prestige employment land which already has planning permission where these issues were addressed. Therefore the sequential test has been met.
- 10.6 For SHLAA site 83 Coronation drive it is acknowledged that the site is relatively small at 1.79ha with a potential site yield of 44 dwellings suggested by the SHLAA. There are many alternative sites across the Borough that could provide this quantum of housing that have no flood risk (see 9.1). However this site is part of a portfolio of council owned land which includes commercial land at the sea front at Seaton which is proposed to be used in partnership with a private development partner to deliver the regeneration of Seaton. From the evidence base work and the 1<sup>st</sup> pass of the sequential test it is clear that there are no suitable alternative sites at Seaton with a lower flood risk that can deliver these homes. It is proposed that all of the area of flood risk is taken out from the developable part of the site. For these wider sustainability reasons the sequential test has been met.
- 10.7 SHLAA site 43 Claremont Flatts is currently housing and the owners who are registered social landlord want to redevelop in the future for more modern housing. Currently none of the developed area is at flood risk. It is acknowledged that there are many alternative sites across the Borough that could provide this quantum of housing that have no flood risk (see 9.1). However as this site is currently developed for housing and the site at flood risk is so small it can be justified as a site to allocate on the basis that all developable areas must be removed from flood risk.
- 10.4 As well as the site analysis above it is proposed that all of the flood Zone 2, 3a and 3b elements of the remaining sites are to be removed from any allocations for any built development and used for green infrastructure. Development of previously undeveloped land can provide excellent opportunities for Green Infrastructure. This includes mapping existing surface water flow pathways and keeping these areas open including the actual watercourses and associated drainage ditches and then exploring the potential to add attenuation to prevent flood risk for the development as well as reduce downstream flood risk. Pathways and cycle routes can be added to the long open green pathways to add community benefit. Section 5.4 of HBC Level 2 SFRA gives details of Green Infrastructure opportunities associated with potential new development. This has been assessed in more detail in the next step.

## **11 Step 8 Assess Yield and Layout Issues on remaining high risk sites to see if viable.**

- 11.1 When accessing the above potential housing sites following the removal and substitution of the identified flood risk areas for green infrastructure it will not affect the viability of any of the sites. This has been explored with the potential developers as the Core Strategy has progressed and has been prominent with the SHLAA sites 47, 49, 55, 56 which make up the planned strategic housing allocation (2,500 homes) at the South West Extension. At this strategic housing site the area of flood risk is related to the Greatham Beck watercourse. This watercourse and its associated areas of flood risk have been safeguarded from development as part of a new green wedge that will be an integral part of the development. If allocated this whole strategic site will be masterplanned with this identified flood being paramount to this work.

### **Conclusions to Sequential Test.**

- 11.2 It is considered that through steps 1 to 8 of this Sequential Test all of the housing sites proposed to be allocated in the Local Plan have passed the sequential test following the assessment of a wide selection of available sites through evidence base documents. Where there are elements of higher flood risk on larger sites these will be removed and substitution of the identified flood risk areas for green infrastructure. Employment sites Emp3 and Emp4 have also passed the sequential test. However the remaining employment sites need further investigation and will be the subject of the next steps.
- 11.3 To reflect this strategic sequential approach the following additional policies and text have been included or strengthened in the Core Strategy (Now the Local Plan) Publication Document February 2012.
- The inclusion of a detailed overarching flood risk policy CC4: Flood Risk. This policy includes the clear requirement for layouts within individual sites to be considered sequentially with regards to flood risk.
  - Explanation of on larger sites where there are small areas of flood risk locally adopting these areas for green infrastructure or other water compatible uses within or integrated within the wider site use at paragraph 6.25.
  - Statement at 6.26 reflected this overall step of the sequential test that more vulnerable development such as housing to be located outside of flood risk. Any areas of higher flood risk have been incorporated into green infrastructure.
  - Policy HSG2: The South West Extension Strategic Housing Site is a new detailed policy which outlines the quantum of development at this site which includes 45ha of multifunction green infrastructure managed as a strategic green wedge. The sites boundaries are identified on accompanying diagram 2. This green wedge as mentioned will contain the Greatham beck water course and its associated flood risk areas and give great opportunity to develop these for bio-diversity and recreational and leisure functions. The policy also stipulates that the detail of how this strategic site and green wedge will be developed will be detailed in a Masterplan and secured through planning conditions and legal agreements which is the agreed approach with the potential developers.
  - Policy NE1 Green Infrastructure includes a section on SuDS and physical mitigation measures and is supported by text at paragraphs 15.7-9.

**12 Identify the likelihood of the remaining sites passing the Exception test. Steps 9 & 10**

12.1 For the remaining sites (which are all for employment apart from the proposed Seaton sands mixed use development and the current hospital site that has the potential for housing) that need to be considered against the exceptions test they will be dealt with in detail below using a more focused area of search. With reference to areas of search Step 1 the area of search for employment land is more focused as it has all been previously allocated by earlier Local Plans and much of the undeveloped available sites are within the land holdings of existing users.

**1 Proposed Employment Sites at Tidal Flood Risk**

12.2 The largest area covers the southern part of the Borough where certain specialist industries and sites for general industry have been historically located and these areas are at risk from tidal flooding. The sites at risk include the proposed Tioxide site extension, the proposed new nuclear power station site, Graythorp, Tofts Farm, Tees Road Seaton and the Seaton Sands Mixed use site. These sites are at risk from tidal flooding from the Tees Estuary and the sites to the east may also be at risk directly from the North Sea. See figures 4 & 5 below.

Figure 4 Sites at risk of tidal flooding.

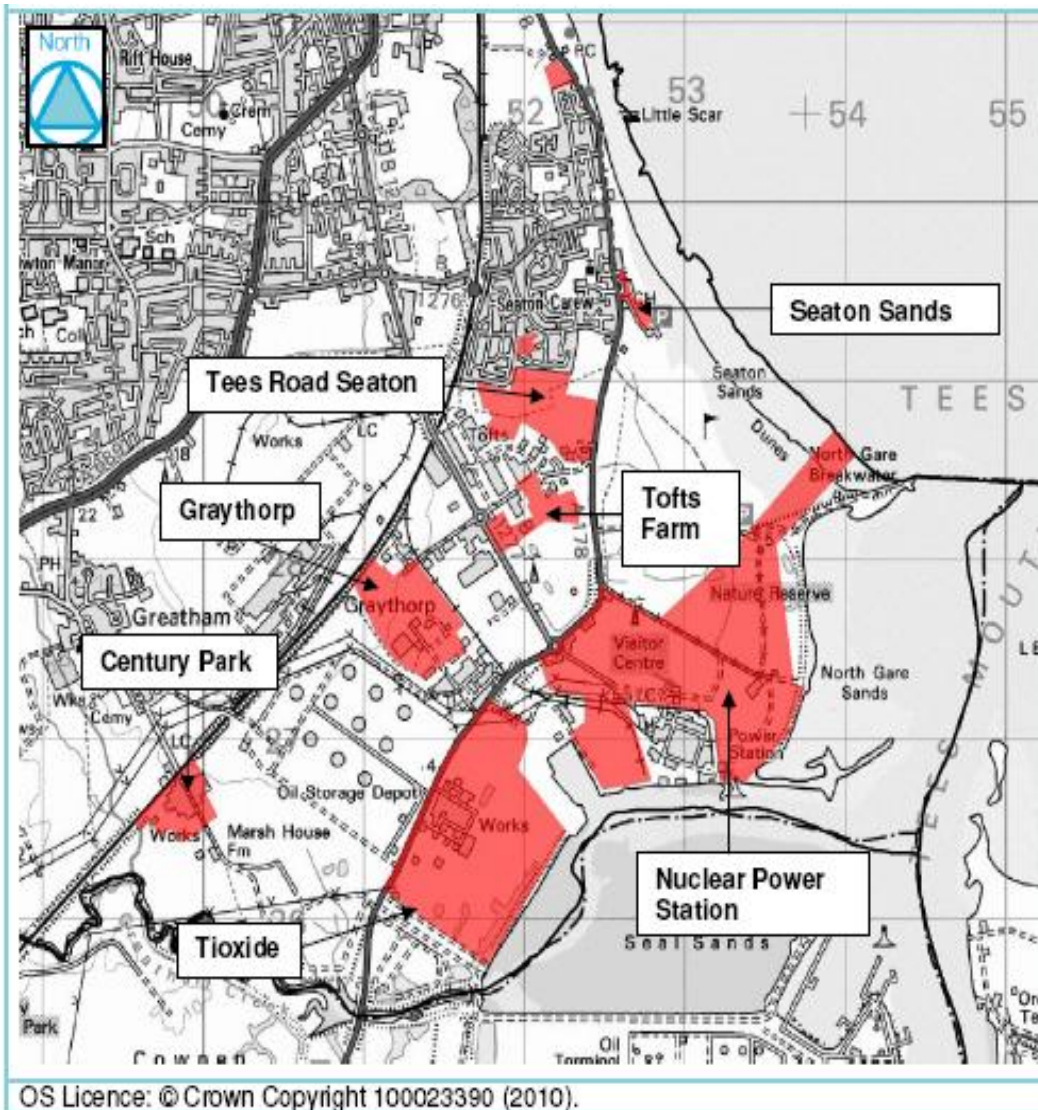
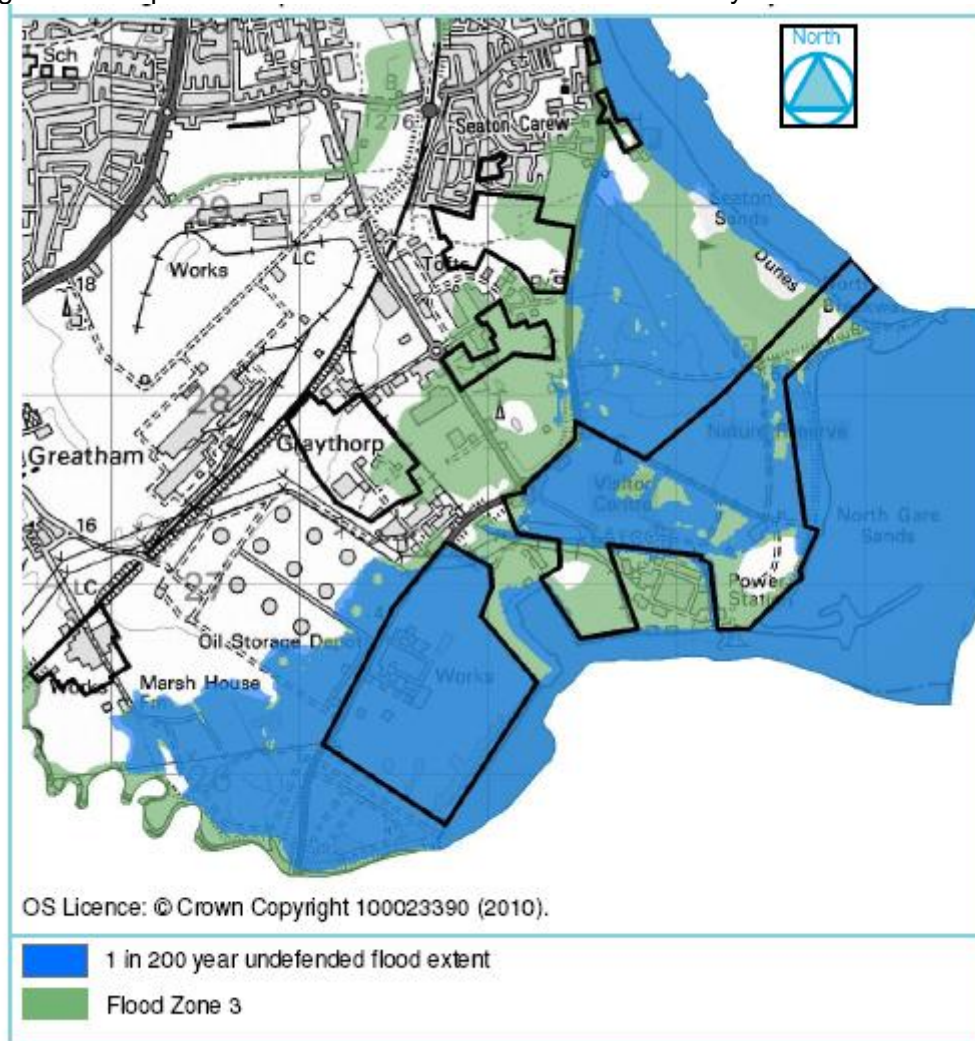




Figure 5 Comparison of the FZ3 and undefended 1 in 200 year extent



12.3 The following sites are subject to this area of flood risk and under D2 of PPS25 have the following development vulnerability.

Site ID	Site Name	Use	Floor Risk Vulnerability
Emp1	Tioxide	Specialist Industrial	Less Vulnerable as not a COMAH site
Emp2	Graythorpe	Industrial	Less Vulnerable
Other	New Power Station	Essential Infrastructure	Essential Infrastructure
Emp3	Tofts Farm	Industrial	Less Vulnerable
Emp4	Tees Road Seaton	Industrial	Less Vulnerable
Mix	Seaton Sands	mixed (leisure, retail, housing)	More/Less Vulnerable
Shlaa 65	Century Park	Removed from potential allocation following first pass of the sequential test.	

12.4 Therefore Seaton Sands and the New Power Station would need to meet the Exceptions tests.



12.5 The level 1 SRFA concluded that while the other sites are in flood zone 3 it was unlikely that the first pass of the sequential test could attempt to move these sites into areas of lower flood risk as they could not be located elsewhere given their type and size. Given their vulnerability levels they would be acceptable in flood zone 3 following a Flood Risk Assessment. However Century Park was removed as a potential housing site on this basis (see step 6 part ii.). In addition some of the sites require a coastal location in order to operate. It recommended that a SFRA Level 2 flood risk assessment was carried out on these areas in order to assess whether the sites will be safe once developed and would not increase flooding elsewhere and the details analysis can be found in section 3 of the SRFA Level 2 report.

12.6 The SFRA Level 2 considers the detailed nature of the flood hazard, taking into account flood risk management infrastructure and how this reduces the extent and severity of flooding when compared to the flood zones on the EA flood map. The Level 2 outputs has enabled the production of mapping showing flood outlines for different probabilities, impact, speed of onset and velocity variance of flooding taking into account of the presence and likely performance of flood defences.

12.7 Level 2 Main Findings for the sites at risk from Tidal Flooding

Site	Undefended Risk	Existing Risk	Development requirements/options
Century Park	Not at risk of flooding	Not at risk of flooding	Can allocate for development on flood risk grounds
Graythorp	Not at risk of flooding	Not at risk of flooding	Can allocate for development on flood risk grounds
Tofts Farm	Around half the site is at risk from the 1 in 200 yr plus CC event. A smaller section is at risk from the 1 in 1000 yr event. For the 1 in 200 plus CC event, flood depths would be between 0.5 and 1m. Flood hazard would be moderate.	Not at risk of flooding due to the natural defences of the North Gare sand dunes.	Can allocate for development. Only at risk from the 1 in 200 yr plus CC event if the North Gare sand dunes were breached. This is a possibility over the next 100 years due to the narrow width of protection. As flood risk to this site will only occur with the predicted 1 in 200 yr event in 100 years time (and if the dunes breached), mitigation measures should not be a requirement for this proposed industrial allocation as the life of the design life of the development is likely to be before the sea level rise affects the site.
Tees Road Seaton	Around half the site is at risk from the 1 in 200 yr plus CC event. A smaller section is at risk from the 1 in 1000 yr event. For the 1 in 200 plus CC event flood depths would be between 0.5 and 1m. Flood hazard would be moderate.	Not at risk of flooding due to the natural defences of the North Gare sand dunes.	Can allocate for development. Only at risk from the 1 in 200 yr plus CC event if the North Gare sand dunes were breached. This is a possibility over the next 100 years due to the narrow width of protection. As flood risk to this site will only occur with the predicted 1 in 200 yr event in 100 years time (and if the dunes breached), mitigation measures would not be required for this proposed industrial allocation.
Seaton Sands development site	Around half the site is at risk from the 1 in 200 yr plus CC event. A smaller section is at risk from the 1 in 1000 yr event. For the 1 in 200 plus CC event flood depths would be between 0.5 and 1m. Flood hazard would be moderate.	Around half the site is at risk from the 1 in 200 yr plus CC event. Flood depths would be between 0 and 1m for this event with a moderate to low flood hazard.	As only part of this site is at risk from the 1 in 1000 year undefended flood event (equivalent to Flood Zone 2), it should be possible to allocate this site on flood risk grounds. The 1 in 200 yr plus CC event existing risk should be mitigated against. The most straightforward way of managing this is by land and floor raising above the 1 in 200 yr plus CC flood depth (raised by around 0.5m). Alternatively, the crest wall could be raised by at least 300mm. A wave overtopping assessment would be required during the FRA for this site.
Tioxide land	If the Greatham Creek defences and Greenabella Sea Wall were not there, this area would be at risk from the 1 in 200 year event. Flood depths for the 1 in 200 yr plus CC event would be over 2m and flood hazard would be extreme.	With the flood defences in place, this area would only be at risk from the 1 in 200 yr plus CC event. However, the flood depths would still be over 2m and flood hazard extreme.	An extension of the Tioxide works has already taken place. Further expansion is not planned in the short and medium term. If expansion goes ahead in the long term, the site is at risk from deep hazardous flooding. Significant land raising (2-3m) and/or improving the flood defence would need to take place as the land is very low lying (around 1.5m AOD).
Nuclear Power Station	Two thirds of the site at risk from the 1 in 200 year event (if the North Gare sand dunes were removed/breached).	With the North Gare sand dunes in place, the area would only be at risk from	The proposed nuclear power station site is dependent on the North Gare dunes for flood protection. The site is also dependant on the Seaton Sands dunes, although breaching here is less likely. During the detailed planning stage, a more detailed assessment of

	<p>The remainder of the site (which is on higher ground) is at risk from the 1 in 200 yr plus CC event. Parts of the site would have flood depths over 2m, the other parts 0 to 1m. Flood hazard ranges between moderate and extreme (depending on the elevation of the land).</p>	<p>the 1 in 200 plus CC event from a flood pathway passing over the existing power station and from overtopping/breaching the Greenabella Sea Wall. Due to the low volume of flood water, flood depths would be between 0 and 0.5m, flood hazard would be low to moderate.</p>	<p>the ability of the dunes to withstand an extreme tide event and the flood hazard caused by a breach should be undertaken. Any new power station should be resilient enough (structurally) to withstand a breach hazard. In order to mitigate the breach hazard and the depth of flooding if the dunes were removed, land raising would be required. Some parts of the site are at risk of flood depths over 2m (this part of the site is elevated at around 2m AOD). Less important/non operational parts of the site (e.g. car parks, open space) could be located in this low lying area (where the nature reserve is), otherwise, significant land raising would be required. 1-2m of land raising in other, higher parts of the site would remove flood risk from the site up to the undefended 1 in 200 yr plus CC flood event. Alternatively, part land raising and part flood resilience measures could be designed in. However, this would be dependent on whether flood resilience measures are possible for a nuclear power station.</p>
--	--	--	---

## 12.8 Seaton Sand Exceptions Test.

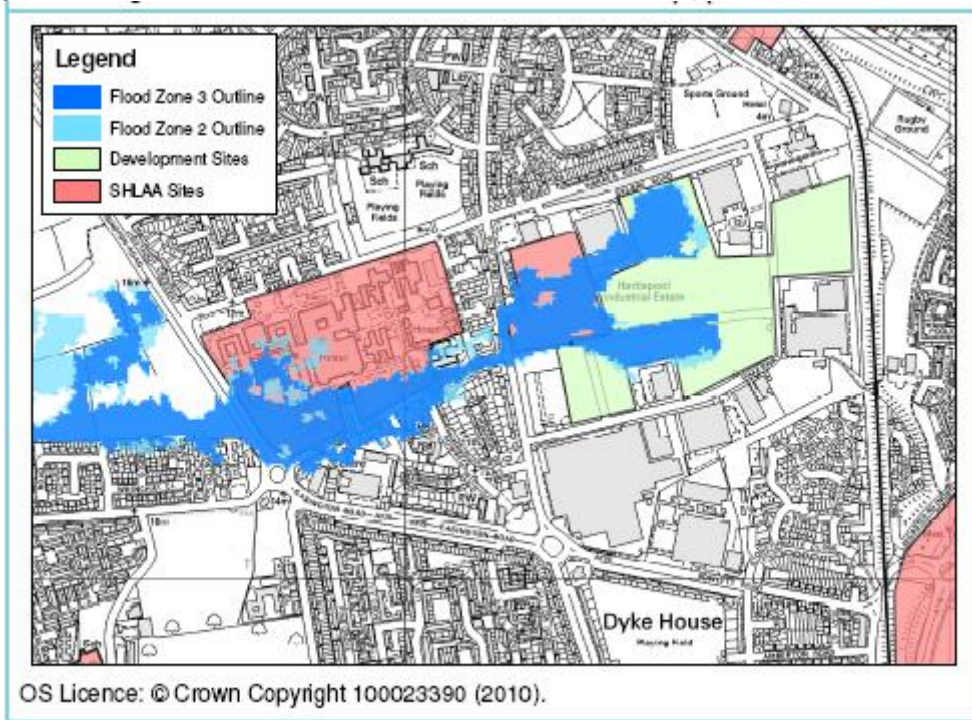
<p>Site Description – This HBC owned site is currently used predominantly as a car park and has a smaller cleared site to the north that was formerly a fair ground. This is a key regeneration site at Seaton Carew where a mixed use commercial/leisure/retail/tourist/residential development is proposed. This could involve an element of residential so the site must need an exceptions test.</p>
<p>Flood Zones 1, 2,3a – Exceptions test needed.</p>
<p>Nature of the Risk – SFRA level 2 At the 1 in 200 year plus climate change this sites floods to depths of 0 to 1m due to overtopping of the sea wall and small crest wall. As the site is small and only a small part is at risk above 0.5mm it seems reasonable that land and floor raising is the most practical option.</p>
<p><b>Test A – it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA where one has been prepared.</b></p> <ul style="list-style-type: none"> <li>• This is key regeneration site for the sea-side settlement of a Seaton and is part of ambitious plans to transform Seaton.</li> <li>• This site as well as other on the Seafront and across Seaton will be considered in a Seaton SPD Masterplan currently being developed by HBC.</li> <li>• It will be an attractor for visitors that will have a knock for other businesses in the area and provide jobs at a sustainable location.</li> <li>• The housing element if included can be located on upper floors of development if necessary.</li> </ul>
<p><b>Test B - a site specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking into account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.</b></p> <ul style="list-style-type: none"> <li>• HBC in conjunction with partners including the EA are currently in the process of building a new sea wall that will provide a tidal flood defence against this identified area of flood risk.</li> <li>• A site specific FRA will be required on this site and have to comply with EA requirements.</li> </ul>
<p><b>Exceptions Test Passed –</b> The Council considers this site to have passed part A of the exceptions test. The new sea wall will provide adequate flood risk mitigation for generations and any developer will still need to carry out an FRA that meet the satisfaction of the EA and HBC.</p>

12.9 For the potential site for a new Nuclear Power Station the Environment Agency has advised that a Exceptions Test is not required at the local level as it has already gone through the allocation process at the national level.

## 2 Hartlepool Hospital and Oaksway Industrial Estate.

12.10 The Slake/Middle Warren watercourse puts parts of the Hartlepool Hospital Shlaa13, Oaksway Housing Shlaa12 and Oaksway Industrial Estate Emp9 within flood zone 3 see map below. As referenced in Step 6 the Shlaa12 site is now considered for employment for strategic planning and economic development reasons and forms an enterprise zone with the wider Emp9 site. Before this watercourse reaches the sites it enters a culvert. The SFRA Level 1 concluded that the flood zone here appears to have been derived by modelling the approximate flow route if the culvert surcharged. These sites were subject to more detailed analysis as part of the SFRA level 2 to determine the validity of the flood zone in this section.

Figure 6 Middle Warren Watercourse Flood Zones and potential allocations.



12.11 The following sites are subject to this area of flood risk and under D2 of PPS25 have the following development vulnerability.

Site ID	Site Name	Use	Flood Risk Vulnerability
Shlaa13	Hartlepool Hospital Site	residential	More Vulnerable
Shlaa12	Oaksway Housing	Industrial	Less Vulnerable
Emp9	Oaksway	Industrial	Less Vulnerable

**12.12 Therefore due to vulnerability the Hartlepool Hospital site would need to meet the Exceptions tests.**

12.13 Section 4 of SFRA gives a detailed analysis of the validity of this area of flood risk including an assessment of potential flows, culvert capacity, main drain capacity and suggested management. In summary the watercourse drains into a large culvert known as the Northern Area Main Drain at Easington Road before reaching the sites. This drain takes the water north and out to the North Sea. The flood zones are derived from potential overtopping from the culvert at Easington Road. The key findings of this analysis can be read

below but the level SFRA 2 concludes that all of these sites are not at risk of flooding.

12.14

### Conclusion

The existing Flood Zone outlines indicate the Hartlepool Hospital SHLAA site along with the Oakesway Industrial Estate development site are at risk of flooding. The flooding mechanisms to the site are attributed to debris build up on the trash screen of the MWW culvert inlet to the NAMD.

The analysis of flood risk has been completed using available data and appropriate assumptions. If there is no debris build up on the trash screen, then there is sufficient capacity in this system to discharge the 100 year design event through the NAMD. The development sites in this scenario would therefore not be at risk of flooding.

Where a significant build up of debris is present on the trash screen, the development sites are at risk of flooding. This residual risk can be managed through a range of options including maintenance or improvements to the trash screen design.

12.15 **Therefore the conclusion of the SFRA level 2 is that the Hartlepool Hospital site would not need to meet the Exceptions tests.**

**13 Step 11 & 12 Producing an Evidence Base & Allocate Sites in the Core Strategy**

### Conclusions

13.1 This document demonstrates how Hartlepool Borough Council has used the Sequential Approach to flood risk in allocating sites for housing and employment as stipulated in the National Planning Policy Framework. This work forms a key piece of the evidence base underpinning the Hartlepool Local Plan.

13.2 Using this step by step approach sites have been steered to areas a lowest flood risk. This is particularly the case for housing where all sites have been located in FZ1 or have the areas of higher flood risk locally allocated for green infrastructure where mitigation can take place. This has approach has been included in the policies and wording of the Local Plan as detailed in Step 8. Specifically an there is a detailed overarching flood risk Policy (CC4) which includes the clear requirement for layouts within individual sites to be considered sequentially with regards to flood risk.

13.3 This strategic sequential approach does not preclude the need for site specific Flood Risk Assessments and policy CC4 includes the need for appropriate site-specific FRAs where necessary.



**APPENDIX 1 SEQUENTIAL TEST SPREADSHEET  
SUMMARY TABLE**

			Flood Zone Coverage								Surface Water Vulnerability					
			Flood Zone 1		Flood Zone 2		Flood Zone 3a		Flood Zone 3b		Low Vulnerability		Intermediate Vulnerability		High Vulnerability	
			Number of Sites	Area (ha)	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	% at risk	Area (ha)	% at risk
Total	95	1374.7	1064.9	90	15.6	20	260.5	15	33.7	18	226.3	15.5	92.4	6.4	16.0	0.6

**MAIN TABLE**

Proposed Use Type from evidence base	Site ID	Name and/or reference	Ownership	Flood Zone Coverage										Surface Water Vulnerability						Comments/May Forward	Allocate considering wider planning and sustainability objectives	Wider planning & sustainability objectives justification/reasons for allocation or non allocation
				Flood Zone 1			Flood Zone 2			Flood Zone 3a		Flood Zone 3b		Low Vulnerability		Intermediate Vulnerability		High Vulnerability				
				Area (ha)	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)			
Specialist Industry	Emp1	Tioxide	Private	89.88	0.00	0.00	0.00	0.00	89.88	100.0	0.00	0.00	26.96	30.00	10.84	12.07	0.03	0.03	Will be assessed in SFRA Level 2	Yes	Specialist location need for these key industries	
Specialist Industry	Emp2	Graythorp	Private	28.09	22.78	81.10	0.38	1.34	4.93	17.56	0.00	0.00	3.70	13.17	0.63	2.25	0.00	0.00	Will be assessed in SFRA Level 2	Yes	Specialist location need for these key industries	
Nuclear Power Station	Other	New Power Station	Private	143.68	7.79	5.42	2.86	1.99	133.03	92.59	0.00	0.00	32.44	22.58	10.37	7.21	0.38	0.26	Will be assessed in SFRA Level 2	Yes	Specialist location need for these key industries/essential	

																				infrastructure	
General Industry	Emp3	West of Brenda Road	Private	25.57	25.57	100.0	0.00	0.00	0.00	0.00	0.00	0.00	2.98	11.64	0.14	0.55	0.00	0.00	Appropriate to allocate	Yes	
General Industry	Emp4	Tofts Farm	Private	10.27	0.02	0.18	0.04	0.43	10.21	99.39	0.00	0.00	2.26	22.03	0.92	8.92	0.00	0.00	Will be assessed in SFRA Level 2	Yes	An existing employment commitment which is part of the strategic portfolio of employment sites which has some existing capacity for further development
General Industry	Emp5	Tees Road Seaton	Private	23.86	12.77	53.53	2.88	12.07	8.21	34.40	0.00	0.00	2.78	11.66	0.12	0.51	0.00	0.00	Will be assessed in SFRA Level 2	Yes	An existing employment commitment which is part of the strategic portfolio of employment sites which has some existing capacity for further development
Mixed Use	Mix	Seaton Sands	Private	2.38	0.31	13.12	0.20	8.39	1.87	78.48	0.00	0.00	0.42	17.47	0.12	5.15	0.00	0.00	Will be assessed in SFRA Level 2	Yes	Key development site for the Regeneration of Seaton Carew.
General Industry	Emp6	Park View East	Private	19.54	14.57	74.55	0.00	0.00	0.00	0.00	4.97	25.45	9.91	50.72	6.65	34.05	2.49	12.73	Will be assessed in SFRA Level 2	Yes	An existing employment commitment which is part of the strategic portfolio of employment sites which has some existing capacity for further development
Industry	Emp7	Golden Flatts	Private	20.89	19.36	92.65	0.00	0.00	0.00	0.00	1.54	7.35	2.49	11.92	0.44	2.10	0.00	0.00	proposed to re-allocate for openspace/woodland	No	Taken out because of flood risk and a strategic planning objective to create a new green wedge.

Higher Quality	Emp8	Queens Meadow	Private	68.71	68.71	100.0	0.00	0.00	0.00	0.00	0.00	0.00	12.66	18.43	2.95	4.29	0.03	0.04	Appropriate to allocate	Yes	
General Industry	Emp9	Oakway	Private	12.16	8.77	72.12	0.52	4.24	0.00	0.00	2.88	23.65	6.83	56.20	4.16	34.19	0.05	0.37	Will be assessed in SFRA Level 2	Yes	An existing employment commitment which is part of the strategic portfolio of employment sites which has some existing capacity for further development
General Industry	Emp10	South of Seaton Lane	Private	6.93	6.72	96.90	0.00	0.00	0.00	0.00	0.22	3.10	1.22	17.63	0.27	3.93	0.00	0.00	Will be assessed in SFRA Level 2	Yes	An existing employment commitment which is part of the strategic portfolio of employment sites which has some existing capacity for further development
Housing	Shlaa14	Springwell School	Council	0.51	0.51	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.42	81.67	0.00	0.00	0.00	0.00	Appropriate to allocate	No	
Housing	Shlaa71	East of Dalton Piercy	Private	0.97	0.95	97.88	0.01	1.13	0.00	0.45	0.01	0.54	0.04	4.26	0.02	1.70	0.00	0.00	Avoid allocation for housing	No	Taken out because of flood risk.
Housing	Shlaa29	Raby Arms Paddock	Private	0.77	0.77	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.13	16.29	0.07	8.42	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa30	Home Farm	Private	2.41	2.41	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa31	Glebe Farm	Private	4.30	4.30	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa15	Jesmond Road School	Council	0.50	0.50	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa4	Hartlepool Water HQ	Private	1.24	1.24	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.21	16.70	0.01	0.93	0.00	0.00	Appropriate to allocate	No	Owners have retained for there current use.
Housing	Shlaa16	Council Depot	Council	2.04	0.00	0.00	0.00	0.00	2.04	100.0	0.00	0.00	1.85	90.51	1.27	62.44	0.00	0.00	Avoid allocation for housing	No	Taken out because of flood risk.
Housing	Shlaa41	Briarfields	Council	1.81	1.81	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.01	0.00	0.00	Appropriate to	Yes	

		Paddock																	allocate		
Housing	Shlaa36	North East of Elwick	Private	3.44	3.44	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.07	1.96	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes, Small part of site	
Housing	Shlaa51	Between Brierton Far	Private	18.88	18.88	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.13	6.00	0.14	0.73	0.00	0.00	Appropriate to allocate	No	Poor Sustainability when considering wider planning objectives
Housing	Shlaa55	Claxton Farm West	Private	71.22	70.45	98.92	0.06	0.08	0.00	0.00	0.71	1.00	7.53	10.57	1.33	1.86	0.00	0.00	Appropriate to allocate but remove areas of zone 2 and 3b from site as use as green infrastructure	Yes	Part of the strategic south west extension of 2,500 dwellings which will be masterplanned with flood risk being a key issue. Section 11.1
Housing	Shlaa58	East of Queensway	Private	3.26	3.26	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.58	17.74	0.02	0.57	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa32	Upper Warren West of	Private	8.48	8.48	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.99	11.64	0.71	8.39	0.24	2.87	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa33	Upper Warren East of	Private	6.55	6.55	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.66	10.05	0.33	5.10	0.18	2.80	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa69	Wynyard North	Private	140.54	133.27	94.83	0.69	0.49	0.00	0.00	6.58	4.68	12.81	9.11	5.84	4.16	1.95	1.39	Appropriate to allocate but remove areas of zone 2 and 3a/3b from site as use as green infrastructure	Yes, Small part of site for housing and majority of site to retain for prestige employment	The identified flood risk areas are located in the area proposed to retain for prestige employment land which already has planning permission where these issues were addressed
Housing	Shlaa70	Wynyard West	Private	10.77	10.77	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.57	5.25	0.22	2.03	0.00	0.01	Appropriate to allocate	Yes	
Housing	Shlaa39	High Tunstall Farm	Private	62.75	62.75	100.0	0.00	0.00	0.00	0.00	0.00	0.00	3.66	5.84	0.91	1.45	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning



																					objectives
Housing	Shlaa20	Hart Station	Private	2.22	2.22	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.25	11.46	0.12	5.45	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa77	Oxford Road	Private	0.78	0.78	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.77	99.15	0.30	38.64	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa76	Three Gates Farm South	Private	0.95	0.95	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa75	Three Gates Farm North	Private	1.78	1.78	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa74	Dalton Piercy South	Private	2.94	2.94	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.44	0.00	0.15	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa72	Dalton Piercy North	Private	5.12	5.12	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa73	Dalton Piercy Dalton Heights	Private	0.11	0.11	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa56	Claxton Farm East	Private	29.84	26.09	87.45	0.87	2.92	0.00	0.00	2.87	9.63	7.95	26.64	5.42	18.16	2.74	9.20	Appropriate to allocate but remove areas of zone 2 and 3b from site as use as green infrastructure	Yes	Part of the strategic south west extension of 2,500 dwellings which will be masterplanned with flood risk being a key issue. Section 11.1
Housing	Shlaa34	Brewery Farm	Private	22.34	22.34	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.84	8.22	0.17	0.76	0.00	0.00	Appropriate to allocate	Yes, small part of the site	
Housing	Shlaa21	Middlethorpe Farm	Private	9.39	9.39	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.77	18.83	1.34	14.32	0.59	6.28	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa62	Greatham Station Terrace	Private	1.01	1.01	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.14	14.17	0.10	10.19	0.00	0.00	Appropriate to allocate	Yes	

Housing	Shlaa40	Valley Drive	Private	35.24	33.76	95.79	0.74	2.11	0.26	0.72	0.48	1.37	12.33	35.00	9.94	28.20	5.20	14.74	Appropriate to allocate but remove areas of zone 2 and 3a/3b from site as use as green infrastructure	No	Not considered further due to wider planning objectives.
Housing	Shlaa61	Egerton Terrace	Private	0.10	0.10	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa 60	Greatham Rear of Chestnut	Private	0.38	0.38	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa65	Greatham Stockton Ro	Private	10.47	9.27	88.51	0.09	0.88	0.00	0.00	1.11	10.60	1.19	11.35	0.81	7.72	0.00	0.00	Avoid allocation for housing	No	Taken out because of flood risk and wider planning objectives.
Housing	Shlaa64	Greatham West of The	Private	0.28	0.28	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa59	Greatham Allotments East	Private	1.13	1.13	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.55	48.73	0.23	20.21	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa57	Greatham Allotments West	Private	1.65	1.53	92.45	0.02	1.12	0.00	0.00	0.11	6.43	0.31	18.47	0.23	13.92	0.00	0.00	Avoid allocation for housing	No	Taken out because of flood risk.
Housing	Shlaa50	Brierton Quarry	Private	2.76	2.76	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.49	17.63	0.40	14.56	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa24	North Hart Farm	Private	8.81	8.81	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.47	5.32	0.09	1.04	0.00	0.01	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa25	Butts Lane	Private	1.36	1.36	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa13	Hartlepool Hospital	Private	10.87	7.43	68.34	0.78	7.22	0.00	0.00	2.66	24.44	1.94	17.81	0.31	2.88	0.00	0.00	Will be assessed in SFRA Level 2	Yes	Key development site for new homes that is predicated on the hospital being relocated. The SRFA level 2 finds a solution to mitigate this flood risk.

Housing	Shlaa26	North of Voltigeur D	Private	0.48	0.48	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa27	East of Millbank Clo	Private	0.84	0.84	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.32	37.69	0.07	8.67	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa35	Potters Farm	Private	11.54	11.54	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.18	10.18	0.89	7.71	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa37	Quarry Farm West	Private	19.32	19.32	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.53	0.26	1.33	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa38	Quarry Farm East	Private	22.72	22.72	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.61	7.09	0.94	4.15	0.71	3.11	Appropriate to allocate	No	Was proposed for housing at preferred options stage but taken out due to poor sustainability when considering wider planning objectives
Housing/General Industry	Shlaa81	Brenda Road	Private	10.12	5.70	56.31	0.00	0.00	0.00	0.00	4.42	43.69	3.39	33.48	1.34	13.25	0.00	0.00	Will allocate for less vulnerable uses and avoid development in 3b zone.	Yes for General Industry	An existing employment commitment which is part of the strategic portfolio of employment sites which has capacity for further development
Housing	Shlaa47	Owton Grange Farm We	Private	18.39	16.72	90.96	0.20	1.11	0.00	0.00	1.46	7.93	2.08	11.29	1.65	8.99	0.72	3.91	Appropriate to allocate but remove areas of zone 2 and 3b from site as use as green infrastructure	Yes	Part of the strategic south west extension of 2,500 dwellings which will be masterplanned with flood risk being a key issue. Section 11.1

Housing	Shlaa49	Owton Grange Farm So	Private	14.09	13.28	94.25	0.21	1.46	0.00	0.00	0.60	4.29	4.16	29.53	1.32	9.38	0.00	0.00	Appropriate to allocate but remove areas of zone 2 and 3b from site as use as green infrastructure	Yes	Part of the strategic south west extension of 2,500 dwellings which will be masterplanned with flood risk being a key issue. Section 11.1
Housing	Shlaa48	Owton Grange Farm Ea	Private	9.93	9.93	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.66	6.64	0.16	1.63	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa46	Owton Grange Farm No	Private	17.69	17.69	100.0	0.00	0.00	0.00	0.00	0.00	0.00	2.81	15.90	0.99	5.59	0.00	0.00	Appropriate to allocate	Yes	
Housing/Port Related Industry	Shlaa2	Victoria Harbour Eas	Private	4.51	0.40	8.75	0.20	4.39	3.92	86.85	0.00	0.00	0.14	3.21	0.02	0.46	0.00	0.00	Will allocate for less vulnerable and water compatible uses.	Yes for Port related Industry	Specialist port related land which is key to the economic strategy of Hartlepool and is water compatible or lower vulnerability.
Housing/Port Related Industry	Shlaa3	Victoria Harbour Wes	Private	77.67	70.71	91.04	2.14	2.75	4.82	6.21	0.00	0.00	16.77	21.60	4.23	5.45	0.05	0.07	Will allocate for less vulnerable and water compatible uses.	Yes for Port related Industry	Specialist port related land which is key to the economic strategy of Hartlepool and is water compatible or lower vulnerability.
Housing	Shlaa45	West of Gulliver Road	Private	21.15	21.15	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.27	0.01	0.03	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa23	Nelson Farm East	Private	5.44	5.44	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.51	9.43	0.06	1.06	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa22	Nelson Farm West	Private	13.44	13.44	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.66	12.35	0.42	3.09	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives

Housing	Shlaa67	Manor House Farm Eas	Private	95.10	91.61	96.34	2.24	2.36	0.09	0.09	1.15	1.21	13.43	14.12	8.56	9.00	0.62	0.65	Appropriate to allocate but remove areas of zone 2 and 3a/3b from site as use as green infrastructure	No	Not considered further due to poor sustainability, wider planning objectives and flood risk.
Housing	Shlaa68	Manor House Farm Wes	Private	17.85	17.85	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.48	8.28	0.38	2.12	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa42	Southbrook Farm	Private	0.65	0.65	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Poor sustainability when considering wider planning objectives
Housing	Shlaa11	Rear of Bruntoft Ave	Council	0.41	0.41	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.06	14.20	0.02	4.26	0.01	2.74	Appropriate to allocate	No	Not consider a suitable site
Housing	Shlaa63	Hill View	Private	0.42	0.42	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Protected green space
Housing	Shlaa80	North, Golden Flatts	Council	1.98	1.98	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.28	14.36	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa17	East Central Area (W)	Council	0.67	0.63	94.10	0.00	0.00	0.04	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Test not needed	n/a	Site is now developed
Housing	Shlaa8	Britmag Main	Private	21.48	21.48	100.0	0.00	0.00	0.00	0.00	0.00	0.00	2.28	10.64	0.82	3.82	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa7	Britmag Middle	Private	3.61	3.61	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.53	14.75	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa6	Britmag Small	Private	1.19	1.19	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.08	6.38	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing/General Industry	Shlaa12	Oaksway Industrial E	Private	2.78	0.84	30.20	0.05	1.89	0.00	0.00	1.89	67.92	0.91	32.70	0.04	1.26	0.00	0.00	Will be assessed in SFRA Level 2 and considered for less vulnerable uses	Yes for General Industry	An existing employment commitment which is part of the strategic portfolio of employment sites which has capacity for further development
Housing	Shlaa20	Former Niromax Site	Private	0.77	0.00	0.00	0.16	20.56	0.62	79.44	0.00	0.00	0.77	100.00	0.63	81.19	0.00	0.00	Test not needed	n/a	Has planning permission where flood risk was fully considered
Housing	Shlaa52	Eaglefield Road	Private	3.38	3.38	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.18	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	

Housing	Shlaa78	Clarkston Court	Private	0.44	0.44	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.17	39.27	0.04	9.71	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa18	East Central Area (E	Council	0.50	0.00	0.00	0.00	0.00	0.50	100.0	0.00	0.00	0.05	9.66	0.00	0.00	0.00	0.00	Avoid allocation for housing	No	Taken out because of flood risk.
Housing	Shlaa9	Behind 224-246 West	Council	1.50	1.50	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.07	4.52	0.03	2.00	0.00	0.00	Appropriate to allocate	No	Not considered a suitable site for development
Housing	Shlaa1	Friarage Manor	Private	0.68	0.68	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa83	Coronation Drive	Council	1.79	1.53	85.21	0.23	12.90	0.03	1.89	0.00	0.00	0.49	27.49	0.14	7.70	0.00	0.00	Appropriate to allocate but remove areas of zone 2 and 3a from site as use as green infrastructure	Yes	Key site as part of a portfolio of sites that make up the council's regeneration strategy for Seaton.
Housing	Shlaa44	Kipling Road	Council	0.55	0.55	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa43	Claremont Flats	Private	0.63	0.61	96.37	0.02	2.93	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate but remove areas of zone 2 and 3b from site as use as green infrastructure	Yes	Currently developed as housing and the owners want to redevelop. Must remove all developable areas from flood risk.
Housing	Shlaa79	Lealhom Road	Private	1.06	1.06	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa54	Eskdale Road	Council	0.46	0.46	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	No	Not consider a suitable site as public open space
Housing	Shlaa82	Elizabeth Way	Council	1.21	1.21	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa10	Former St Hilds Scho	Council	3.81	3.81	100.0	0.00	0.00	0.00	0.00	0.00	0.00	1.79	47.04	0.78	20.58	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa5	Old Cemetery Road	Private	0.59	0.59	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa53	West of Eaglesfield	Private	9.60	9.60	100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.37	0.11	1.14	0.00	0.00	Appropriate to allocate	Yes	
Housing	Shlaa65	Century Park	Private	12.14	12.02	0.00	0.03	0.21	0.09	0.70	0.00	0.00	2.04	16.83	0.49	4.06	0.02	0.19	remove allocation	No	Taken out because of flood risk and wider planning objectives.

**KEY**

	Need further Sequential testing and potential Exceptions test (SFRA level 2 required)
	Removed from potential allocation following Screening (1st pass)
	Change of use to water compatible Development
	Meets Sequential test at screening stage(1st Pass)
	Meets Sequential test by substituting within site boundary (2nd Pass)
	Has Planning Permission
	Not considered for housing following screening (1st pass) but retained as a potential employment site
	Site has now been developed

