

Draft City Plan Part One

Brighton & Hove City Council's Local Development Framework

May 2012

Sequential and Exception Tests



Brighton & Hove
City Council

Sequential and Exception Tests for the Brighton & Hove City Plan

Introduction

The Council's overarching spatial strategy for the city to 2030 is to direct future development to eight broad areas of the city where identified capacity exists to accommodate significant levels of development. These areas are identified in the emerging City Plan, part of the Brighton & Hove Local Development Framework, as 'Development Areas' (DAs).

The DAs are proposed to accommodate a significant amount of development because they contain opportunities for change, they can deliver development of citywide or regional importance and/or because they are in need of regeneration. The eight DAs are:

- DA1 - Brighton Centre and Churchill Square Area;
- DA2 - Brighton Marina, Gas Works, and Black Rock Area;
- DA3 - Lewes Road Area;
- DA4 - New England Quarter and London Road Area;
- DA5 - Eastern Road and Edward Street Area;
- DA6 - Hove Station Area;
- DA7 - Toad's Hole Valley;
- DA8 - Shoreham Harbour Area.

The Council first submitted a City Plan, then known as the 'Core Strategy', in 2010. However, the plan was subsequently formally withdrawn and elements of it are now being redrafted to reflect new evidence and national planning guidance. This process has resulted in changes to housing delivery figures and the proposed distribution of the new housing, including the addition of Toad's Hole Valley as a DA and significantly reduced housing numbers at Shoreham Harbour¹. The timescale of the Plan has also been extended to 2030.

Government guidance in the National Planning Policy Framework (NPPF) and the PPS25 Practice Guide² does not aim to prevent all development on sites liable to flooding, accepting that some form of development may have to be located there. The focus is instead to minimise risks to people and property by seeking to direct development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere³.

¹ The South East Plan includes an allocation of up to 10,000 dwellings at Shoreham Harbour. This scale of development is of regional significance so the Sequential (and if applicable Exception Test) needed to be applied in that context. Now that the housing numbers for Shoreham are significantly reduced then the Sequential Test can be applied at the local level.

² The PPS25 Practice Guide remains in place despite PPS25 itself being withdrawn.

³ NPPF, para. 100.

The risk of sea and river flooding of an area is categorised according to the probability of flooding occurring in any given year. The categories are summarised in Table 1⁴:

Flood zone	Risk of Flooding
1	Low probability - less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
2	Medium probability - between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year.
3a	High probability - 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.
3b	Functional floodplain - land where water has to flow or be stored in times of flood.

Table 1 – Summary of Flood Risk Zones

Table 2 shows which type of development can be appropriately located in each flood zone, and where the Exception Test is required⁵. Appendix 1 lists the types of development that are classified under each flood risk vulnerability classification.

Flood risk vulnerability classification	Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood Zone	Zone 1	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓
	Zone 3a	Exception Test required	✓	x	Exception Test required
	Zone 3b	Exception Test required	✓	x	x

Table 2 – Flood risk vulnerability and flood zone ‘compatibility

Key:

- ✓ Development is appropriate
- X Development should not be permitted

Source: Technical Guidance to the National Planning Policy Framework

The overall aim should be to steer new development to Flood Zone 1. Where there are no reasonably available sites in Flood Zone 1, the flood risk vulnerability of land uses should be taken into account and reasonably available sites in Flood Zone 2 considered, applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood

⁴ For further information refer to Technical Guidance to the National Planning Policy Framework, Table 1.

⁵ See part 3 of this document for further information on the Exception Test.

Zone 3 be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.

The NPPF requires Local Plans to “apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by applying the Sequential Test, and, if necessary, applying the Exception Test”⁶. This paper is therefore structured as follows:

- Part 1 summarises the proposed levels of development within each of the Development Areas referred to in the City Plan, and provides a summary of the risks from flooding affecting Brighton & Hove;
- Part 2 sets out the Sequential Test for each DA⁷;
- Part 3 sets out the Exception Test for particular uses in the DAs that fall into Flood Zones 2 and 3a.

This paper was originally prepared in May 2008 and updated in October 2009. This further update in April 2012 takes into account:

- Changes to the DAs and proposed levels of development within them due to the redrafting of the City Plan;
- The change to the timescale of the Plan (now covering the period to 2030);
- Publication of an updated Strategic Flood Risk Assessment (SFRA) for Brighton & Hove (2011). Section 2.2 of the SFRA details how more recent data has been used to inform the assessment; and
- Publication of the National Planning Policy Framework and associated Technical Guidance (March 2012).

⁶ National Planning Policy Framework, para. 100

⁷ Separate sequential tests will be prepared for land uses identified through the Site Allocations DPD, and for any masterplans that are prepared as part of the Local Development Framework.

Part I – Context

Flood risk in Brighton & Hove

There are no rivers within Brighton & Hove and therefore no fluvial flood risk, however aquifers in the chalk downland mean that emergent groundwater presents a significant risk of flooding to some areas.

The City shares approximately 14km of its boundary with the sea so there is also a risk of coastal flooding along some sections of the seafront, although much of the area at risk from tidal flooding is protected by flood defences.

In addition to these sources of flood risk, surface water run off from existing and new development can contribute to flood risk.

A more detailed explanation of the risks from flooding in the city is contained within Section 4 of the SFRA, and maps showing the locations of each of the DAs together with spatial flood risk data is contained within Appendix A of that document.

Flood Risk Vulnerability of the Development Areas

The following table sets out the eight Development Areas identified in the City Plan, the existing land uses, proposed uses, the flood risk vulnerability classification for the proposed uses, and any existing flood defences at the location.

Table I – analysis of flood risk vulnerability of the proposed Development Areas identified in the City Plan

Policy no.	Development Area	Flood risk zone(s)⁸	Existing flood defences	Existing uses	Proposed Development	Flood vulnerability classification⁹
DA1	Brighton Centre and Churchill Square Area	FZ1	n/a	Retail Leisure Hotels Offices Church Residential	20,000 m ² retail 25,000 m ² leisure	Less vulnerable Less vulnerable
DA2	Brighton Marina, Gas Works, and Black Rock Area	FZ1 FZ2 FZ3a	Currently defended to 1 in 200 (0.5%) annual probability level ¹⁰ .	Retail Leisure Residential Hotel Employment	4000 m ² industrial 5000 m ² retail 9,000 m ² leisure 1,940 residential units Community building A health facility within or in the vicinity of the Marina A primary school or increase in the number of school places within or in the vicinity of the Marina	Less vulnerable Less vulnerable Less vulnerable More vulnerable (or highly vulnerable if basements) More vulnerable/less vulnerable (depending on details) More vulnerable More vulnerable
DA3	Lewes Road Area	FZ1	n/a	Residential Retail Education Employment	885 residential units Community Building 15,600 m ² employment floorspace including an Innovation Centre; Business School and additional academic floorspace (16,000 m ²);	More vulnerable (or highly vulnerable if basements) Less vulnerable Less vulnerable More vulnerable

⁸ Flood Risk Zones are identified in the Brighton & Hove Strategic Flood Risk Assessment, which is informed by Environment Agency Flood Maps.

⁹ See 'Technical Guidance to the National Planning Policy Framework', Table I.

¹⁰ See SFRA, Appendix B.

Policy no.	Development Area	Flood risk zone(s) ⁸	Existing flood defences	Existing uses	Proposed Development	Flood vulnerability classification ⁹
					Student Accommodation (900 rooms);	More vulnerable (or highly vulnerable if basements)
DA4	New England Quarter and London Road Area	FZ1	n/a	Residential Retail Hotel Employment Leisure Education	1,140 residential units 300 student housing 20,000 m ² BI floorspace	More vulnerable(or highly vulnerable if basements) More vulnerable(or highly vulnerable if basements) Less vulnerable
DA5	Eastern Road Edward Street Area	FZ1	n/a	Residential Retail Health Employment Leisure Community	597 residential units; 23,200 m ² employment floorspace; 60,000 m ² hospital floorspace; 400-bed student accommodation 3530 m ² University library (education floorspace); 1100 m ² Dance Studio a multi-practice GP's surgery for Kemptown; a community building for Queens Park and Craven Vale. ancillary supporting uses	More vulnerable (or highly vulnerable if basements) Less vulnerable More vulnerable More vulnerable (or highly vulnerable if basements) More vulnerable Less vulnerable More vulnerable Less vulnerable Less vulnerable
DA6	Hove Station Area	FZ1	n/a	Residential Retail Employment	4,000 m ² employment 575 residential units	Less vulnerable More vulnerable
DA7	Toad's Hole Valley	FZ1	n/a	Open space	Minimum of 750 residential units Minimum of 30,000 m ² of office space Primary School Eco-centre Public open space with children's play space and informal sports facilities Shops and cafes	More vulnerable(or highly vulnerable if basements) Less vulnerable More vulnerable Less vulnerable Water compatible development Less vulnerable

Policy no.	Development Area	Flood risk zone(s)⁸	Existing flood defences	Existing uses	Proposed Development	Flood vulnerability classification⁹
					Doctor's surgery Food growing space	Less vulnerable Water compatible development
DA8	Shoreham Harbour Area	FZ1 FZ2 FZ3a	South Portslade – n/a Shoreham Harbour - estimated defence of 1 in 50 year standard ¹¹	Port Employment Residential Retail Education Community	400 residential units within Brighton & Hove 7500 m ² net additional employment floorspace	More vulnerable(or highly vulnerable if basements) Less vulnerable

¹¹ See SFRA, Appendix B.

Part 2 – The Sequential Test

New development should be directed first to sites at the lowest probability of flooding with the flood vulnerability of the intended use matched to the flood risk of the site i.e. higher vulnerability uses should be located on parts of the site at lowest probability of flooding. The Sequential Test aims to ensure this occurs by considering whether development proposed for Flood Zones 2 and 3 could be located in zones less susceptible to flooding.

Which Flood Zones are the proposed Development Areas in?

DAs wholly within Flood Zone 1:

- DA1 Brighton Centre and Churchill Square Area
- DA3 Lewes Road Area
- DA4 New England Quarter and London Road Area
- DA5 Eastern Road and Edward Street Area
- DA6 Hove Station Area
- DA7 Toad's Hole Valley

DAs partly in Flood Zone 1:

- DA2: Brighton Marina, Gas Works, and Black Rock Area (8% of the area)
- DA8 Shoreham Harbour Area (66% of the area)

DAs partly in Flood Zone 2:

- DA2: Brighton Marina, Gas Works, and Black Rock Area (2% of the area)
- DA8: Shoreham Harbour Area (9% of the area)

DAs wholly or partly in Flood Zone 3a:

- DA2: Brighton Marina, Gas Works, and Black Rock Area (80% of the area)¹²
- DA8: Shoreham Harbour Area (25% of the area)

DAs in Flood Zone 3b: none

For the DAs wholly within Flood Zone 1, the location is appropriate in flood risk terms for all development and there is no need to proceed with the Sequential Test.

Are the proposed uses in the 'water compatible' or 'less vulnerable' flood risk vulnerability classification?

The development proposed for the DAs falls into the following vulnerability classifications:

¹² Percentages for Brighton Marina in the SFRA do not add up to 100%

Water compatible:

- amenity open space/public realm improvements

Less vulnerable:

- retail
- restaurants/cafes
- offices

More vulnerable:

- residential
- student housing
- health services (Brighton Marina).

Highly vulnerable - none

Can the Development Areas in Flood Zones 2 and 3a be redirected to Flood Zone 1?

Alternative strategic locations for development were considered at the following locations situated in Flood Zone 1:

Portland Road - following consultation comments and further assessment whilst opportunities were identified for townscape improvements and improvements to the local shopping centre there was not sufficient capacity to accommodate significant development to warrant its inclusion as a specific Development Area. The proposed Sustainable Neighbourhoods Proposals and general Core Policies were considered sufficient policy guidance for future development in this area.

Old Shoreham Road corridor - following consultation comments and further assessment, it is considered that whilst there is the potential for improvements relating to the sustainable transport corridor and north-south links in the Hove area along the corridor, the majority of sites along Old Shoreham Road have been identified within the Employment Land Study as requiring safeguarding for employment uses and therefore do not present significant development opportunity. However links to Old Shoreham Road have been made in the Hove Station Area as they relate to that area and in the Shoreham Harbour and South Portslade area.

Western Seafront (Kingsway and Wellington Road) - following further investigation of opportunities for additional development beyond existing commitments it was felt that this area did not present significant development potential and opportunities regarding townscape improvements and improved links to the seafront could be better dealt with in a revised Seafront Preferred Option (see SAI).

The Urban Fringe - Consultation responses suggested a lack of consensus as to the role of the urban fringe. The protection and enhancement of the wider landscape role of land within the urban fringe is considered necessary to protect the setting of the South Downs National Park and the strategic views into and out of the city. The urban fringe is also promoted as part of the city's green network and to encouraging opportunities for recreation and cultural experiences, new allotments and local food production and biodiversity conservation and enhancements.

Although future development should be accommodated primarily within the existing built up area of the city, one location on the urban fringe, at Toads Hole Valley, has been included as a Development Area to assist in meeting the development and infrastructure needs of the city.

Could the proposed development in Flood Zones 2 and 3 be alternatively located in Flood Zone 1?

It was also considered whether the proposed development could be alternatively located in Flood Zone 1 by breaking it down into a greater number of smaller allocations rather than as a large, strategic, Development Area. Means of achieving this are considered below:

- **Intensifying development at another DA**

Studies so far indicate that none of the identified Development Areas have capacity to accommodate that scale of development in addition to what is already proposed in the Core Strategy.

- **Dividing up the proposed development between the other DAs**

If the amount of residential development was significantly increased at the other Development Areas then it would be at the cost of other land uses that are allocated in the Core Strategy for that area. This varies according to the Development Area, but potentially it could conflict with necessary land use allocations for tourism, retail, employment, education/community facilities, open space or regeneration objectives.

This could risk delivering unbalanced and unsustainable communities in those Development Areas.

Dividing up the development could also threaten the developer contributions received towards significant items of infrastructure such as the Rapid Transport System.

- **Relying on windfall sites to deliver the proposed levels of housing.**

Interim findings of the Strategic Housing Land Availability Assessment (SHLAA) suggest that it may be necessary to include an allowance for the development of small windfall sites to meet PPS3 requirements for housing delivery over a 15 year period given the significant development constraints affecting the city and

the lack of opportunity to identify specific sites. However monitoring of small windfall sites suggests that these sites would not be able to accommodate the scale of development proposed and would lead to a shortfall against the targets in the South East Plan. To rely that significantly on windfall sites would also have implications for the developer contributions and investment that could be secured, especially in terms of large items of infrastructure that are vital to the city.

None of these options are therefore considered practical.

Can the Development Areas in Flood Zone 3a be redirected to Flood Zone 2?

The SFRA illustrates that apart from a thin coastal strip, Flood Zone 2 is overlain by Flood Zone 3 in Brighton & Hove, therefore there are no sites in Zone 2 where development could be reasonably be redirected to. The only option would be to redirect development to sites in Flood Zone 1, however development is specifically required in these DAs to aid regeneration and redevelopment objectives. National guidance recognises that in these situations development cannot go elsewhere as there are no reasonably available sites¹³.

The approach for these areas is therefore to maximise opportunities to reduce flood risk to the community, for example by locating the higher vulnerability class uses in the areas of lowest flood risk. Opportunities may exist to build in sustainable drainage elements. The Sequential approach must also still be applied *within* the regeneration area, and in larger areas a sequential test may also be applied within the area.

The three parts of the Exception Test will also need to be passed. As the sites are part of a regeneration strategy it is very likely that the first two parts of the Exception Test can be met (i.e. the development is required for sustainability reasons, and is on previously-developed land). A developer would still need to satisfy the part of the test that shows the development will be safe and will not increase flood risk elsewhere.

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

Planning policies and guidance, based on the SFRA, will where possible direct the more vulnerable uses away from the sources of flooding and closer to the lower risk parts of Flood Zone 3. The most sensitive uses on each sites should be guided to the areas of relatively lower flood risk through more detailed discussion at the planning application stage.

¹³ PPS25 Practice Guidance, paras 4.36 - 4.38.

In all cases it must be demonstrated that an adequate standard of safety can be achieved through a site specific Flood Risk Assessment and will comply with Environment Agency requirements and the Exceptions Test if applicable.

Part 3 – The Exception Test

Table 2 (above) details when the Exception Test must be carried out. For the two DAs partly within Zones 2 and 3a (Shoreham Harbour and Brighton Marina), the Test is required for highly vulnerable land uses in Zone 2 and essential infrastructure and more vulnerable land uses in Zone 3a.

As set out in the NPPF, the Test comprises two parts, both of which must be passed for development to be allocated or permitted. These are considered below:

1. It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared

The Sustainability Appraisal (SA) of the City Plan has considered how well the proposed allocations will contribute to the twenty-two identified sustainability objectives. The SA findings indicate that the strategic allocations at Brighton Marina and Shoreham Harbour would both have a broadly positive impact on these objectives. The findings are reproduced in detail in Appendix 2.

2. A site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

A site specific Flood Risk Assessment (FRA) must be carried out in the event of detailed proposals being submitted. National guidance states that it is the responsibility of the developer to prepare a comprehensive flood risk management strategy for the site to ensure the site is safe, covering:

- the design of any flood defence infrastructure;
- access and egress;
- operation and maintenance;
- design of development to manage and reduce flood risk wherever possible;
- resident awareness;
- flood warning; and
- evacuation procedures and funding arrangements¹⁴.

The SFRA for the city includes a Level 2 SFRA for all Development Areas which examines in detail various aspects of risk such as depth, rate of onset, and residual risks to people and property.

Therefore any development proposal must take into account all of the risks and suggested mitigation and management measures identified in Appendix B of the SFRA

¹⁴ PPS25 Practice Guide, para. 4.52.

which sets out the minimum requirements to ensure safe development, and also the recommendations of any site-specific FRA that is prepared at the time of the application.

A site-specific FRA must be carried out in order to demonstrate that the development of a site will not increase flood risk on the site or elsewhere, and that where possible it will reduce flood risk. Appendix 3 contains suggested requirements for FRAs, as set out in the SFRA.

Appendix C of the SFRA contains further recommendations for mitigation measures that could be incorporated into new developments.

Conclusion

All the proposed Development Area allocations have passed the Sequential Test.

The Exception Test has also been applied to DA2 (Brighton Marina) and DA8 (Shoreham Harbour) and it is considered that the wider sustainability benefits of development at both locations outweigh the flood risks. Site specific FRAs produced to support proposals will ensure that development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere. It is therefore considered appropriate to allocate both sites in the Brighton & Hove City Plan.

Appendices

Appendix I – Flood risk Vulnerability Classification

Essential infrastructure

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- 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.
- Wind turbines.

Highly vulnerable

- Police stations, ambulance stations and fire stations and command centres and telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent. (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”)

More vulnerable

- Hospitals.
- Residential institutions such as residential care homes, children’s homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non–residential uses for health services, nurseries and educational establishments.
- Landfill and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, *subject to a specific warning and evacuation plan.*

Less vulnerable

- Police, ambulance and fire stations which are *not* required to be operational during flooding.
- Buildings used for shops, financial, professional and other services, restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non–residential institutions not included in “more vulnerable”, and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).

- Water treatment works which do *not* need to remain operational during times of flood.
- Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).

Water-compatible development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, *subject to a specific warning and evacuation plan.*

Appendix 2 – Sustainability Appraisal of the proposed Development Areas located in Flood Zone 3

Development Area DA2 (Brighton Marina)

I. Do the development proposals make a positive contribution to sustainable communities and to the sustainable development objectives of the Brighton & Hove Local Development Framework (the 22 Sustainability Objectives set out in the Sustainability Appraisal of the City Plan):	
<i>(1) To achieve a net gain in biodiversity under conservation management as a result of development and improve understanding of local, urban biodiversity by local people</i>	
Yes / No	<p>The Marina itself has a severe lack of green space, therefore any development could potentially lead to an increase in biodiversity if the recommended suggestions for mitigation are incorporated. However, the Black Rock site, which is designated a SNCI due to the presence of coastal vegetative species, in addition to the Brighton to Newhaven cliffs SSSI, could be compromised and therefore any development must ensure the protection of these areas and planting of complimentary vegetation.</p> <p>To ensure that development contributes towards achieving an increase in biodiversity, a number of measures should be incorporated into developments including:</p> <ul style="list-style-type: none"> • The encouragement of coastal vegetation; • The inclusion of features such as green roofs, green walls, tree planting and nesting boxes; • The inclusion of areas of green space.

	<p>All developers will be required to carry out a thorough survey to assess the impact of developments on sites which are of biodiversity importance, and must consider indirect effects such as shading and pollution that may reduce people's ability to appreciate and access biodiversity.</p>
<p><i>(2) To improve air quality by continuing to work on the statutory review and assessment process and reducing pollution levels by means of transport and land use planning</i></p>	
<p>Yes / No</p>	<p>Sustainable modes of transport are currently not given enough priority in the Marina, with poor access for pedestrians and cyclists. This, combined with the availability of free car-parking, does little to encourage visitors to travel to the Marina in a sustainable way.</p> <p>Development proposals for the Outer Harbour scheme and Inner Harbour strategic allocation could lead to an increase in the number of cars accessing the site.</p> <p>Existing infrastructure and future development may therefore cause an increase in the number of cars accessing the site, which in turn may result in a reduction in air quality, however transport and land-use planning could help to improve air quality if a number of measures are incorporated into developments:</p> <ul style="list-style-type: none"> • The improvement in public transport to/from the Marina; • The improvement of pedestrian and cycling access to the Marina; • The development of car-free facilities (e.g. at Black Rock); • The development of a Park & Ride scheme. <p>In addition, part of the Core Strategy's policy on sustainable transport is to implement a public-transport based Coastal Transport System which would link the Marina to the city centre and beyond and help contribute to delivering improvements in air quality.</p> <p>The cumulative effects of each development within the Marina on each other must be assessed in order to minimise the negative effects on air quality that would be caused by the predicted increase in traffic.</p>
<p><i>(3) To maintain local distinctiveness and preserve, enhance, restore and manage the city's historic landscapes, townscapes, parks, buildings and archaeological sites effectively</i></p>	
<p>Yes</p>	<p>The buildings and form of the Marina are introspective without many views of the sea and areas of public realm are poor due to the haphazard groupings of buildings. Therefore, any development has the potential to increase the distinctiveness and visual appearance of the Marina.</p> <p>However, any development must take into account, be sensitive to, and compliment the surrounding areas, in particular:</p> <ul style="list-style-type: none"> • Local residential areas including the Kemp Town Conservation Area; • The cliffs to the North and East of the site which are designated a SSSI. <p>The site may be suitable for tall buildings, however any proposal for tall buildings must have due regard for the residential areas to the north, as well as the overall composition when viewed along the coast.</p>
<p><i>(4) to protect, conserve and enhance the South Downs and promote sustainable forms of economic and social development and provide better sustainable access</i></p>	
<p>No?</p>	<p>Improvements to sustainable transport, both from within Brighton to the Downs, as well as into Brighton must occur in order to protect the Downs. The implementation of the Coastal Transport System, which would link any future development in the Marina to the city centre, would provide a positive step in improving sustainable travel within the city, as well as provide a link to the edge of the Downs.</p>

	<p>It is difficult to state whether developments at the Marina itself would lead to an increase in visitors to the Downs, however developments throughout Brighton may lead to an increase in visitors to the city.</p> <p>Development situated within the built up area of the city, including the Marina, would help to avoid a negative impact on the setting of the Downs, through decreasing the need to develop on land situated on the urban fringe.</p>
<i>(5) to meet the essential need for decent housing, particularly affordable housing</i>	
Yes	<p>Development of the Marina site will meet the need for decent housing including affordable housing, providing that developers meet the council's requirement for a proportion of new houses to be affordable.</p> <p>Anticipated development at the Marina area includes the construction of 1650 dwellings. This would equate to 660 affordable homes at the rate of 40%.</p>
<i>(6) to reduce the amount of private car journeys and encourage more sustainable modes of transport via land use and urban development strategies that promote compact, mixed-use, car-free and higher-density development</i>	
Yes	<p>Sustainable modes of transport are currently not given enough priority in the Marina, with poor access for pedestrians and cyclists. This, combined with the availability of free car-parking, does little to encourage visitors to travel to the Marina in a sustainable way. Future development may increase the number of people living, working or visiting the Marina, which is likely to increase the number of cars owned or car journeys to the Marina area.</p> <p>However, there are a number of ways in which future developments could encourage sustainable transport and reduce the amount of private car journeys including:</p> <ul style="list-style-type: none"> • Greater emphasis on pedestrian priority; • More dedicated cycle routes with adequate provision of cycle parking; • Improved transport interchange facilities; • Improved signage on arrival and parking facilities; • Provision of information regarding train services and an enhancement of the Volks Railway service to the Palace Pier; • Improved infrastructure for taxis; • Development of car-clubs for residents; • Mixed-use developments. <p>In addition, car journeys would be reduced through the proposed Coastal Transport Scheme that links the area to the city centre.</p>
<i>(7) minimise the risk of pollution to water resources in all development</i>	
Yes	<p>New development could help to minimise the risk of pollution to water resources if Sustainable Urban Drainage Systems (SUDS) are incorporated in developments, where possible.</p> <p>SUDS would not be suitable for areas of contaminated land, and therefore may not be appropriate for the Gas Works site, which forms part of the Marina development area.</p>
<i>(8) minimise water use in all developments and promote the sustainable use of water for the benefit of people, wildlife and the environment</i>	
Yes / No	<p>Any development will lead to an increase in water use during the construction phase and operation. However, water use could be minimised during the operation of any developments if high water efficiency technologies are incorporated into developments. Developments will be encouraged to use the Code for Sustainable Homes and reach the highest possible water efficiency levels through the implementation of schemes such as grey-water recycling.</p>
<i>(9) to promote the sustainable development of land affected by contamination</i>	

Yes	Development will promote the use of contaminated land as the Gas Works site has potential for significant contamination due to its previous use. Part of this site has already been remediated but further investigation of the site is needed to ensure the land is suitable for development.
<i>(10) manage coastal defences to protect the coastline and minimise coastal erosion and coastal flooding</i>	
Yes	<p>The cliffs between Black Rock and Saltdean are protected by a number of designations including a SSSI and are considered to be of high geological value.</p> <p>Any future proposals will be expected to make provision for the protection and enhancement of the visibility of the cliffs and their management and it will necessary for developers to discuss any proposals with English Nature.</p> <p>The Shoreline Management Plan, which forms part of the strategy for flood and coastal erosion risk management, identifies a strategy of hold the line for the next 100 years.</p> <p>Future activities must avoid significant destabilisation of the cliffs, which might be incurred as a result of construction activity, such as demolition works, piling and compaction of earthworks.</p>
<i>(11) to balance the need for employment creation in the tourism sector and improvement of the quality of the leisure and business visitor experience with those of local residents, businesses and their shared interest in the environment</i>	
Yes	<p>The Marina site attracts visitors and any developments may increase visitor numbers. However, development could balance the needs of local residents, business and visitors in a number of ways:</p> <ul style="list-style-type: none"> • Through the employment of local people in the construction and operation stage of development; • By ensuring that improvements to the areas of public realm are incorporated into developments; • By increasing provision of industrial units in East Brighton by including the development of light industrial units for small and start-up businesses during the regeneration of the Gas Works site; • By ensuring that any development must be comprised of mixed-use sites, including services and facilities for residents.
<i>(12) to support initiatives that combine economic development with environment protection, particularly those involving targeted assistance to the creative and digital industries, financial services, tourism, retail, leisure and hospitality sectors</i>	
Yes	<p>The Marina is designated as a District Centre, however currently lacks essential shops and services. Development will be beneficial to various sectors with the proposed housing development leading to an increase in AI units to meet residents' needs.</p> <p>The Black Rock site has been identified principally for tourism and leisure facilities and will therefore directly support the tourism and leisure sectors.</p> <p>Environmental protection of these sites and mitigation of possible impacts will be considered before development occurs and will include energy, water, waste, improvements to public realm, accessibility, biodiversity and air quality surveys.</p>
<i>(13) to improve the health of all communities in Brighton & Hove, particularly focussing on reducing the gap between those with the poorest health and the rest of the city</i>	
Yes	The Marina site is adjacent to the East Brighton Ward, within which the Whitehawk Estate is situated. This estate is one of the most deprived areas in the city, as defined by the Index of Multiple Deprivation. The development of key health and other services within the Marina will be complimentary to existing provision located within neighbouring areas and will be accessible to residents within the Marina, as well as to residents in East Brighton.

	<p>This could therefore potentially lead to an improvement in health of residents in neighbouring communities and reduction in health inequalities.</p> <p>All developers will be requested to conduct a Health Impact Assessment (HIA) as part of their scheme.</p> <p>Developments will incorporate new areas of public space, as well as improve existing areas of public realm, which will have a positive effect on the health and well-being of residents.</p>
<i>(14) to integrate health and community safety considerations into city urban planning and design processes, programmes and projects</i>	
Yes	<p>The Inner Harbour strategic allocation includes the provision of community facilities, including a Healthy Living Centre and community centre.</p> <p>New developments will consider community safety, particularly when planning areas of public realm.</p>
<i>(15) to narrow the gap between the most deprived areas and the rest of the city so that no one should be seriously disadvantaged by where they live</i>	
Yes	<p>Development may lead to the gap between the most deprived areas and the rest of the city being narrowed as services, facilities and amenities become more accessible to residents from neighbouring communities.</p> <p>The development proposals incorporate improved transport, health, and leisure opportunities, as well as potentially offering employment opportunities and housing, all of which are wider determinants of health.</p> <p>See also Objective (13).</p>
<i>(16) to engage local communities into the planning process</i>	
Yes	<p>There has been extensive stakeholder and public consultation concerning the detailed proposals for the Outer Harbour and Inner Harbour schemes. There is currently a period of consultation underway for the Brighton Marina Masterplan Planning Advisory Note and widespread public consultation will occur for all other proposals.</p>
<i>(17) to make the best use of previously developed land</i>	
Yes	<p>The Marina, Black Rock and Gas Works sites are all areas of land that have previously been developed.</p>
<i>(18) to maximise sustainable energy use and mitigate the adverse effects of climate change through low/zero carbon development and maximise the use of renewable energy technologies in both new development and existing buildings</i>	
Yes/No	<p>Any development will lead to an increase in energy use during the construction and operation stages.</p> <p>However, development at the Marina site could include the implementation of large scale zero and low-carbon energy technologies to serve the Marina and wider city, particularly those that take advantage of the Marina's coastal location.</p> <p>All new build residential units are expected to be zero carbon for energy use, be designed to Lifetime Home Standards, and achieve a minimum rating of Level 4 of the Code for Sustainable Homes .</p> <p>All non residential developments are expected to score at least 60% in the energy and water sections of the relevant BREEAM assessment</p>
<i>(19) to ensure all developments have taken into account the changing climate and are adaptable and robust to extreme weather events</i>	
Yes	<p>Climate change is predicted to cause a rise in sea-level for the south coast as well as cause</p>

	<p>an increase in summer temperature and increased periods of extreme weather events, including winter precipitation.</p> <p>A site specific Flood Risk Assessment will be required as part of the planning application process to demonstrate that all proposed developments at the Marina are safe, will not increase the risk of flooding, and where possible will reduce the flood risk overall.</p> <p>Implementation of other local policy should ensure that new development is adaptable to a changing climate.</p>
<i>(20) to encourage new developments to meet the high level Code for Sustainable Homes/BREEAM 'Excellent' standard</i>	
Yes	<p>Residential units are expected to achieve a minimum rating of Level 4 of the Code for Sustainable Homes .</p> <p>All non residential developments are expected to score at least 60% in the energy and water sections of the relevant BREEAM assessment.</p> <p>All developers will be required to submit a completed Brighton & Hove Sustainability Checklist as part of the planning application.</p>
<i>(21) to promote and improve integrated transport links and accessibility to health services, education, jobs, and food stores</i>	
Yes	<p>A Healthy Living Centre, situated within the District Centre of Brighton Marina, is proposed to be included within the Inner Harbour strategic allocation. This would be situated within close proximity to a transport interchange, to ensure improved access to other amenities including local supermarkets, employment sites and leisure facilities within the Marina.</p> <p>Sustainable travel will be integrated into all developments, as described in Objective (6).</p> <p>Services for the emerging population will be balanced with the needs of visitors and tourists, as described in Objective (11).</p>
<i>(22) to reduce waste generation, and increase material efficiency and reuse of discarded material by supporting and encouraging development, businesses and initiatives that promote these and other sustainability issues</i>	
No	<p>Redevelopment of the site will lead to an increase in waste during the construction and operation phases.</p> <p>The Sustainability Appraisal states that a site waste management plan must be submitted with any application for planning, and that the Construction & Demolition Waste SPD and the Recyclable Materials and Waste Storage PAN must be referred to in order to reduce the amount of waste produced through various stages of development.</p>

Development Area DA8 (Shoreham Harbour)

I. Do the development proposals make a positive contribution to sustainable communities and to the sustainable development objectives of the Brighton & Hove Local Development Framework (the 22 Sustainability Objectives set out in the Sustainability Appraisal for the Core Strategy):	
<i>(1) To achieve a net gain in biodiversity under conservation management as a result of development and improve understanding of local, urban biodiversity by local people</i>	
No	<p>Within the Brighton & Hove area, the Basin Road South SNCI and habitats and species associated with this may be sensitive to impacts potentially arising as a result of any scheme. The wider JAAP area is regionally important for passage birds, of county importance for wintering birds and locally important for breeding birds.</p> <p>No ecological study has been carried out to determine the impacts of this scheme, and</p>

	<p>would be recommended as part of a wider Environmental Impact Assessment, particularly of land reclamation from within the Canal area.</p> <p>Development may provide the opportunity to enhance biodiversity, however also presents a risk as outlined above and therefore a negative uncertain impact for the medium and long term is awarded.</p>
<p><i>(2) To improve air quality by continuing to work on the statutory review and assessment process and reducing pollution levels by means of transport and land use planning</i></p>	
<p>No</p>	<p>The development area falls within the AQMA that was designated in 2008. NO₂ levels have been modelled along certain roads in Brighton & Hove and the area that runs along the A259 carriageway between Church Road and Wharf Road exceeds the annual mean air quality objective for NO₂. Within this area, NO₂ levels at the Boundary Road/Station Road junction and the Wharf Road junction are likely to continue to exceed the annual mean limit value for NO₂ in future years. Pollution levels at the Wharf Road junction can be partly attributable to the volume of HGVs that use this junction to access Wharf Road, however the width of the carriageway and streetscape in this area are better for dispersion of vehicle emissions. Poor air quality is more of an issue for sensitive receptors at the Boundary Road/A259 junction and also for those situated alongside Church Road/Trafalgar Road where the carriageway is narrower and the streetscape creates a canyon effect.</p> <p>One of the priorities for Character Area 3: North Quayside/South Portslade is to develop a new access road to the South Quayside via the existing junction at Church Road/A259/Basin Road North and linking to the existing Basin Road North. This would also link to Basin Road South and would divert HGVs from the route currently used via the Wharf Road junction. This is likely to reduce the level of exceedence and improve the existing air quality around the Wharf Road/A259 junction. The SA recommends that monitoring of air quality at the three key junctions along the A259 in this area would help to ascertain the impact on air quality.</p> <p>The policy proposes certain amounts of development, including 400 residential units within the Brighton & Hove area of the Harbour, and 7,500sqm of additional employment floorspace, some of which may be used by non-port employment uses and the overall aim of the policy is to enhance the operations of the Port. This additional amount of development in the area is likely to have some impacts on number of journeys made to the area and congestion, with potential for associated impacts on air quality either within the development area or on key roads within the surrounding area.</p> <p>It is presumed that the detailed JAAP policy will set out the aims in terms of sustainable transport, which may help to mitigate against this and the SA recommends that the detailed JAAP policy should seek to ensure that sensitive receptors are located away from the roadside and that any new streetscapes are designed to avoid the canyon effect.</p> <p>A negative score is awarded as although the changes to access to the port may bring about localised improvements in air quality, overall the impact is considered to be negative. Recommendation to include a reference to improving air quality for Character Area 3 – North Quayside/South Portslade.</p>
<p><i>(3) To maintain local distinctiveness and preserve, enhance, restore and manage the city's historic landscapes, townscapes, parks, buildings and archaeological sites effectively</i></p>	
<p>Yes</p>	<p>Poorly designed or located development can have a negative impact on the historical built environment with the wider area containing a Scheduled Ancient Monument, listed buildings and is adjacent to conservation areas, all of which will need to be considered. Some of the existing townscape and public realm in the area is of poor quality and priorities for Character Areas 2 and 3 includes improving the local townscape which should lead to a positive impact on this objective.</p> <p>The policy proposes 400 residential units which will generate demand for open space. It is</p>

	<p>not known whether the full open space requirements of future residents could be met on site and this could increase the pressure on existing areas of open space situated within the western wards of Brighton & Hove, such as Vale Park, Victoria Park, Wish Park and Hove Lagoon which are all within close proximity to this part of the Development Area. The Area Priorities for character area 5 include the improvement of the quality and access of public areas, including beaches, which are an important component of open space in this area and should also help to bring about positive impacts against this objective. However the SA recommends that reference to protection of the historic built and environment and provision of open space should be made, although recognises that this may be more appropriately located in the more detailed JAAP policy.</p>
<p><i>(4) to protect, conserve and enhance the South Downs and promote sustainable forms of economic and social development and provide better sustainable access</i></p>	
Yes	<p>The Shoreham Harbour and Boundary Road area were both identified as areas with potential for tall buildings in the Tall Building Study (2003). Although the location of tall buildings in this location is unlikely to impact on views of the Downs, they may impact on views from the Downs, which are an important part of the National Park designation. It is unknown what height buildings may be in the area, however the AECOM Shoreham Harbour Capacity and Viability Study (2011) indicates that buildings may be up to 6 storeys in height. The SA does not consider that buildings of this height would significantly impact on views from the Downs, the SA recommends that the impact should be tested.</p>
<p><i>(5) to meet the essential need for decent housing, particularly affordable housing</i></p>	
Yes	<p>The policy specifies delivery of 400 residential units in the Brighton & Hove part of the Development Area, as supported by the SHLAA update 2011. The area is a broad location for housing, however the Area Priorities for Character Areas 2 (Aldrington Basin) and 3 (North Quayside/South Portslade) include residential/mixed use development in these areas, although there is no indication as to how this will be delivered and it is expected that this will be considered further by the full JAAP policy. The impact is likely to be positive on this objective, with this becoming more significant in the long term.</p>
<p><i>(6) to reduce the amount of private car journeys and encourage more sustainable modes of transport via land use and urban development strategies that promote compact, mixed-use, car-free and higher-density development</i></p>	
No	<p>There are strong east-west links throughout the area provided by the existing railway and road network, although the road network suffers from congestion. Links north-south are more constrained. Previous transport assessments have shown that there is limited capacity for the existing road network to absorb additional journeys in the area. Vehicular access to the port is heavily constrained as is restricted to a single access point. The Harbour area is a popular route for cyclists with National Cycle Route 2 passing through the Harbour, making use of the locks and is also used for pedestrian access. The SA welcomes the priority for Character Area 5 in relation to improving the PROW.</p> <p>The policy proposes certain amounts of development, including 400 residential units within the Brighton & Hove area of the Harbour, as well as 7,500sqm of additional employment floorspace. This additional amount of development in the area is likely to have some traffic impacts, either as a result of the newly located residents, from people travelling to the Harbour for work, or from increased vehicles related to a potential increase in port activity and therefore a negative score is awarded.</p> <p>The priority for the North Quayside/ South Portslade area to develop a new access road may help improve access to the port and improve congestion around the Kingsway/Wharf Road junction, as well as reduce volume of heavy good vehicles between this junction and the Church Road/Kingsway junction, although this would benefit from transport modelling to ascertain impacts.</p>
<p><i>(7) minimise the risk of pollution to water resources in all development</i></p>	
No	<p>The SFRA 2011 shows that some areas within the site are at risk of surface water flooding</p>

	in both the 1 in 30 and 1 in 200 year event. This would need to be considered when planning development. Surface water flooding can result in pollution to water and therefore the impact on this objective is considered to be negative. The area is also within the EA's major aquifer high vulnerability zone and consequently could be susceptible to groundwater emergence.
<i>(8) minimise water use in all developments and promote the sustainable use of water for the benefit of people, wildlife and the environment</i>	
No	The South East has been classified as highly water stressed, therefore measures to reduce water consumption are critical. New development of any type will increase demand for water, and therefore must be minimised through incorporation of highly efficient water saving technologies.
<i>(9) to promote the sustainable development of land affected by contamination</i>	
Yes	The Harbour area has been subject to many phases of industry including the former Portslade Gas Works, Timber Yards, Power Stations and Coal House. These former land uses, as well as existing land uses have the potential to have caused contamination. Any development within the area has potential to remediate previously contaminated land, and therefore is likely to have a positive impact on this objective. The SA recommends that more specific wording in relation to promoting remediation of contaminated land could be contained within the detailed JAAP policy.
<i>(10) manage coastal defences to protect the coastline and minimise coastal erosion and coastal flooding</i>	
No	The SFRA 2012 identifies that 26% of the development area is situated within flood zones 3a and 3b. In addition, the SFRA considers wave over-topping to be a significant risk in this area, and this has not been considered in the designation of the flood-zones, potentially meaning that a greater extent of the area could be at higher risk. The SFRA also found the area to be at increased risk of flooding due to climate change. The SA cannot ignore that parts of the development area are situated within flood zones 3a and 3b and therefore development situated within these areas are at high risk of flooding. The impact on this objective is therefore considered to be negative. All development proposals should carry out a site specific flood risk assessment and any development proposals for more vulnerable uses would need to pass the sequential and exception tests. The SA recommends that the policy includes a reference to the risk of tidal flooding.
<i>(11) to balance the need for employment creation in the tourism sector and improvement of the quality of the leisure and business visitor experience with those of local residents, businesses and their shared interest in the environment</i>	
Yes	Some of the LSOA located within South Portslade fall within the most 20% deprived in the UK in terms of education and skills, and also suffer from employment deprivation (IMD 2010) and the policy makes specific reference to the worsening pockets of deprivation. The policy states that 7,500sqm of additional employment floorspace will be located within the Development Area. This could be floorspace that is associated with the port-based industries, or other types of employment uses, both of which will provide employment opportunities. In addition, employment opportunities will be provide at construction stage. One of the main aims of the policy is for the Harbour to benefit existing and future communities, and it is presumed that this includes through the provision of employment opportunities.
<i>(12) to support initiatives that combine economic development with environment protection, particularly those involving targeted assistance to the creative and digital industries, financial services, tourism, retail, leisure and hospitality sectors</i>	
Yes	One of the main aims for Shoreham Harbour is to maximise its potential for business and Port-users, and to enhance the operations of the Port recognising the vital role it plays in the local economy. The delivery of mixed-use developments including employment space is

	<p>also one of the aims for the area. The policy should have a positive impact on this objective through the delivery of new and improved port operational facilities, which should increase the operational use and output of the Port, through improvements to the business environment of existing non-port employers, through provision of 7500sqm additional employment floorspace (to be delivered within Brighton & Hove) and through the redevelopment of currently under-used spaces. The benefits to the local economy are likely to become more significant in the long term. The designation of the South Portslade Industrial Area as a Strategic Employment Area could bring about the redevelopment of the lower-grade employment areas potentially having economic benefits. The mix of residential and employment uses in the Port may also bring about economic benefits to the nearby local centres, including the Boundary Road/Station Road District Centre.</p>
<p><i>(13) to improve the health of all communities in Brighton & Hove, particularly focussing on reducing the gap between those with the poorest health and the rest of the city</i></p>	
<p>Yes/no</p>	<p>Health based deprivation varies widely within the South Portslade ward, ranging from being within the most 6.6% deprived LSOAs in the UK, to the 47.1% most deprived LSOAs. The regeneration of the Harbour area to include provision of housing, employment opportunities, improved quality and access to existing open space and to other local connections and leisure opportunities should help to bring about a positive impacts, with all being wider determinants of health.</p> <p>However, air quality is currently an issue in this area, and air quality may worsen as a result of the traffic impacts of development, potentially bringing about negative impacts on health, and this is reflected in the mixed -/+ score. This will be dependant on where and how sensitive development is situated and could be mitigated through careful design within the Development Area, however may impact on adjacent areas that already suffer from poor air quality and that do not have the capacity to change. See Objective 2.</p>
<p><i>(14) to integrate health and community safety considerations into city urban planning and design processes, programmes and projects</i></p>	
<p>Yes</p>	<p>There is no specific objective regarding community safety, however improvements to sustainable transport, improvements to the streetscape and public realm, and improvements to key gateway routes all have potential to bring about positive impacts.</p>
<p><i>(15) to narrow the gap between the most deprived areas and the rest of the city so that no one should be seriously disadvantaged by where they live</i></p>	
<p>Yes</p>	<p>Two of the LSOAs within the South Portslade ward are within the most 20% deprived LSOAs in the UK (overall deprivation IMD 2010) and deprivation varies widely within the ward itself. Domains where LSOA within the South Portslade ward are in the 20% most deprived in the UK include income deprivation affecting older people, health, education & skills, children & young people, housing, and living environment. Employment (at 20.1%) is also an issue in some LSOAs. Two of the LSOA in the Wish ward are also situated along the eastern edge of the Development Area, with these LSOA having most significant levels of deprivation in the wider barriers and living environment domains. Regeneration of the harbour area has potential to reduce deprivation among some of these domains and has potential to bring about benefits to the existing local community, provided that the needs of the existing local community are met. The SA recognises that the main aims includes bringing benefits for existing as well as future residents, as well as the fact that development plans for the harbour area are driven by worsening pockets of deprivation.</p>
<p><i>(16) to engage local communities into the planning process</i></p>	
<p>Yes</p>	<p>All LDF documents include periods of public consultation. The JAAP and accompanying SA will be subject to widespread consultation.</p>
<p><i>(17) to make the best use of previously developed land</i></p>	
<p>Yes</p>	<p>The entire development area is situated on previously developed land. Some of the development area includes under-used and vacant employment sites, the value of which could be improved. It is assumed that new development, and consolidation of existing development will make better use of this land.</p>

<i>(18) to maximise sustainable energy use and mitigate the adverse effects of climate change through low/zero carbon development and maximise the use of renewable energy technologies in both new development and existing buildings</i>	
Yes	In general, an increase in development is likely to lead to an increase in energy consumption. The policy itself does not set standards, in terms of BREEAM or similar, however it is assumed that the standards set out in CPI will apply or may be detailed further in the JAAP. In addition, government targets for all new homes to be zero carbon by 2016 and non-residential development to be zero carbon by 2019 should also help to ensure high standards in terms of energy efficiency are met and therefore overall, the policy should bring about positive benefits against this objective. Widespread re-development of existing buildings in the area also provides the opportunity to increase their energy efficiency and should be encouraged. The location may also provide the opportunity for district heating which should be investigated further.
<i>(19) to ensure all developments have taken into account the changing climate and are adaptable and robust to extreme weather events</i>	
No	The potential impacts of climate change include an increase in extreme weather events, e.g. droughts, storms and heavy rainfall, as well as predicted rises in sea level which will increase the likelihood of tidal flooding. The SFRA 2012 outlines areas which will be at risk of tidal flooding as a result of the effects of climate change and this includes areas situated within the JAAP boundary, with risks of flooding increasing with climate change. Development in this area is therefore considered to be at greater risk of the impacts of climate change, particularly coastal flooding with climate change reducing the effectiveness of the existing sea defences over time.
<i>(20) to encourage new developments to meet the high level Code for Sustainable Homes/BREEAM 'Excellent' standard</i>	
No	There is no specific requirement in the policy for development to meet certain standards.
<i>(21) to promote and improve integrated transport links and accessibility to health services, education, jobs, and food stores</i>	
Yes	One of the priorities for Character Area 2 is to improve access arrangements to create better links to surrounding areas; one of the priorities for Character Area 3 is to improve connections to Boundary Road/Station Road and Church Road areas; and in addition, the priority for Character Area 5 is to improve access to the PROW corridor, beach and public areas. The policy is therefore considered to have a positive impact on this objective as should improve and increase accessibility. It is not clear whether the "supporting infrastructure" outlined in the aims of the policy will result in any community infrastructure and it is recommended that this is clarified.
<i>(22) to reduce waste generation, and increase material efficiency and reuse of discarded material by supporting and encouraging development, businesses and initiatives that promote these and other sustainability issues</i>	
No	In general, an increase in development will lead to an increase in production of waste both at construction and operation stages.

Appendix 3 – Suggested requirements for Flood Risk Assessments (source: Brighton & Hove SFRA)

[Flood risk assessments for Flood Zone 3a](#)

A detailed site specific FRA should be undertaken. It is strongly recommended that the Sequential Test, and, depending on the vulnerability of the development (see Table D.2

of PPS25), the first two parts of the Exception Test be satisfied before the FRA is commenced.

The FRA should meet the following criteria:

- If the development is within tidal Flood Zone 3a, assess the flood risk from a breach in, or overtopping of, the tidal defences, and the risk from wave overtopping.
- Where necessary demonstrate whether the site is at residual risk from tidal flooding.
- Identify and detail the level of risk to a development from all sources.
- Detail how all sources of flood risk will be managed and the consequences mitigated.
- Where possible show how overall flood risk will be reduced.
- Undertake a drainage impact assessment to identify the impact of the proposed development on surface water drainage, including the potential impact upon neighbouring areas, and recommend the approach to controlling runoff to the required discharge rates.
- Show that safe access can be provided to an appropriate level for the type of development.
- Show that flood flow routes are preserved and floodplain storage capacity is not reduced.

Detailed FRAs should be undertaken by a suitably qualified professional. Assessments should be on a site by site basis making use of local knowledge, but an initial assessment of potential sources of flooding can be made by consulting the maps in this SFRA.



**Brighton & Hove
City Council**