

## 4 CONSIDERATION OF ALTERNATIVES

### 4.1 Introduction

- 4.1.1 Schedule 4 of the EIA Regulations states that an Environmental Statement (ES) should include:

*“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”*

### 4.2 ‘Do Nothing’ Scenario

- 4.2.1 The first alternative considered is the ‘do nothing’ scenario. This scenario assumes the Proposed Development would not be built and considers how the Site would evolve without the Proposed Development in place. This option would eliminate the potential for adverse environmental impacts arising from the Proposed Development.
- 4.2.2 Cardiff Council’s Atlantic Wharf, Butetown Masterplan aims to redevelop the Inner Harbour area of Cardiff Bay as part of its wider regeneration, improving the link between the city centre and Cardiff Bay waterfront. The Proposed Development aims to provide an extension to the local community through new residential and office development as well as providing a setting for mixed-use development increasing the leisure, commercial and cultural offerings in Cardiff Bay.
- 4.2.3 The Site falls within the Cardiff Council Local Development Plan’s Bay Business Area and this policy promotes new office, residential and commercial leisure uses within the area. The Proposed Development aims to increase Cardiff’s tourism offer and attract visitors to the area as well as attracting businesses, delivering new investment and employment opportunities.
- 4.2.4 It is considered that the ‘do nothing’ scenario is not a suitable option given that the Site falls within the Bay Business Area and given the economic and social credentials of the Proposed Development.

### **4.3 Alternative Site Locations**

- 4.3.1 The EIA Regulations only require that an ES set out the ‘reasonable’ alternatives which have been considered by the Joint Applicant. As such, it would not be reasonable to consider other sites outside of the Joint Applicant’s control.
- 4.3.2 The Site comprises existing development encompassing Cardiff County Hall and its car park, the Red Dragon Centre and its car park and Hemingway Road. The Site for the Proposed Development is therefore located on a brownfield development site rather than a greenfield development site.
- 4.3.3 The Site also forms part of the Bay Business Area of Cardiff Council’s Local Development Plan (LDP). Within this area, new mixed-use development is supported by Policy KP10. The Proposed Development would provide significant commercial, leisure and retail services in the Cardiff Bay area.
- 4.3.4 The potential environmental impacts that could occur due to the Proposed Development at the Site have been mitigated as part of this EIA, as detailed in the individual technical chapters of this Environmental Statement. The Site is therefore considered to be the most suitable in terms of sustainability and environmental impact.

### **4.4 Alternative Site Design**

- 4.4.1 The Proposed Development has evolved as the result of an ongoing and iterative design process, in which various design alternatives have emerged and been considered. The design has been influenced by factors including environmental constraints identified through the EIA process; and feedback from stakeholders including Cardiff Council.
- 4.4.2 The original proposals have been amended and improved through various iterations to reflect information pertaining to Site constraints identified during the EIA process. As far as possible, potential significant adverse environmental impacts have been ‘designed out’ of the Proposed Development.
- 4.4.3 Key elements of the design evolution of the Proposed Development are summarised as:
- The potential location of the Arena has been limited within the Site due to the need for the existing Travelodge and Red Dragon Centre to remain operational

until new facilities are constructed. Similarly, Cardiff County Hall will need to remain operational until a new facility is provided. The presence of below ground constraints has also influenced the selection of the Arena location as well as consideration of Hemingway Road's use as a diversion route when the A4232 tunnels are closed.

- The Arena is proposed to be located on the existing Cardiff County Hall car park which allows for its construction whilst minimising potential impacts on existing buildings and infrastructure on Site.
- The illustrative masterplan has been developed to incorporate a Vista between a new Plaza / event space (Atlantic Square) and Roald Dahl Plass. Consequently, the existing Travelodge hotel requires relocation. Its proposed location adjacent to the Arena has been selected as a logical location which provides an acoustic buffer to existing residential properties in the area and allows access from Schooner Way.
- The event square (Atlantic Square) has been designed to accommodate both new events and events relocated from other areas of Cardiff, and in order to factor in permeability of the space, Atlantic Square is visible from along Lloyd George Avenue and Mermaid Quay whilst creating views towards Bute East Dock.
- The location of the multi storey car park (MSCP) and its proximity to the existing roundabout reduces the need for new infrastructure in the area and minimises vehicle disruption through the wider Site. The location also reduces interactions between vehicles and pedestrian spaces for increased safety. Adjacent to this area of the Site is the proposed pedestrian footbridge (Footbridge Walk), and beyond this the proposed transport interchange (Transport for Wales) providing access to further transport options.
- The massing of the proposed residential development in the Bute East Dock Quarter has been designed to connect to the waterfront and minimise the impact of wind from taller buildings. The orientation of the buildings (east to

west) allows sunlight to penetrate between the buildings in order to create a pleasant space for users of this area of the Site.

- The Proposed Development's hard and soft landscaping has been designed to provide high quality outdoor spaces for residents and visitors as well as provide biodiversity benefits.

4.4.4 Mitigation measures have been identified and incorporated into the proposals in order to avoid, remove or reduce any adverse environmental effects that cannot be adequately addressed through design. Further information on the specific mitigation measures proposed are set out within the relevant technical chapters of this ES.

4.4.5 The Proposed Development, as illustrated within Appendix 3.3 and described in Chapter 3 (Development Description), is considered to be the optimum design alternative.

#### **4.5 Conclusion**

4.5.1 The Proposed Development is the result of a comprehensive, iterative design process incorporating the views of key stakeholders, as well as environmental constraints.

4.5.2 It is concluded that the Proposed Development constitutes the most sustainable alternative for development to meet the needs and objectives of the area, whilst minimising adverse impacts on the environment.