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List of Abbreviations

| | |
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| ADA | Airport Development Area |
| BFI | Bulk Fuel Installation |
| DFID | Department for International Development |
| LPDCO | Land Planning and Development Control Ordinance |
| OTD | Overseas Territories Department |
| RMS | Royal Mail Ship |
| SHG | St Helena Government |

1. INTRODUCTION

PURPOSE OF THE STATEMENT

- 1.1 The St Helena Government (SHG) is seeking planning permission for the development of an airport and associated infrastructure on the island of St Helena. This Planning Statement provides a summary of all the material comprising the planning application, and presents the case for the development.
- 1.2 The scheme to which this Planning Statement relates consists of the construction of:
- An airport and its essential support facilities at Prosperous Bay Plain;
 - An in-shore sea rescue service to be based at Jamestown;
 - A haul road for construction purposes from Rupert's Bay to Prosperous Bay Plain which will be made permanent when construction of the airport is complete;
 - A wharf and associated facilities at Rupert's Bay;
 - A bulk fuel installation (BFI) in Upper Rupert's Valley and the decommissioning of the existing bulk fuel facilities; and
 - A water supply from Shark's Valley for the operation of the airport, which may be augmented by a dam at the top of Dry Gut at the south end of Prosperous Bay Plain.
- 1.3 In addition, various temporary facilities may be required to facilitate construction as follows:
- A temporary quarry in Rupert's Valley;
 - Contractor's compounds for equipment and materials, with accommodation for construction workers provided at a site near the airport;
 - A temporary wharf at Rupert's Bay; and
 - A temporary runway at Prosperous Bay Plain.
- 1.4 Figure 1.1 provides a location plan for St Helena, and Figure 1.2 provides an overview of the scheme.

LEGISLATIVE CONTEXT AND PLANNING APPLICATION PROCESS

- 1.5 Planning applications on St Helena are normally determined under the Land Planning and Development Control Ordinance (LPDCO). However, the proposed airport and supporting infrastructure development is of a scale and complexity not previously encountered on the island, and the normal legislation does not provide an appropriate process for determining the application. To address this issue, the Airport Development Ordinance, 2006, makes provisions to facilitate the design, construction and operation of an airport on St Helena.
- 1.6 The Ordinance sets out a process through which the Governor in Council can designate any land on St Helena as an 'Airport Development Area' (ADA), and provides that nothing done within an ADA with the consent of the Governor-in-Council is deemed to be in contravention of the LPDCO. Effectively, therefore, the power to grant development control for the airport and associated works is transferred to the Governor in Council. The designation of the ADA is being carried out in parallel with this planning application, and an Order or Orders will be made designating the ADA prior to the Governor in Council making the planning decision.
- 1.7 The Airport Development Ordinance provides flexibility for a substantial consultation period as part of the planning application process. This period will enable interested organisations and the general public to make representations on the scheme; the Governor will also seek views from the relevant Government Departments to feed into the decision-making process.

DESIGN, BUILD AND OPERATE CONTRACT

- 1.8 The airport will be developed through a design, build and operate contract which has yet to be awarded. This planning application is based on a reference design which sets out the key elements of the scheme as defined in 2007. As proposals for the scheme continue to develop, the successful Contractor will submit separate planning application(s) for any variations to the reference design that require permission.

ENVIRONMENTAL IMPACT ASSESSMENT

- 1.9 Although not a statutory requirement in St Helena, the UK's Department for International Development (DFID) and SHG require that the planning application for the new airport be accompanied by an Environmental Statement which sets out the findings of the Environmental Impact Assessment of the scheme. The proposals for the airport and supporting infrastructure have been developed through an iterative process, with environmental concerns and considerations influencing the final form of the scheme.

SUPPORTING INFORMATION

1.10 In addition to this Planning Statement, the full planning application package comprises:

- Planning application form;
- Application drawings;
- Aircraft Crash and Disaster and Fuel Installation Emergency Plan
- Environmental Statement consisting of a Technical and Non-Technical Summary, Figures and Photographs, Environmental Management Plan and the following assessments:
 - Land use;
 - Noise and vibration;
 - Air quality and dust;
 - Carbon emissions;
 - Terrestrial ecology and nature conservation;
 - Landscape and visual impact;
 - Cultural heritage;
 - Roads, traffic and footpaths including a Transport Statement;
 - Geology, contaminated land and hydrogeology;
 - Marine environment;
 - Surface water environment;
 - Waste management;
 - Combined effects; and
 - Socioeconomic impact assessment.

STRUCTURE OF THIS STATEMENT

1.11 Section 2 provides the background to the development of the airport, explaining the need for the airport, the alternative approaches considered and the reasons for choosing the preferred scheme. Section 3 describes the areas affected by the scheme and Section 4 provides a description of the proposed development. Section 5 explains how the local community and other consultees have been involved in the development of the proposals. Section 6 gives a summary of the technical assessments of the impacts of the project. Section 7 sets out the planning policies relevant to the scheme, and explains how the scheme addresses these policies. Section 8 summarises the case for the development.

2. BACKGROUND TO THE SCHEME

THE NEED FOR IMPROVED ACCESS

- 2.1 The island of St Helena is facing a number of key challenges. The economy is small, in decline, and has a heavy reliance on public sector employment and increasing levels of UK aid. The island's population is also declining through a combination of outward migration, particularly of young adults seeking employment, and below-replacement fertility. Outward migration is weakening and dividing families, increasing pressure on social services and in the long term is likely to lead to declining standards of living.
- 2.2 Access to the island is currently provided by the Royal Mail Ship (RMS) St Helena. The RMS St Helena has, in recent years, made two round voyages from the UK and South Africa annually, as well as shuttle sailings between St Helena, South Africa, Namibia and Ascension Island. Travel to and from the island is costly in both time and expense and has, to date, failed to generate tourism on a scale that could reverse the existing declining trends. The RMS St Helena is coming to the end of its working life, and the current contract with the operator Andrew Weir Ltd runs out in August 2011.
- 2.3 The island's rich history, unique ecology and glorious land and seascapes make it a potential tourist destination. Various studies have identified the development of the tourist industry as the most likely means of stemming the decline in the population and economy, and stimulating new development. A comprehensive study of the island's demographics¹ demonstrated that unless access to the island is significantly improved to facilitate development of the economy through tourism, the economy and with it, the population, is likely to continue to decline.
- 2.4 The local population has for many years expressed a strong desire for air access to the island. A majority supported the development of an airport in a Referendum in 2002 (further detail is provided in Section 5).

OPTIONS CONSIDERED FOR IMPROVING ACCESS TO ST HELENA

- 2.5 Over the years a number of studies have considered ways of improving access to St Helena. Before 2003, many focused on making best use of the RMS St Helena and existing off-loading facilities. In 2003, following an earlier study by High Point Rendall on access to St Helena, the DFID and SHG invited Expressions of Interest from private sector developers for the provision of an air access solution. When none of the responses provided a viable way forward, DFID/SHG commissioned

¹ St Helena Access Feasibility Study, Atkins 2004

Atkins to carry out a full feasibility study to establish the most practical and affordable means of providing access to St Helena, covering both sea and air options.

2.6 Based on a thorough review of all previous studies, a number of options were considered for both sea and air access. Some of the many options considered were:

- Replacement of the RMS St Helena by a larger ship to carry 180 people rather than the current 128;
- Providing separate passenger and cargo vessels with the passenger vessel constructed along the lines of a cruise ship;
- Two high speed options for the passenger vessel were also considered consisting of a conventional high speed vessel and a twin hull vessel. Both options would accommodate higher levels of passenger movement than other sea options;
- Development of a new airport with a long runway to accommodate B737-800 aircraft, typically carrying around 160 passengers per flight to a hub airport in South Africa;
- A new airport with a medium length runway for a fleet of 19-seat business jets based on St Helena and owned by SHG;
- Construction of a passenger terminal at the airport on Ascension Island for use as a hub facility with flights to Europe, USA, South America, Africa and the Falkland Islands;
- Use of the ShinMaywa US-1A Kai amphibian aircraft which could carry 32 passengers, and would require the establishment of water aerodromes in both St Helena and Ascension Island; and
- Use of two long range airships carrying around 48 passengers, and flying from St Helena to Ascension Island and Cape Town.

EVALUATION OF OPTIONS AND SELECTION OF THE LONG RUNWAY OPTION

2.7 These options, as well as others, were evaluated against a wide range of criteria including: costs; environmental and economic impacts; travel and fares; institutional and social issues; evacuation services; operations; and procurement. The results of this exercise identified two preferred air access options - the long runway and medium runway options. In respect of sea access options, the evaluation demonstrated that replacement of the RMS St Helena would deliver better value for money than other sea access options. The long runway; the medium runway; and replacement of the RMS St Helena were the three access options taken forward for further evaluation in the 2004 Feasibility Study:

2.8 The three access options were compared in terms of discounted total costs (capital and operational expenditure, social, institutional, infrastructure, environmental) and

benefits (tourism growth, revenues from tourism, GDP growth, reduction of subsidy, population growth, employment, investment). The key conclusions from the assessment of the options included:

- The replacement RMS option would not be sufficient to arrest the island's social and economic decline as it would be unlikely to generate sufficient levels of tourism to stimulate economic growth and reduce reliance on UK subsidy. In fact, the island's decline would probably accelerate;
- Conversely, there was a high probability that the introduction of air access would reverse the economic decline, create job opportunities and enable return-migration by off-island Saints to their families, through the development of tourism and associated industries;
- Of the air options, the long runway solution had the lowest net total cost taken over the long term. This is because the long runway option was anticipated to be the most effective in attracting tourists to the island and stimulating the local economy;
- The long runway option required greater capital investment in the early years than the medium runway and the RMS replacement option;
- The subsidy to St Helena from the UK Government was likely to be reduced to zero most quickly for the long runway option, because of the increased potential to attract tourists and develop the local economy. The medium runway option could take more than two further decades to reach this outcome; and
- The GDP predictions were much stronger for the long runway option than for the medium runway or RMS replacement.

2.9 The long runway was selected as the preferred option as it provided the least-cost solution in financial terms over the long term and the one most likely to enable St Helena eventually to become financially self-sufficient. This option would also deliver more affordable ticket prices for Saints compared with the medium runway option, as the use of larger aircraft would enable lower costs per passenger to be achieved.

2.10 The Feasibility Study highlighted that St Helena would have to make institutional change, particularly in respect of policies and procedures concerning immigration, landholding and inward investment, in order to ensure a successful economic outcome. It also highlighted the importance of SHG working closely with the air service provider to become effective tourism marketers.

DEFINING THE LONG RUNWAY OPTION

2.11 During the development of proposals for the long runway option, alternative approaches were considered to various aspects of the scheme including:

- Two possible airport locations, Deadwood Plain and Prosperous Bay Plain, were considered for airport development. The elevated ground level and frequent low cloud base meant that Deadwood Plain was rejected as a possible site;
- Two principal sea landing points were considered for the provision of construction access to the airport site: Rupert's Bay; and Prosperous Bay. Evaluation of these options considered a range of issues including topography, sea and landing conditions, the length of the route to the airport site, ease of construction, the impact on the Wirebird and other environmentally sensitive habitat, the opportunity to open up development potential and the possible use of the route for operational access. Rupert's Bay was selected as the preferred location. Permanent access to the airport from Rupert's Valley would follow the same route as that for operational access; and
- Three possible runway alignments/locations on Prosperous Bay Plain were considered. Key issues included: the steepness of approach slopes due to the terrain over which the aircraft would be flying; the extent of earthworks required; requirements for instrument landing systems; and prevailing winds. After consideration of these issues, the north/south alignment was selected as the preferred alignment

2.12 Construction of the north/south runway alignment will involve development of a level area over severely undulating terrain. The eastern plateau of Prosperous Bay Plain currently provides a sheltered environment for the area's ecologically important flora and fauna. Three alternatives to the solution for the construction of the runway were considered in exploring the possibilities of developing the runway while minimising environmental impacts. These were:

- **Balanced cut and fill option:** This solution envisaged a balanced mix of cutting the surface of the Plain, in some cases up to a depth of approximately 25 to 30 metres, and filling the depressions and guts to create a level area for the airstrip and terminal buildings, and the use of this material to fill in Dry Gut to obtain the required runway length. This solution would reduce the level of part of the eastern plateau leading to changes in wind speeds and impacts on the area's ecology;
- **High ridge option:** This option involved constructing the runway at a datum height of 320m above sea level. This would require a much greater volume of fill, and an approximate doubling of costs compared with the cut and fill option, which would have a major impact on the overall scheme cost. There was also the problem of where to win the fill material from. This would have necessitated the demolition of a small mountain (or parts of a number of mountains and hills)

close to Prosperous Bay Plain which would have resulted in a range of environmental impacts and raised a wide range of practical issues; and

- Bridge deck option: This proposal was based around a large reinforced concrete deck, constructed in situ to cross Dry Gut, approximately 300m wide by 500m long. The costs of the bridge deck alone were estimated at over four times more than that for the complete balanced cut and fill solution, having a major impact on the overall scheme cost. There were also doubts over the ability to operate aircraft safely from such a platform because of the interaction of the prevailing winds and the supports and platform of the bridge deck. This would create a major design risk which could only be overcome through prolonged testing periods, possibly adding many years to the construction programme. In addition, the construction of such a massive and challenging structure in this remote location was considered to present a very high risk to the completion date of the airport.

2.13 Although the balanced cut and fill solution will reduce the height of part of the eastern plateau, leading to impacts on the area's ecology, it was selected as the preferred approach because it is the only practical, cost-effective way of developing the runway. It has significantly lower costs, lower risks, a shorter construction programme, will provide better flight safety, and also avoids the creation of a wide range of additional environmental impacts off site.

2.14 Further details of the options considered are provided in the Environmental Statement.

3. SITE DESCRIPTION AND CONTEXT

OVERVIEW

- 3.1 The development of the airport and supporting infrastructure will require some 506 ha² of land on the north and eastern side of St Helena as shown by the ADA in Figure 1.2. The ADA and surrounding area vary in character considerably and include the expansive landscape of Prosperous Bay Plain, the commercial uses in Rupert's Bay and Valley, the pasture at Deadwood Plain, the residential and farming community at Longwood, the woodland near Bottom Woods and the fluvial areas of Fisher's and Shark's Valley.
- 3.2 Figure 3.1 provides an aerial view of the north eastern part of the island and indicatively shows the proposed development. Figure 3.2 provides photography of the ADA context. Various aspects of the ADA and surrounding area are described below, and further details can be found in the Environmental Statement.

LAND USE CONTEXT

- 3.3 The ADA and surrounding area include a range of land uses as shown in Figure 3.3. These are as follows:
- Rough ground – This is the predominant land use in the ADA and surrounding area. Rough ground is unproductive land which covers extensive areas including Prosperous Bay Plain, Shark's Valley and part of the slopes of Rupert's Valley. The majority of this land is owned by SHG and is termed 'Crown Waste'. The highly visible effect of soil erosion which has resulted in extensive tracts of highly degraded land and extensive gullying is illustrated in Figure 3.2;
 - Woodland scrub and Millennium Forest - Woodland scrub provides the second largest land cover across the area of the ADA, and is found at Bottom Woods, Fisher's Valley and in the southern part of Rupert's Valley. It includes indigenous regeneration planting, although the primary woodland cover consists mainly of exotic and introduced species. The Millennium Forest of Gumwood planting is included within this land use which was planted solely for nature conservation and amenity purposes;
 - Agriculture - Agricultural land comprises both arable and pastoral land uses and is centred around Longwood and Deadwood respectively, with an isolated pocket of grazed land at Woody Ridge;

² Note: This figure does not include a 3m wide corridor centred on realigned Post Box Walks, overhead and buried power lines for remote obstacle lights, or a 100m² area for remote obstacle lights. Details of these facilities are shown in Figure 1.2.

- Residential - Residential properties are concentrated around Deadwood and Longwood, as well as along the valley floor in Rupert's Valley, with a small number of isolated properties at Government Garage;
- Retail and community uses – These uses are found in the settlement of Longwood and include a number of shops, a church, two schools and a bar. There is also a church is located adjacent to the properties at Rupert's Bay as well as retail storage (stores and LPG);
- Tourism, recreation and amenity – These uses comprise the golf course at Longwood, Napoleon's House in Longwood and adjacent public green and Rupert's beach, as well as a number of coastal batteries and the signal station at Prosperous Bay which are of historic and tourist interest;
- Employment and utilities - Employment land uses are generally centred around Rupert's Bay and at Horse Point where the refuse dump is situated. Various commercial premises are located around Rupert's Bay including the fish landing area and fisheries processing facility (Argos and the St Helena Cannery), the bulk fuel farm and various commercial storage units. The power station lies further east along Rupert's Valley with the incinerator and quarantine station. A small pocket of commercial land use also exists at Government Garage close to Prosperous Bay Plain and at the Meteorological Station; and
- Watercourses - A number of watercourses extend across the ADA and surrounding area, rising in the higher ground towards the centre of the island and draining into the numerous bays which surround the island's perimeter. Most of the watercourses are usually dry with intermittent flows, the exception being Shark's Valley which flows all year round and is proposed to provide the permanent water source for the airport.

ECOLOGY

- 3.4 St Helena is noted for its unique range of landscapes and habitats and for its endemic flora and fauna (i.e. species that are found nowhere else in the world). Ecological issues are therefore of particular importance to the island and in relation to future development.

Terrestrial Ecology

- 3.5 The ADA and surrounding area includes terrestrial ecology of a very high nature conservation value and is home to a range of endemic species. The ecology baseline is shown in Figure 3.4, and ecological designations are shown on Figure 3.5. A summary description of the area's terrestrial ecology is provided below.
- 3.6 Prosperous Bay Plain comprises a central basin surrounded on three sides by a raised plateau. The area supports a range of endemic invertebrates (including burrowing spiders, beetles and bugs some of which are only found on Prosperous Bay Plain), endemic and indigenous vegetation (including babies' toes, scrubwoods

and tea plant), lichens and birds (including the critically endangered endemic Wirebird) and is designated as a proposed National Protected Area. The ecological interest of the central basin is considered to be of very high value and of international importance.

- 3.7 Habitats affected by the proposed access road are generally dominated by introduced alien plant species, although there are small patches of endemic plants and invertebrates. Although the pastures of Deadwood Plain and Bottom Woods are dominated by introduced grasses, these sites support significant numbers of breeding Wirebird. There has been a significant decline in the Wirebird population in recent years, and it has been concluded that this is due mainly to invasion of pastures by scrub. Following recent scrub clearance at Bottom Woods, there has been some recovery of the Wirebird population.
- 3.8 The stream course of Fisher's Valley near Cook's Bridge was formerly a Wirebird location, although it is currently dominated by scrub and dense grassland. Clearance of scrub to provide a more open habitat has been proposed in the past, and the area is being considered for designation as a Wetland of International Importance.
- 3.9 The water pipeline route crosses a range of habitat types and affects some areas of ecological interest including lichen-rich outcrops and communities of samphire and babies toes.
- 3.10 Sites in Rupert's Valley for the quarry and BFI are mainly dominated by introduced species and do not pose any particular ecological issues. Similarly, the proposed locations for navigational aids and the remote obstacle lights do not appear to raise any particular concerns.

Coastal and Marine Ecology

- 3.11 The Environmental Impact Assessment involved investigation of the marine ecology in Rupert's Bay. The Bay was assessed as being of low biological diversity, and is dominated by a species-poor sandy seabed. Species found in the Bay include various types of algae, limpets and crabs, as well as small colonies of coral. In addition, hawksbill turtles are commonly sighted in the Bay, and their presence is thought to be related to offloading of fishing boats.

LANDSCAPE

- 3.12 The landscape and scenic quality of the island is one of St Helena's most valuable environmental assets. The landscape has undergone extensive change since the early settlers arrived in 16th Century and the natural environment with the indigenous and endemic plant communities has undergone extensive degradation. Nonetheless, the landscape exhibits incredibly dramatic and spectacular scenery of

the highest quality, displaying a diverse range of landscapes and habitats. Figure 3.2 provides an overview of the landscape of the ADA and surrounding area.

- 3.13 St Helena is a volcanic island with many dramatic geological features which dominate the landscape. The interior of the island is deeply incised displaying a very folded and complex topography with large areas of level ground restricted to Deadwood Plain, Longwood and Prosperous Bay Plain.
- 3.14 The landscape of the ADA and surrounding area reflects its complex topography and climate. The variable geology, local topographic effects of rainfall, slopes and erosion rates have given rise to a complex pattern of physical features which define much of the current landscape. Key features are summarised below.
- 3.15 Rupert's Bay is a relatively enclosed bay with a fortification wall at the back and a small jetty on the western side. Commercial properties are clustered around the Bay, and bulk fuel storage and warehouse units dominate views. Rupert's Valley is characterised by a narrow valley with steeply rising side slopes covered by boulders and scree, and interspersed by occasional rocky outcrops. The lower valley sides are generally bare, while the upper sides are deeply incised and interspersed with scattered vegetation.
- 3.16 Deadwood Plain has a wide, open and exposed landscape. It is an extremely visible area which can be seen from large parts of the island. The wind swept nature of this area is its defining character with the few remnant trees heavily wind pruned. Vegetation consists of a mixed grass pasture which is grazed by cattle.
- 3.17 Longwood is one of the larger residential communities on St Helena. Large pockets of arable land lie to the north, centred around Longwood Farm and Mulberry Gut, which form the main area of arable land on St Helena. Between Longwood and Prosperous Bay Plain lies an area of eroded slopes with extensive gully systems. The landform of this area is typical of the effects of a highly eroded and folded topography, with variable levels of ground cover generally by more invasive species.
- 3.18 Prosperous Bay Plain is an exposed semi-desert landscape and represents one of the largest areas of relatively level ground on the island. The central basin is surrounded by a raised plateau to the south and east, with a deep gorge to the north and the valley of Dry Gut to the south. The east of Prosperous Bay Plain is fringed by a dramatic coastal landscape of steep, rugged cliffs.
- 3.19 To the south of Prosperous Bay Plain, the landform known as Bencoolen has a distinctive plateau shape, while Sharks Valley is characterised by a narrow, deeply incised, steep sided valley with a constant water supply. The valley floor has a rich covering of mostly invasive vegetation.

TRANSPORT

Local Road Network and Traffic Conditions

- 3.20 The road network on St. Helena is limited and consists of the following categories of road:
- Main roads – these are the roads serving the main centres of population, the main industrial/commercial areas and a linking road which connects the main areas of the island;
 - Secondary roads – these are the roads serving the various communities distributed around the island as well as areas of industry/commerce/agriculture;
 - Minor roads – all other surfaced roads maintained by the Government; and
 - Unclassified – all non-government roads, shared access roads and dirt tracks.
- 3.21 The existing road network in the ADA and surrounding area is shown in Figure 3.6.
- 3.22 Roads on the island, including the main roads, are steep and narrow with very tight corners and many hairpin bends. They are generally wide enough to accommodate a refuse collection vehicle and for cars to pass at low speeds on some sections. Elsewhere passing bays are provided. The legal weight restriction of 14 tonnes is largely dictated by the capacity of small bridges and other structures, and there is a three tonne restriction on minor roads. There are also height and width restrictions at some locations including the historic arch at the entrance to Jamestown and Longwood Gate.
- 3.23 There is no existing road from Prosperous Bay Plain linking into the island road network. The existing road network terminates just south of the Government Garage and there is an unmade track beyond this which is not suitable for normal traffic. From Rupert's Bay an existing road (Field Road) leads up the western side of the valley and connects with the existing roads to and from Jamestown. This is the only access route to and from Rupert's Bay and Valley. The lack of suitable access roads connecting the airport site with Rupert's Bay means that a new access road will be required.
- 3.24 Traffic count data for the two main roads leading into Jamestown (Side Path Road from the east and Ladder Hill Road from the west) indicate light traffic flows, with a two-way flow of 538 and 1,210 vehicles over a 12 hour period 6am to 6pm respectively.
- 3.25 Although there has been an increase in car ownership over recent years with over 3000 vehicles now registered, the only location with a parking problem is Jamestown. This problem is acute on main shopping days and when the RMS St Helena arrives and departs.

Public Transport

- 3.26 A network of subsidised minibus services connects the peripheral communities with Jamestown. This helps to minimise car usage and pollution, as well as relieving the congestion caused by parking in Jamestown. Before the introduction of the minibus services, taxis were the only form of public transport, and they are still considered by many to be the most flexible option.

Footpaths, Recreation and Amenity

- 3.27 There is a network of footpaths which include both inland and coastal walks which take in the spectacular scenery of St Helena. Many of the key footpaths are within a network referred to as Post Box Walks, the routes for which are published by the St Helena Nature Conservation Group. At present it is not known how many walkers use these trails and how regularly they are used. The St Helena Nature Conservation Group organises guided walks weekly, weather permitting, throughout the year. In addition to the Post Box Walks, there are routes described in various guides. Other routes, although not formally mapped or marked are known to be used by members of the community. The routes for known footpaths are shown in Figure 3.6.
- 3.28 The ADA and surrounding area includes a range of other recreational facilities: the swimming beach at Rupert's Bay; areas used for fishing at Rupert's Bay; and recreation facilities in Longwood as mentioned above.

CULTURAL HERITAGE

- 3.29 The ADA and surrounding area have a number of features with cultural heritage value. Figure 3.7 identifies the location of these features, which include:
- Listed buildings and military features within Rupert's Valley including Rupert's Lines (fortification wall), desalination plant chimney, Hay Town House and the Boer Road;
 - Known Burial Sites of liberated African slaves in Rupert's Valley;
 - Listed buildings and military features in the Deadwood Plain area including the site of the Boer Prisoner of War camp, the Pipe Path and the cricket wicket;
 - Military features of historic interest such as Prosperous Bay Signal Station and Prosperous Bay Battery and Martello tower; and
 - Longwood Conservation Area and listed buildings in Longwood.

LAND OWNERSHIP

- 3.30 Almost the entire ADA area is owned by SHG although the upgrading of a track associated with the airport water supply at Sharks Valley will require a small area of land from private property at lower Sharks Valley and Woody Ridge. Temporary access will also be required to some properties at Deadwood to provide

underground drainage for the airport access road, although this is not within the ADA.

- 3.31 The ADA is in close proximity to private land in a range of locations notably along the western side of Deadwood Plain, to the north of Longwood and Bottom Woods, and in the valley floor in Rupert's Valley.

OTHER PLANNED DEVELOPMENT

- 3.32 Before and after the opening of the airport a considerable amount of development is likely to take place on St Helena. The development of the airport is intended to facilitate economic growth based on tourism. Development will include both private sector projects including residential development, recreational and tourism facilities, commercial and industrial development, as well as supporting infrastructure provided by Government. Further details are provided within the Environmental Statement.

INTERVENTIONS TO SUPPORT AIRPORT DEVELOPMENT

- 3.33 The provision of air access to St Helena will mark the start of a new era in the development of the island and will present a wide range of challenges and opportunities. SHG has and is continuing to put a range of plans, policies and programmes in place to ensure that local residents enjoy the maximum benefits from air access and that the island's environment is protected as far as possible. These include:

- The Sustainable Development Plan 2007/8 – 2009/10 which seeks to ensure that principles of sustainable development are embedded into all development decisions and strategies for the future;
- The Investment Policy 2007, which seeks to assist the local private sector to compete effectively and efficiently in an open economy and ensure the local economy and people obtain maximum benefit from the island's development, while also making the economy accessible to international investors;
- The Tourism Policy 2007, which encourages developers of tourist facilities to work with a St Helenian partner, encourages Saints to participate in the growing tourism sector, and encourages tourism businesses to employ and provide training for local people;
- The Land Development Control Plan 2007, which guides development to the Intermediate Zone, although the Plan also allows for tourism development of an appropriate form within the Coastal Zone and Green Heartland (see Figure 3.8); and
- A review of the island's infrastructure including roads, water supply and utilities.

4. PROPOSED DEVELOPMENT

OVERVIEW OF SCHEME

4.1 Providing air access to St Helena will involve the development of a comprehensive scheme. Figure 1.2 provides an overview of the scheme which will consist of:

- The airport and its essential support facilities at Prosperous Bay Plain;
- An in-shore sea rescue service to be based at Jamestown;
- A new wharf at Rupert's Bay;
- A bulk fuel installation (BFI) in Rupert's Valley and the decommissioning of the existing bulk fuel facilities;
- A haul road for construction and permanent access on the same alignment from Rupert's Bay to the airport; and
- A permanent water supply system from Shark's Valley to the airport.

4.2 The proposals have been developed based on a number of key principles as follows:

- Delivering a high quality, well-designed scheme;
- Providing a cost effective and practical development;
- Minimising impacts on the environment;
- Ensuring safety for all both during construction and operation; and
- Maximising the benefits to the island as a whole.

4.3 The various elements of the scheme are described below. More detail on the proposals is provided by the application drawings and the Environmental Statement.

AIRPORT COMPONENTS

4.4 The airport will consist of a runway, airside and landside facilities (including a terminal building, car park, Air Traffic Control tower, fire station and airport fuel facility) and other infrastructure required to support the safe operation of the airport,

and is shown in Figures 4.1 and 4.2. The key components of the airport are summarised below:

- Earthworks - These are required to generate a level area of land for the airstrip and airside/landside facilities. The general approach to construction will seek to achieve a balance of cut and fill within the airport site. Material will be excavated and, where necessary, blasted from the central and northern parts of the site, and used to fill in Dry Gut on the southern side of the site, as well as to partially fill another gut to the south. Twin concrete arch culverts 2.2m high and wide will be constructed to allow any stormwater passing down Dry Gut to pass under the fill. The existing and proposed profiles of the runway are shown in Figure 4.3 and Figure 4.4 provides an artist's impression of the earthworks at Dry Gut;
- Runway strip - Figure 4.5 shows the general layout of the runway strip and an area of land surrounding the runway which meets prescribed grading criteria. The runway strip will be made up of: the declared runway, which is 1650m long and a starter extension of 300m incorporating aircraft turn pads, which will be formed in pavement quality concrete construction; Runway Emergency Safety Areas provided in case an aircraft overshoots or undershoots the runway; a clear and graded area extending 105m from the runway centre line; and a further 45m graded area. An emergency runway will be provided on the eastern side of the runway strip;
- Apron and taxiway – The taxiway will connect the apron to the runway as illustrated in Figure 4.5. The apron is designed to accommodate two Boeing 737-800 or similar aircraft simultaneously on individual self manoeuvring stands as shown on Figure 4.6. The apron will include a hydrant re-fuelling system incorporated into the central portion. Figure 4.6 identifies the areas either side of the apron which have been safeguarded for possible future expansion;
- Airside facilities – Secure airside facilities will be provided to serve all aspects of the airports operational requirements and are shown in Figure 4.6. Figure 4.7 provides a bird's eye view of the airside facilities. These consist of:
 - The Combined Building - details are provided below;
 - Storage and generator compounds – Two single storey structures constructed from local stone will be located to the south of the Combined Building. They will provide areas for general purpose storage and house the airport's electrical power generators which will supply all of the airport's power requirements;
 - Aviation Fuel Facility – The aviation fuel facility will comprise three 54m³ tanks for aviation fuel and one 54m³ tank for gas oil, a receipt pump/filter platform, and facilities such as piping, valving, pumps and filters for product handling. A pipeline from the aviation fuel facility to the apron will supply fuel to the aircraft;
 - Fire Training Rig – The fire training rig will provide a facility for hot fire training for the airport fire service and potentially the island fire service. The rig consists of a mock aircraft fuselage set within the airside area and is

- used to simulate aircraft fire fighting conditions. An example of a fire training rig is shown in Figure 4.8;
- Airside roads, parking and servicing – These will consist of: an access road in front of the terminal building; fire vehicle access road from the combined building to the apron; airside car parking for staff next to the Combined Building; a fuel loading bay next to the aviation fuel facility; perimeter security access tracks; and access tracks to airfield lighting and navigational aid installations;
 - Future Fisheries Protection Building – land is safeguarded for the possible future construction of a Fisheries Protection Building for the UK Foreign and Commonwealth Office which would be the subject of a separate planning application;
 - Landside facilities – The proposed landside facilities are shown on Figure 4.6 and will consist of:
 - The Terminal Building – details are provided below;
 - Car parking and drop off areas - The airport will be linked to Rupert's Bay and the existing island road network by the proposed access road. At the airport end this road will become an airport circulation road around a central car parking area. The circulation road has been designed as a conventional one-way system for passenger drop off and pick up for registered taxis and coach parking. Short and long stay parking will be provided in the central car park which has 85 standards and 3 disabled spaces;
 - The Vehicle Control Point - Vehicular access to the airside area will be controlled through a vehicle control point located off the southern side of the airside circulation road. The vehicle control point will be a small rectangular building with a floor space of 36m² (gross external area);
 - Cargo drop off – A dedicated manoeuvring area will be provided for lorries delivering cargo to the Terminal Building to reduce congestion on the circulation road;
 - Airfield ground lighting and navigation aids – Airfield ground lighting will be provided to assist in the safe arrival, departure and manoeuvring of aircraft. A range of navigation aids will also be provided close to the runway, at the Government Garage and at locations where high terrain causes an obstacle to air navigation, as shown on Figure 1.2;
 - Security fence – A 2.9m high welded steel mesh fencing with two layers of plastic mesh will be provided to secure the airport boundary from intruders and hazards to aircraft, as shown on Figure 4.1. This fencing combined with natural boundaries provides effective separation between landside and airside;
 - Surface water storage ponds and drainage – The airport's surface water drainage system will be split into two areas, with the northern area draining into the northern surface water storage pond, and the southern part of the airport draining into the southern pond;

- Sewage treatment plant and foul water drainage – All foul water from the Terminal and Combined Buildings will be piped either by gravity or small pumping station to the sewage treatment plant which is shown in Figure 4.6. Its location has been selected to minimise the spread of odour to the terminal area given the prevailing trade wind direction; and
- Power and telecommunications services – Cables for airfield ground lighting, navigational aids and external lighting will be buried. Telecoms cables connecting the airport buildings to the existing island infrastructure will be buried from the airport to Government Garage then carried on overhead lines on the existing network.

Terminal Building

- 4.5 The form of the Terminal Building has been determined by the requirement for the Terminal to be space-efficient, simple in its construction, flexible with regards to future alterations to internal planning and able to expand. The layout of the building is shown in Figure 4.9, and Figure 4.10 provides sections through the building. Figures 4.7 and 4.11 provide external perspectives and Figures 4.12 and 4.13 provide internal perspectives.
- 4.6 The Terminal Building design focuses on the provision of adequate facilities for arriving and departing passengers as well as those who come to meet them. The internal volume is essentially a single open space with landside and airside areas separated by a core containing all the essential operational facilities. Within this core, the main passenger processes take place including passport control, security and customs. The core contains the cafeterias that serve landside and airside concourses and the toilet main block.
- 4.7 Landside facilities will include the concourse, check-in area, airline offices and units for currency exchange and tourist information. Airside facilities will include the departure lounge, business and VIP lounge, arrivals hall and baggage reclaim facilities. A mezzanine floor for plant will also be provided. The Terminal Building will provide 2,873m² of floor space (gross external area).
- 4.8 The central part of the ground floor will allow people on the landside direct access to the east side of the building, and giving views onto the apron and parked aircraft. This will create a link between travellers and non-travellers. Either side of this area will be glazed onto both the departures gate and arrivals hall to create further visual links between passengers and those who come to meet them. The cargo facility will be incorporated into the Terminal Building to make use of shared facilities and contain construction cost.
- 4.9 People using the airport will experience the Terminal Building in two distinct ways. When people arrive on the landside, it will appear as a monolith giving the impression of a safe port to travel from as shown in Figure 4.11. This façade will be formed from local cut stone.

- 4.10 Once inside the building, the experience is one of light and transparency, with views through to the airside as shown in Figures 4.12 and 4.13. This transparency also greets passengers arriving on the airside as shown in Figure 4.7, and helps people understand how the building functions. The airside façade will be formed from a sandwich panel system with sections of glazing to provide views onto the apron and waiting aircraft.
- 4.11 The Terminal Building has a single pitch roof, which falls towards the landside elevation. Roof-lights located between structural roof beams permit natural, controlled daylight to enter the landside end of the building. Exposed external columns are made of Corten steel, which provides a rustic feel, sympathetic to the colours of the surrounding landscape.
- 4.12 An area to the south of the Terminal Building is safeguarded for possible future expansion as shown on Figure 4.6.

Combined Building

- 4.13 The Combined Building will accommodate the majority of the airport's functional requirements. The Air Traffic Control Tower, airport fire service, administrative offices, potable water treatment plant, power generation control, airfield ground lighting control and airline secure storage rooms will all be located here. Figures 4.14 and 4.15 show the layout and a section for the Combined Building, and Figure 4.7 provides an airside perspective. The total floor space provided will be 1,475m² (gross external area).
- 4.14 The internal planning of the building is driven by the need to locate the fire and rescue element as close to the apron as possible with direct access to the runway without having to negotiate bends in the road. The maintenance area is placed in the west end of the building. Shared facilities such as office-areas, toilets, changing-rooms, general plant, and store-facilities are placed in the central area of the building. The Air Traffic Control Tower is located on the south-eastern corner of the building with stair access from inside the building.
- 4.15 The shape, form and materials are derived from that of the Terminal Building so as to create a coherent architectural language throughout the airport. The southern, western and eastern façades will be formed from local stone with openings for plant-room, storage, access-doors and vehicle bays. The northern façade will be made of a sandwich panel system with sections of glazing, and all external columns will be made of Corten steel.
- 4.16 The Terminal and Combined Buildings will include a number of features to reduce energy and resource consumption as follows:
- Windcatchers - The check-in area of the Terminal Building will be naturally ventilated via windcatchers located on the roof. These terminals allow for the

supply and exhaust of air which helps keep the building cool whilst providing fresh air for the occupants;

- Low energy lighting - The lighting will be low energy which will both reduce electricity consumption and minimize heat gain to the space. The lighting system will be controlled by photocell tied in to a control system for both internal and external installations. Passive infra red detectors will also couple into the system for occupancy control. Roof lights assist in reducing the reliance on electric lighting;
- Solar hot water - Hot water will be provided by solar collectors sized for 100% of the hot water requirements supplemented by electric immersion heaters for times of low or no solar radiation;
- Domestic water - Hot and cold water will be provided by sensor activated taps to reduce water consumption; and
- Building fabric - Natural stone has been specified for sections of the external envelope sourced from within the airport site area.

Temporary Runway

4.17 The remoteness of St Helena, complex construction logistics and the limitation of frequent access via the RMS may mean that the Contractor requires a temporary runway to facilitate construction. It is possible that this will be required to ensure that the project can be cost-effectively delivered.

4.18 The temporary runway would be constructed by grading the surface to a 1000m long by 80m wide un-paved strip. The location proposed is shown in Figure 4.1, and is to the west of the airport along the route of the permanent access road. This location has been selected for the following reasons:

- It avoids the highly sensitive Central Basin of Prosperous Bay Plain, although it is still located within the proposed National Protected Area;
- It is proposed in a location where the access road will be constructed in any case, minimising the additional impact of the temporary runway;
- The availability of suitable flat land is very limited, restricting the choice of possible locations;
- The location has also been chosen for safe operation of the aircraft, involving input from the Regulator; and
- The selected location close to the airport site will enable efficient working practices, ensuring that the project is developed as cost effectively as possible.

4.19 If the temporary runway is required to enable cost effective construction, the detailed location will be carefully reviewed to ensure that environmental impacts are

minimized and that it can support safe flying operations. Facilities will be provided for port controls such as customs and excise, and immigration.

- 4.20 This facility would be for the sole and private use of the Contractor and not for commercial activity. It is expected a service would be operated once per week. The proposed aircraft for this particular long range air service, Walvis Bay to St Helena and vice versa, is a small, four engine de Havilland Canada DHC-7 or 8 (“Dash 7” or “Dash 8”) or Hercules L100 which have low take-off speeds ideally suited to short take-off runs.
- 4.21 On a case by case basis, the service may be used for emergency medical evacuation and extended to Saints, subject to the necessary insurance and agreement from doctors, the air service provider and Contractor. As soon as possible, the flight operation would be shifted from the temporary airstrip into the new runway or emergency runway, depending on which is available first. On completion of the airport, the land used for temporary airstrip would be restored to its existing profile and vegetation re-established.

AIRPORT OPERATION

Air Services

- 4.22 It is assumed that the following air services will use the airport, providing connections to countries such as South Africa, Namibia and Ascension Island:
- Scheduled services – The main air service for St Helena will be a scheduled service starting with one return flight per week for the first three or four years, expected to increase to five return flights per week within 15 years, and stabilising at 10 return flights per week after 30 years. The assumption is that the flights will be provided by a B737-800 aircraft with 150 economy and 12 business seats;
 - Charter flights – There may be a small number of charter flights as tourism activity grows, starting sometime after the second year of operation. Charter flights are unlikely to exceed two flights per week for 26 weeks of the year; and
 - Business jets – Business jets may visit the island for short periods, with a likely pattern of between one and three jets visiting once a month each carrying a maximum of 19 passengers.
- 4.23 Most air cargo will be carried in the hold of the scheduled aircraft although there will be some occasions when charter air cargo aircraft are used to carry larger loads.

In Shore Sea Rescue

- 4.24 There will be an in-shore sea rescue lifeboat moored at Jamestown or at another agreed location. This life boat will be specially equipped with life rafts and detection

gear to enable it to be used for sea rescue of passengers from a ditched aircraft up to a range of about 50 nautical miles from St Helena.

- 4.25 For the first two years of aircraft operations, the lifeboat is to be at sea and within fifteen minutes sailing time from the airport for one half hour before the arrival of aircraft and for one half hour after the departure of that aircraft. After two years, this arrangement will be reviewed.

RUPERT'S BAY WHARF

- 4.26 The existing wharf facilities and access through Jamestown are not sufficient to support the import of plant, equipment and materials required for the construction of the airport and associated facilities. Physical restrictions include lack of sufficient water depth, minimal storage area on the quay, available crane capacity, limitations of the existing roads serving Jamestown, and the low and narrow historic arch at the entrance to the town. In addition, the volume of construction traffic would have adverse impacts on Jamestown.
- 4.27 New wharf facilities are therefore required both for the construction of the airport and to provide a permanent facility for the island. It is likely that a temporary wharf will be developed for the airport construction period, and that this will be replaced by a permanent wharf in the longer term. Although the permanent wharf forms part of this planning application, its eventual delivery is subject to affordability. The locations of proposed permanent and temporary wharfs are shown in Figure 4.16 and Figure 4.17 provides an artist's impression of the wharfs.

Temporary Wharf

- 4.28 The early stages of constructing the airport will require the delivery of heavy plant and equipment to St Helena. A temporary wharf is likely to be constructed on the western side of Rupert's Bay. This is likely to be a promontory constructed from quarried fill and covered in a layer of protective rock armour. Road access to the temporary wharf would be by extending the existing road from the Shears Quay part of which may need to be on reclaimed land built out from the existing shoreline. Disruption to Shears Quay is anticipated to be minimal. On completion of the airport, it is likely that the temporary wharf will be removed, and that material will be used in the permanent wharf construction.

Permanent Wharf

- 4.29 The marine facilities following airport construction will be required to accommodate a wide range of commercial shipping and to transfer and handle a range of cargoes including dry and liquid bulks, general cargo, containers and petroleum products. It is proposed that in the long term the new wharf will replace Jamestown as the

commercial port for St Helena, although foot passengers will continue to land at the Jamestown Wharf as at present.

- 4.30 Marine facilities will comprise a solid jetty structure extending seaward from the shoreline at approximately a right angle from the shoreline to provide a measure of protection against waves from the northwest. The facility is designed as a multi-user port with the following key features:
- A 120m long main quay with minimum alongside water depth of 7m for bulk, containerised and general cargoes;
 - A 15m wide fixed ro-ro ramp for vehicular cargo;
 - A 40m long 'lighter' berth with minimum water depth of 3m for lighter berthing as is currently practiced in Jamestown;
 - A 25m wide cargo handling 'apron' over the whole length of the main quay;
 - A rock revetted slope constructed from precast concrete units or rock armour to protect the structure from wave action; and
 - A causeway connecting the jetty structure to the shore.
- 4.31 Rupert's Bay will remain as the fuel supply point for St Helena during and following construction of the airport, and as such the facility is to include fixed pipelines and facilities for a floating hose for servicing petrochemical tankers moored offshore as is current practice. Cargo transfer operations from vessels of appropriate size will be carried out by a combination of self unloading using ships' gear and by mobile cranes operating from the wharf apron. Due to the prevailing sea conditions, it will only be possible to unload cargo directly onto the wharf for about 340 days of the year. When sea conditions prevent direct unloading, this can be carried out as at present using lighters shuttling from the ship to the lighter berth. Larger vessels will also be unloaded in this way.
- 4.32 An access road to connect the quay to the existing road in Rupert's Bay and the new permanent access road will be provided that incorporates a turning head near the wharf appropriate for the types of vehicles expected to be used for wharf cargo operations. The section of road on the quay will have a minimum paved width of 8m.
- 4.33 Aids to navigation will be provided for the operation of the marine facilities. Aids to navigation are likely to comprise fixed jetty lights marking the extremities of the wharf and marker buoys indicating safe water depths in the approaches and manoeuvring areas.

Port Authorities Accommodation

- 4.34 During construction of the airport, temporary accommodation for the Port Authorities will be provided comprising offices, holding room and WC's. Port Authorities accommodation post airport construction is yet to be determined, but is

likely to include offices for the Harbour Master, administration and control authorities together with ancillary and amenity provision. Support infrastructure for a permanent wharf will be subject to a separate planning application.

BULK FUEL INSTALLATION

- 4.35 At present there are fuel stores at the shore in Rupert's Bay and further up Rupert's Valley. These installations are supplied by ocean going tankers via a pumping facility on the beach at Rupert's Bay. Fuel is pumped from the beach to the mid valley storage site through two dedicated pipelines. There are currently no facilities to handle aviation fuel and a number of health and safety concerns have been raised in respect of the existing Bulk Fuel Installation (BFI). In addition, its relatively small capacity requires quarterly supplies by ship. With larger on-island storage capacity, fuel could be supplied more cost effectively, particularly as the island's fuel demand increases through development of the tourism industry.
- 4.36 To cater for the airport requirements, and to provide improvements to the island wide supply, a new BFI will be constructed, to be located in Rupert's Valley as shown in Figures 4.1 and 4.18. The location has the benefit of being further away from residents in Rupert's Valley than the existing facilities and avoids disturbing known grave sites. The majority of the existing bulk fuel facilities will be decommissioned, although some of the facilities at Rupert's Bay will be retained where they are required to serve the new BFI. The sites of the decommissioned facilities will be decontaminated for future industrial use.
- 4.37 The BFI will comprise product handling (piping, valving, pumps, filters etc), storage tanks and a loading platform for road trucks. The BFI will include four 750 m³ tanks for gas oil, two 750 m³ tanks for aviation fuel and two 750 m³ tanks for gasoline, a receipt pump/filter platform, and facilities such as piping, valving, pumps and filters for product handling.
- 4.38 Space will be provided within the BFI for office accommodation, staff amenities, spare parts and consumables storage, a plant control room, electrical switchgear, uninterruptible power supply, emergency generator and fire-fighting plant. An electrical distribution system will be provided to connect the BFI with the existing power station. The main storage tanks at the BFI will be provided with fully automated foam systems and water cooling systems as a fire safety measure.
- 4.39 At present, a watercourse meanders down the valley at the location of the proposed BFI. This will be diverted around the BFI in a stabilised channel with appropriate inlet, outlet and energy dissipation structures to minimise long term erosion of the stream bed.
- 4.40 The surface water drainage system within the BFI will collect, convey and treat surface water runoff from the areas within the BFI and discharge into the sea or

local watercourses. In emergencies resulting in an incident which could cause pollution, the surface water will be stored and treated before being discharged. The foul water drainage system will collect and convey foul water from the buildings to a septic tank for collection by the local authorities. Effluent from the septic tank will be suitable for discharge into a soakaway.

- 4.41 Safety fencing will be provided to separate the BFI from areas of public access and for mandatory safety clearance requirements. Specific rock fall protection will be provided to slopes above the BFI. Fuel will be loaded into bridger tankers at the BFI for distribution to the airport site and island fuelling stations as is current practice.
- 4.42 A new floating and land-based pipeline will tie in with the existing fuel transfer pipeline. A booster pumping station located at or near the landfall will be required in order to assist the transfer of fuels to the tanks at the BFI.
- 4.43 A single multi-fuel transfer pipeline will transfer all fuel types from the delivery tankers to the new BFI. At the BFI, the pipe will enter a fuel interface system and change over facility where the different types of fuel will be separated and sent to the correct tanks. As part of the transfer pipeline works, a new gas oil fuel supply line connecting the BFI to the existing power station will be installed.

HAUL ROAD AND PERMANENT ACCESS ROAD

Road Alignment

- 4.44 In order to enable the construction of the airport, a haul road is required to connect Rupert's Bay wharf and the airport site. This road will also form a permanent airport access road with links to the existing road network at the top of Deadwood Plain, at Fox's Garage, near Longwood, at Bottom Woods and south of Government Garage (Bradley's). The design and alignment of the road seeks to minimise impacts on the landscape, features of cultural heritage importance, local residents and businesses, recreational resources and areas with nature conservation value.,
- 4.45 The haul and permanent access road will be made up of both upgraded existing roads and stretches of new road. The alignment is described below in sections in terms of "chainage" which is the distance along the road from the starting point at Rupert's Bay existing fuel farm, and is shown on Figures 1.2, 4.1, 4.19 and 4.20. Figures 4.21 and 4.22 provide artist's impressions of the permanent access road.
- 4.46 The road will begin in Rupert's Bay and progress up the valley along existing roads. At chainage 650m, the road will deviate from the alignment of the existing road and cross the stream to pass behind the power station. It will continue up the valley, making turns to ensure that gradients are not too steep up to Rupert's Hill (chainage 4,000m). From here the road runs beside the historic Pipe Path track

until chainage 5,350m. The road alignment will be adjusted locally on-site to avoid and preserve the Pipe Path track where possible. However, where crossing the Pipe Path is unavoidable, provision will be made for steps so that the historic route is not obstructed.

- 4.47 The road will then descend to Deadwood Plain and progress along the western edge of the Plain, following the line of the existing paved road until Fox's Garage at chainage 7,100m. The road will then leave the existing route and continue eastwards to the north of Longwood Farm as far as Bottom Woods, where it will join the existing paved road at chainage 9,450m. The road will follow the existing alignment as far as Government Garage. From here, a section of new road will be constructed crossing land at Bradley's and Cooks Bridge before rising steeply to Prosperous Bay Plain, skirting the western edge of the central basin. The final part of the road will descend gradually to the airport site.
- 4.48 Airport employees and passengers travelling between the airport site and Jamestown (and other destinations around the island) are likely to leave the permanent access road west of Longwood Farm (heading south towards Longwood Gate) and make use of the existing road network. This is because the link between Rupert's Bay and Jamestown is currently poor quality and is not due to be upgraded as part of this project.

Details of the Haul and Permanent Access Road

- 4.49 Where it is mentioned above that the haul road will use the alignment established by existing roads, these roads will be upgraded for the haul road traffic and then adopted as part of the permanent access road upon final completion.
- 4.50 When used as a haul road, the road will be sealed to reduce dust and noise impact to the local environment. Once no longer needed for construction traffic, the road will be upgraded to the permanent access road. This will entail a general re-grading of the haul road surface, construction of a final basecourse overlay and applying the sprayed bitumen and chippings surface. Other finishing works will also be completed at this time, such as architectural facings to bridge abutments and walls, line painting and crash barriers.
- 4.51 The permanent access road will be 6m wide with 1m wide paved shoulders provided each side. Horizontal and vertical alignment accord with a design speed of 30 mph as a minimum, consistent with the island's speed limit.
- 4.52 Retaining walls, used predominantly on the steeper sections of road on Rupert's Hill, will be of colour render to blend in with the surrounding area. The permanent access road from Government Garage to the airport (including roads and tracks around the airport) will comprise a finished surface which assimilates them into the semi-arid landscape of Prosperous Bay Plain as much as possible. However, it is

acknowledged that where tar spray and chipping finish is required, the tar spray will be prominently visible, particularly when first constructed.

- 4.53 Road drainage and crossings of watercourses will be provided for the access road, particularly along hillsides. In the area of Deadwood, specific drainage provisions are required as the run off needs to be collected and discharged downhill of residential properties.
- 4.54 Footways will be provided along the permanent access road where the road passes in front of residential and commercial property such as in Rupert's Bay and Deadwood to provide safe access for pedestrians. Safe access will also be provided during construction for residents accessing the road from their properties. Where existing footpaths and access are disturbed either by construction or in the permanent works, these will be diverted prior to commencing construction.
- 4.55 Crash barriers will be provided at corners on steep sections of the road where the change in direction of the road is generally greater than 90 degrees and there is inadequate run-off space at the side of the road. Crash barriers will also be provided to the access road above the BFI in Rupert's Valley.
- 4.56 Figure 4.19 shows areas included within the ADA where there are steep slopes covered with loose rocks and boulders which could fall on to the proposed road. Specific rock fall protection will be provided to slopes above the BFI and aviation fuel facility at the airport. No permanent street or pedestrian lighting will be provided along the access road.

PERMANENT WATER SUPPLY

- 4.57 Water is a precious resource on St Helena, and the airport development aims to maximise the long term benefit to the island of any development of the new water supplies. A potential source for the operation and construction of the airport has been identified in Shark's Valley.
- 4.58 This source is a combination of surface water and river bed flow and will be used by the airport development subject to a maximum abstraction rate of 40m³ per day. The raw water from this source will to be treated to the required standard as necessary for potable use.
- 4.59 Figure 4.23 shows the components of the proposed water supply system which will consist of:
- Water abstraction works at Shark's Valley including: a weir built of grouted masonry embedded into the river bed, a 30m³ stilling basin to store water, a pumping station, pipework, a security fence and an access path for inspection and maintenance. The existing track to Shark's Valley will enable access for construction materials and plant. Power for the pumping station will be

provided by extending the island's electricity network on overhead cables from Woody Ridge Flax Mill to the break tank (see below). Cables will run from the break tank to the pumping station along the delivery pipeline (see below);

- Water will be pumped to a break tank on elevated land at +350m. The delivery pipe will run above ground fixed to reinforced concrete piers generally half a metre above ground level;
- The break tank will be a covered glass coated steel tank with a capacity of 6.5m³. A new graded unpaved vehicle access track to the tank will be constructed from the existing track at Woody Ridge. The tank compound will be security fenced; and
- Water will be delivered to two storage tanks on high ground adjacent to the airport via a buried gravity main. One tank will be used solely for fire fighting with a capacity of 55m³. The other will be used to supply the water requirements of the airport with a capacity of 35m³. Access to the water storage compound will be from the airport access road. The tank compound will be security fenced.

CONSTRUCTION

4.60 In addition to the permanent infrastructure, the project will require a significant amount of temporary works to enable and support the Contractor during the construction phase. The methodology, phasing and support facilities such as offices, storage, accommodation, along with the type and size of equipment required to construct the development will ultimately depend upon the successful Contractor's approach and methodology, and as such these details cannot be provided at this stage. However, an assessment of possible construction activities and sequencing of works has been made and is based on the reference design drawings which form part of this application. This assessment informs the Environmental Impact Assessment.

4.61 In addition to the temporary wharf and runway mentioned above, the Contractor's temporary works in support of the permanent works may include:

- A temporary quarry in Rupert's Valley to provide material for the construction of the permanent wharf, access road and BFI. The site for the quarry has yet to be selected, and two locations are indicated on Figure 1.1 and Figure 4.19. The quarry is likely to cover an area of approximately 3 ha, which will cover only a small proportion of the areas shown on Figure 4.19. Further assessment will enable the preferred location to be selected and the quarry will be the subject of a future planning application;
- Compounds and offices in Rupert's Valley and site(s) close to the airport works for the Contractor's administration, equipment and bulk materials storage. A Contractor's compound has been provisionally shown near Government Garage. However, this is some distance from the airport site and it is possible the Contractor will wish to locate a temporary compound somewhere closer to the airport site. This may be important to enable cost effective delivery of the

project, and to enable efficient working practices. A provisional location on the western side of Prosperous Bay Plain is shown on Figure 4.1. This location avoids the sensitive Central Basin, although it is partially within the proposed National Protected Area. The compound is proposed in a location where the access road will be constructed in any case, minimising the additional impact of the compound. If a compound is required close to the airport site, the detailed location will be carefully reviewed to ensure that environmental impacts are minimised. Accommodation for construction workers will be provided at site(s) close to the airport; and

- A water supply for compacting the fill required for the airport earthworks. It is likely that a number of supply options will have to be considered. These include:
 - Using the permanent water abstraction works at Shark's Valley to provide part of the supply;
 - Abstracting water from Shark's Valley close to the waterfall at the beach provided a residual flow is maintained;
 - Piping water from existing temporary storage tanks elsewhere on the island;
 - Using Dry Gut to create a weir and reservoir (see Figure 4.1); and
 - Pumping sea water from Gill Point to be used in selected parts of the earthworks where leaching of salts can be effectively controlled or where it can be shown that this would not be detrimental to the environment (see Figure 4.1).

Phasing

4.62 The duration of the works, including commissioning, has been estimated to be approximately 4 years from commencement of enabling work until the airport is operational. The general order of construction could be as follows:

- The Contractor arrives on the island bringing key staff, small items of plant, materials, etc.;
- Advance works such as service diversions, construction of the Contractor's camp, environmental protection and mitigation measures;
- Establishment of the quarry;
- Construction of the temporary wharf in Rupert's Bay;
- Construction of the haul road;
- Construction of the BFI in Rupert's valley;
- Earthworks for the airport;
- Construction of airfield pavements;
- Construction of the Terminal and Combined Buildings and airfield infrastructure;
- Construction of the permanent wharf and airport water supply;

- Upgrading of the haul road into the access road;
- Commissioning and flight checks; and
- Certification of the aerodrome.

ENVIRONMENTAL MITIGATION

4.63 The scheme includes a wide range of mitigation measures to address the impacts of the development proposals. These measures are set out in the Landscape and Ecology Mitigation Plan and the Environmental Management Plan. Proposed mitigation measures include:

- Restoration and enhancement of habitats, and re-introduction of native species to increase biodiversity and ecological value;
- A recovery project for the Wirebird including reinstatement and enhancement of pastures and grazing regimes to provide additional habitat;
- Long term control and eradication of invasive and non-native species;
- Long-term monitoring programmes to monitor results of the reintroduction / habitat restoration programmes;
- Reinstatement and compensatory planting to reflect the local landscape structure, and reinforcement and extension of amenity and forest planting;
- Prohibition of unauthorised access into protected areas;
- Installation and reinstatement of fencing where appropriate, reinstatement of disturbed ground, trenches and excavations, the construction camp, agricultural land;
- Restriction of access to site via certain routes on the existing road network to minimise disturbance;
- Adequate signing, lighting and safety fencing on construction roads and routes;
- Safe pedestrian routes where diversion onto road is necessary;
- Prevention of mud, dirt, debris and loose material from the Site being deposited on the island's roads and footpaths through the provision of wheel washing facilities;
- Control and monitoring of activities that may cause noise, vibration and dust;
- Control of working hours at specific locations including restriction of construction in specific location during certain seasons to protect wildlife;
- Control of handling and disposal of contaminated materials including waste and implementation of Waste Management Plan;
- Protection of surface water and groundwater resources and prevention of pollution; and
- Protection of features of archaeological importance.

AIRCRAFT CRASH AND DISASTER AND FUEL INSTALLATION EMERGENCY PLAN FOR ST HELENA

- 4.64 An outline Aircraft Crash and Disaster Plan has been prepared to support this planning application. The Plan also makes provision for the handling of emergencies at the aviation fuel facility at the airport and the BFI.
- 4.65 The Plan outlines the organisational structure that shall be put into place on St Helena for the contingency planning and training of staff to handle the following types of emergencies and accidents:
- On airport aircraft emergencies and accidents;
 - Off airport but on Island aircraft emergencies and accidents;
 - In shore sea aircraft emergencies and accidents;
 - Off shore sea aircraft emergencies and accidents;
 - On airport fires and explosions;
 - Airport fuel facility emergencies and accidents; and
 - BFI emergencies and accidents.
- 4.66 Where possible, the Plan attributes specific responsibilities to organisations and post holders and requires the formation of a number of committees and sub-committees to deal with emergencies. A Disaster Control Centre will be created located in Jamestown with a Disaster Control Team including an Incident Commander, Duty Airport Manager, Duty Air Service Provider Manager, Duty Meteorological Forecaster, Duty Fuel Facility Manager, Duty Police Commander, Duty Medical Liaison Officer, Duty Island Fire Officer, Harbour Master or Sea Rescue Coxswain not at sea, Press Officer and Next of kin Information Officer.
- 4.67 The Plan further sets out:
- The specific responsibilities of the individual Disaster Control Centre Operations Room staff;
 - Details of the staff training required;
 - The roles and responsibilities of the on airport rescue fire fighting services;
 - Details of sea rescue facilities including mooring and serviceability, lifeboat crew training, details of practice rescues, at sea rescues coverage and sea rescue crew callout;
 - Details of the provision of temporary facilities and other support vehicles, equipment and volunteers in the event of a major incident;
 - Details of the practice of callouts and emergency procedures; and
 - The containment of air crash wreckage both on land and at sea.

5. PUBLIC CONSULTATION

INTRODUCTION

- 5.1 This section reviews the wide range of ways in which stakeholders and the public have been consulted on proposals for air access to St Helena, and explains how the issues raised have been used to shape proposals for the airport scheme. Consultation has been carried out in a wide range of locations to ensure that Saints living both on the island and away from home have been involved in the process. The far-reaching consultations have involved a range of local and international organisations and professional specialists, as well as interested members of the public.

CONSULTATION METHODS

- 5.2 The provision of air access to St Helena is an issue which has been discussed over many years both on the island and overseas. This section explains the key information and consultation activities which have been carried out to date.

2002 Referendum

- 5.3 A Referendum was held in February 2002 to determine the public's preference for future access to the island. Before the Referendum the (then) Air and Sea Access Team conducted an island-wide information campaign from September 2001 through to January 2002. The aim of the campaign was to ensure that people were well informed before casting their votes. The target audience was primarily St Helena residents, but also included Saints on Ascension Island, the Falkland Islands and on board the RMS St Helena.
- 5.4 A total of 16 public meetings were held, which included discussions on the economic, social and environmental impacts of air access, as well as the technical aspects of the concept. In addition, displays were set up in 15 shops throughout around the island, on all notice boards and at Prince Andrew School. In December 2001 an Air and Sea Access Information Centre was officially opened in Jamestown to disseminate information and answer queries.
- 5.5 Informative display areas were also set up in locations off the island at Georgetown, Two Boats and the American base on Ascension Island. Two displays were arranged for the Falkland Islands, one at Mount Pleasant and the other in Port Stanley. Information packs were sent to Ascension Island, the Falkland Islands and to the RMS St Helena.

5.6 The Referendum was held on 4th February 2002. Polling facilities were provided on St Helena, the Falkland Islands, Ascension Island and for the RMS St Helena Crew. The specific question asked was as follows:

“I would like to have an airport on St Helena, with alternative arrangements being made for shipping

Or

I would not like to have an airport but would like to have a replacement RMS St Helena”

5.7 From a total of 4,473 potential voters, around half cast votes. Table 6.1 provides a summary of the responses.

Table 6.1: Referendum Responses

| Location | In favour of airport | | In favour of replacement RMS | | Spoiled voting slips | Total |
|-------------------------|----------------------|------------------|------------------------------|------------------|----------------------|--------------|
| | Votes cast | % of valid votes | Votes cast | % of valid votes | | |
| St Helena | 909 | 61% | 583 | 39% | 10 | 1,502 |
| Ascension | 346 | 93% | 26 | 7% | 2 | 374 |
| Falklands | 286 | 96% | 12 | 4% | 1 | 299 |
| RMS Crew | 36 | 88% | 5 | 12% | 0 | 41 |
| Total votes cast | 1,577 | 72% | 626 | 28% | 13 | 2,216 |

5.8 The referendum demonstrated the clear support for air access to St Helena with nearly three quarters of those who cast valid votes supporting the development of an airport.

Private Sector Participation

5.9 In April 2003, SHG and DFID invited expressions of interest for private sector participation and investment in development of air access for St Helena. Four proposals were received and a full assessment of the proposals was carried out. In April 2004, a press release delivered by SHG’s newly appointed Access Project Manager informed the public that:

- None of the four outline proposals offered a basis upon which to start a negotiation for air access;

- The attempts to develop air access as part of a package of private sector investment in which air access would be part-funded by proceeds from other private development would be discontinued; and
 - Alternative ways of providing air access would be explored. As the costs to DFID were likely to be substantial, a full feasibility study and other investigatory work taking account of all costs and long term impacts would be undertaken.
- 5.10 There was a strong negative reaction to the press release and further questions were raised and answers provided via radio interviews, a live radio phone-in, public meetings and a public surgery.

Feasibility Study, 2004

- 5.11 The 2004 Feasibility Study was announced in a press release in July 2004, which recorded the activities of surveyors on Prosperous Bay Plain and the imminent arrival of a study team to discuss social, economic and environmental topics.
- 5.12 The public were kept informed of progress throughout the Feasibility Study through press releases, radio interviews and public meetings. In August 2004, the final shortlist of three access options: medium runway; the longer runway; and the RMS St Helena, was announced to the public. In November 2004, a report showing the work carried out to identify the final short-list of access options for further analysis was made available in the Jamestown Public Library.
- 5.13 The key findings of the Feasibility Study were made available to the general public in 2005.

Consultation on the Land Development Control Plan

- 5.14 The Land Development Control Plan was prepared in parallel with the Feasibility Study in 2004. The Plan includes a wide range of policies relevant to the development of the airport, and involved a number of stages during which the public and other interested bodies were consulted including:
- Early in 2004 a UK Planning Advisor was appointed who, working with the local Planning Officer, held over 30 meetings and a public meeting to discuss the Plan and encourage comments; and
 - A Consultation Draft of the Plan was placed on deposit on St Helena from December 2004 to February 2005, and comments were encouraged from Saints living on the island and at various locations elsewhere. In addition, public 'surgeries' and exhibitions were held on the island to provide information on the Plan. All written comments were recorded and reported to the Land Development Control Agency. Comments made about air access and policies related to airport development were a key part of this process. The Plan was adopted in 2007 following approval by the Governor-in-Council.

Announcement of Decision to Provide Air Access

- 5.15 On 14th March 2005, following completion of the Feasibility Study, the Governor announced the UK Ministerial decision to fund the development of air access for St Helena subject to a rigorous environmental assessment and acceptable contract bids. The announcement was made at Plantation House with senior government officials, representatives from the private sector, non government organisations and the local media in attendance. The decision was widely publicised, both on the island and overseas.

Public Information and Consultation Post Decision

- 5.16 In April 2005, advisors from DFID's Overseas Territories Department (OTD), visited St Helena and, along with SHG's Access Project Manager, hosted a public meeting to talk about the recent Ministerial decision and the project plan. This was the first of many air access related meetings/forums, radio interviews and press releases following the announcement a month earlier.

Public Information and Consultation Week April 2006

- 5.17 A year later, between the 10th and 17th April 2006, a focused public information and consultation period was held. The purpose of this consultation was to update the public about the air access proposals and to get feedback on the developing proposals. In addition to SHG officers, a number of key people participated in the consultation period. These were representatives from DFID, Atkins (the technical design team), Faber Maunsell (the environmental impact assessment team), and Professor Michael Adler (Professor of Genitourinary Medicine / Sexually Transmitted Diseases).
- 5.18 The consultation programme included meetings, distribution of leaflets, displays, opportunities for informal dialogue and family fun days. Question boxes were also located throughout the island during the consultation period to give people a further opportunity to raise issues and make comments. The consultation events were well publicised through posters, television, radio interviews and press releases.
- 5.19 One of the concerns raised during the April Public Information and Consultation Week by visiting Saints, was the limited information that had been disseminated amongst Saints abroad, particularly on Ascension and the Falkland Islands. To address this, the SHG Access Project Manager visited both Islands in September/October 2006 and hosted a number of meetings. Posters showing details of the proposed haul road, new BFI, wharf and airport were also displayed. The main concern, a very strong one from both islands, was the provision of a link between Ascension and St Helena when the RMS St Helena is decommissioned. Discussions are currently being held and the possibility of providing air access via Wideawake Airfield is being explored. Failure to deliver this replacement link would

make travel between Ascension Island and St Helena considerably more expensive and inconvenient than is currently the case and the securing of a replacement link by SHG will be an important part of the overall air access project.

Consultation Relating to the Tender Process

- 5.20 In February 2006, it was announced that three consortia had pre-qualified for the airport contract. August 2006 saw another spate of meetings with SHG departments, the private sector, non-governmental organisations and members of the public following the sudden withdrawal of one consortium and the confirmed non-compliance of the other two. There was widespread concern and the meetings, radio interviews and press releases were used to explain the situation and to reassure the public that air access would continue to be pursued.
- 5.21 Following a review of the reasons behind the withdrawal of the contractors from the 2006 tender process, it was agreed that the tender would be revised and re-issued. The Access Office announced to the public at the end of March 2007 that four interested consortia (Basil Read, Lagan, Impregilo and China State Construction Engineering Corporation) had passed the pre-qualification stage. Soon afterwards, it was announced through radio interviews and press releases, that the four consortia would visit St Helena in June 2007. A further range of meetings was held with the private sector building trades and other service providers to help prepare them for the impending consortia visit and to ensure local workers and local businesses had the best possible chance of securing any opportunity that might become available. Arrangements were also made for the St Helena Development Agency to work with the private sector and the public on updating their business portfolios and CV's.
- 5.22 Two consortia withdrew their interest in the project in early June and the remaining two consortia, Basil Read and Impregilo made their visit to St Helena during the 14th to the 22nd June 2007. The pre-visit consultation with local businesses ensured both consortia received details of most of the island businesses. Two receptions were also arranged at Plantation House on the 15th June and at the Consulate Hotel on the 20th June, which allowed the local private sector to have one-on-one meetings with members of each consortium.

On-going Consultation Activities

- 5.23 Since the announcement of the decision to develop air access, a range of consultation and information activities have been and are still on-going including:
- Press releases - over 50 press releases have been published since the announcement providing project updates and related information;
 - Visits - a series of visits to the island have been made by key professional specialists and organisations;

- Public meetings - often coinciding with visits to the island by representatives of DFID and consultants working on the airport, a number of public meetings have been held in various venues to keep local people updated on the progress of the project;
- Meetings with Government departments and key organisations – a range of meetings and presentations have been held with organisations such as the Chamber of Commerce, St Helena Development Agency, Solomon & Company, Cable & Wireless, Builders & Allied Trades Association, Prince Andrew School, , etc.;
- Radio interviews – project updates have been aired periodically on the radio; and
- Displays, including a video display of the project flight trials. Footage of flight trials that were undertaken in May 2006 were shown in the Canister Window, in Jamestown.

Consultation with the UK Government

- 5.24 DFID Ministers have updated an All Party Parliamentary Group for St Helena at key points throughout the process of development of air access proposals for St Helena. In addition, DFID Ministers have responded throughout the process to a number of parliamentary questions and to written correspondence from the public, covering a wide range of issues including the environment and the UK Government's commitment to maintaining access.

KEY ISSUES RAISED AND RESPONSES

- 5.25 A wide range of organisations and individuals have been involved in the process of developing proposals to provide air access to St Helena. Their comments have been made through a range of channels including letters, phone calls and emails to SHG and DFID, and also through comments made at public meetings, and informal discussions. The key issues that have been raised are summarised below. Further detail on the impacts of the scheme and measures to address these impacts is set out in the Environmental Statement and is summarised in Section 6.

Support for the Provision of Air Access

- 5.26 A wide range of comments have been made highlighting support for the provision of air access to the island. Key benefits identified through consultation include halting and reversing the decline in population, making it easier to visit family and friends, providing a means of evacuation for medical emergencies, and economic development.

Economic Development and Growth

- 5.27 Consultees have expressed a range of views related to the impact of air access on economic development and growth on St Helena. Many consultees have pointed out the benefits of air access, including new business and employment opportunities, financial self-sufficiency and new investment. Concerns focused on the degree to which local people would benefit from the new opportunities and impacts on social polarisation and land prices. Saints were also concerned about the cost of air travel.
- 5.28 In response to concerns about economic growth, a number of policies and programmes are being developed which seek to ensure that Saints enjoy the benefits of economic development and that negative impacts are avoided as far as possible. These include the Investment Policy, the Tourism Policy, the Land Development Control Plan, and the possible release of Crown land for development as a way of controlling land values.

Increase in Crime and Introduction of Drugs and HIV/AIDS

- 5.29 Many consultees raised issues related to the possible impacts of tourists and construction workers on the island. Key concerns related to the possible introduction of HIV/AIDS to the island, increase in crime levels and the introduction of illegal drugs.
- 5.30 In response to the concerns relating to HIV/AIDS, Professor Adler, Professor of Genitourinary Medicine/Sexually Transmitted Diseases and an advisor to the British Government, the World Health Organisation, the United Nations and the European Commission, joined the team visiting St Helena for the April 2006 Public Information and Consultation Week. Professor Adler spoke at a number of public meetings about HIV issues and promoted a prevention/education programme and behavioural change.
- 5.31 Following Professor Adler's visit, DFID created the new post of HIV/AIDS Health Educator. In November 2006, a specialist with many years experience in HIV/AIDS issues, was posted to St Helena for two years to work closely with the Sexual Health Group and to lead the HIV/AIDS prevention programme.
- 5.32 The airport contractor, as part of the conditions of contract, is responsible for the conduct of their employees, and is required to provide appropriate supervision and security. The Contractor is also required to provide an HIV awareness programme via an approved service provider.

Capacity of Local Infrastructure

- 5.33 A number of consultees have expressed concern about the capacity of the island to cope with growth in population and tourism. Existing infrastructure including roads, water supply and other utilities, as well as the hospital, are perceived to be over-stretched. Local people fear that increased demand will exacerbate the situation.
- 5.34 In October 2006 DFID and the St Helena Government engaged consultants WSP to carry out a review of all infrastructure on St Helena, including roads, water, wastewater, solid waste, electricity, public buildings, wharfage and tourism facilities. The aim of the review was to set out the work that needs to be done to support the existing population and future economic growth. The strategy is currently being developed into an action plan to improve St Helena's infrastructure over the next five years.

Impact on the Environment

- 5.35 The impact of the scheme on the environment is an issue which has been raised by international organisations and environmental specialists. Concern has focused on the island's endemic species, in particular the invertebrate community of Prosperous Bay Plain and the Wirebird. The environmental impacts of the scheme have been considered throughout the development of the scheme and the environmental impact assessment process, as set out in Section 6.
- 5.36 Local Saints have expressed concern about the impact of increased tourism and activity on the currently peaceful atmosphere of the island. Careful planning will be required to ensure that increased activity is successfully accommodated without generating unacceptable impacts. It is intended to cap tourism at around 58,000 visitors per year which, combined with the anticipated increase in resident population, was assessed as being a maximum sustainable visitor level.³

Impacts on Existing Residents

- 5.37 Residents in Rupert's Bay, Deadwood and Longwood have expressed concern about the impacts of construction and traffic during operation. These people live close to the proposed haul and access road alignment and are concerned about issues such as noise, dust and safety. These issues have been addressed through the design of the scheme, the avoidance of private property and a wide range of mitigation measures to minimise impacts on residents.

³ These figures assume that 30 years after the opening of the airport there will be a total of around 80,000 passenger movements per year of which 22,000 would be Saints, while 58,000 would be visitors

Access to Recreational Assets

- 5.38 Local people expressed concern about development cutting off recreational walking routes, including routes to recreational fishing grounds. In cases where it will be necessary to close existing routes, suitable diversions have been identified and are included within the proposed development.
- 5.39 Consultees were also concerned about the impacts of the development of the new wharf at Rupert's Beach in Rupert's Bay which is the only swimming beach on the island accessible by car. The Contractor will be required to undertake a series of measures to ensure that the amenity of the beach is maintained.

6. THE ENVIRONMENTAL EFFECTS OF THE PROPOSED DEVELOPMENT

INTRODUCTION

6.1 This section provides a summary of the findings of the assessment of each of the topics covered in the Environmental Statement. The assessments describe the negative and positive effects of the development on a rising scale, typically negligible, minor, moderate or major. Some of the mitigation measures (measures to avoid, reduce or offset negative impacts) are also set out below. These measures will be ensured through the implementation of the Environmental Management Plan. The scale of impacts is classified as follows:

- Major - These are highly significant impacts because of their large scale and/or the importance of the area affected;
- Moderate - These are significant impacts because of their scale and/or the importance of the area affected;
- Minor - While noticeable these impacts are not significant;
- Negligible - These are very small impacts that are not significant;
- Neutral - Where positive and negative effects cancel each other; and
- In some instances other terms have been used such as large adverse.

6.2 The summary provided below focuses on the major and moderate impacts identified.

SOCIAL AND ECONOMIC EFFECTS

Population

6.3 Major positive impacts on the island's population are predicted once the airport becomes operational. The introduction of air access is predicted to reverse the current population decline, creating net in-migration and growth within the resident population. The majority of those attracted back to the island and those migrating to the island will be economically active, and the influx is likely to go some way towards redressing the current population imbalance. The island could also experience in-migration by people wishing to retire in the longer term. SHG will monitor and manage population changes through immigration policy and social planning.

Economy

- 6.4 The economy of St Helena has been in a gradual state of decline since the demise of the flax industry in the 1960s, and the island has since become increasingly dependent on UK budgetary aid which has increased rapidly over recent years. The construction of the airport and supporting infrastructure will provide a temporary boost to the economy through the creation of jobs, increased demand for local goods and services to assist with construction, and the multiplier effects of additional activity and expenditure. Unemployment is expected to be reduced during construction. A range of measures are planned to ensure that Saints make the most of the employment and business opportunities that the development will create.
- 6.5 It is anticipated that there will be a movement of labour from both public and private sector activities to the project during the construction period as wages paid by the contractor are likely to be above the prevailing local rate. Mitigation includes modernisation and efficiency improvements and pay increases in the public sector, and SHG activities to attract expatriate workers if necessary. However there is expected to be a temporary decline in public sector services and the ability of the private sector to provide goods and services, particularly in the construction sector.
- 6.6 Major economic benefits are predicted over the first few decades of airport operation. The benefits include⁴:
- Average GDP growth of around 6.3% per annum over the first 30 years of airport operation, equivalent to an overall increase of over 330%;
 - An approximate doubling of the number of employed persons on the island with an increase of over 2,000 jobs after 25 years of airport operation. Unemployment is predicted to remain low at around 5%;
 - Increase in the number of tourists from 800 overnight visitors and 1,500 day trippers per annum in 2005 to up to around 58,000 per annum after 25 years of airport operation;
 - Development of the private sector to become the engine of the economy, led by activity in the tourism sector. Annual private sector investment is forecast to reach approximately to £17 million after 25 years of operation; and
 - Financial independence, with the aid received from the UK Government reduced to zero within 15 to 25 years of airport operation

⁴ The following are forecasts of the potential benefits and are meant as a guide to show the broad magnitude of potential effects. They should not be considered a definitive levels or targets

- 6.7 Moderate negative impacts are predicted due to increases in social inequality arising from rising prices and unequal distribution of benefits from private sector development in favour of higher skilled Saints and/or Saints with greater entrepreneurial ability.
- 6.8 A range of measures are proposed to ensure that benefits are maximised and negative impacts are minimised. These include the implementation of the policies set out in the Sustainable Development Plan (2007), the Tourism Policy (2006) and the Investment Policy (2006), and Government intervention to support business and encourage inward investment, to provide training and to ensure that Saints make the most of the opportunities on offer.

Education and Health

- 6.9 The increase in population and economic activity resulting from the project will lead to an increase in the tax base from which the Government can invest in the health and education systems. In addition, there will be an increase in demand for these services as the island's population rises. These factors will combine to provide opportunities to broaden and develop these public services, and significant improvements to the currently somewhat limited health and education systems are predicted. However, it is important to note that there may be a lag in the actual and required increase in capacity of health and education services, and this could create issues in the short term.
- 6.10 The introduction of air access is also predicted to generate increased demand for adult education and vocational training, particularly in the tourism and hospitality sectors. The skill levels of the population are predicted to rise.
- 6.11 Medical evacuations by sea are currently often slow. Air access will make it much easier to access international medical expertise, including for medical emergencies.
- 6.12 Care of the elderly is an increasing concern as the population ages. A long term beneficial impact of air access is an increase in non-medical care of relatives at home made possible by the return of Saints currently living overseas.
- 6.13 Negative impacts on health and education are predicted in the short term during the construction phase of the project. It is anticipated that people working in the health and education may be attracted to the construction project due to wage differentials. This will increase pressure on these systems in the short term. SHG is considering a range of measures to attract people into teaching and health service roles including recruiting overseas, reviewing teachers' salaries and encouraging re-employment of retired staff.

Social Cohesion, Security and Crime

- 6.14 Major benefits are predicted to family life on the island following the opening of the airport. Air access will allow quicker and easier access to and from friends and families working abroad. It will also allow families to be re-united as people return to St Helena attracted by the new economic and employment opportunities available on the island. The incidence of fostering of children by relatives is expected to be reduced as parents return home. The re-balancing of the population brought about by this return migration will also reduce the pressure on the social welfare system, increasing the island's tax base and reducing the proportion of people who need to be cared for. Issues related to crime and security are discussed in paragraphs 5.29 -5.32.

Housing

- 6.15 During the construction of the airport, workers from the local construction industry are likely to be attracted by higher wages to work for the Contractor. This will have adverse impact on the local construction industry and the supply of housing and other forms of development.
- 6.16 There are two location options for the contractor's camp - a) east of Bradley's Garage and b) west of the airport site on Prosperous Bay Plain. In the event of the contractor's camp being located near Bradley's Garage, SHG will seek to temporarily re-house those residents living close to the camp activities if the disruption to their lives is considered to be significant and if they chose to move.
- 6.17 Following the opening of the airport, there is potential for increased demand for housing from both returning Saints and second home ownership of non-Saints to lead to rising house prices and increased pressure on the local development industry. There are concerns that this may disadvantage low paid workers, leading to continued out-migration of Saints. A range of Government interventions seek to minimise these impacts including: the possible release of Crown land for residential development; the allocation of land for development in the Land Development Control Plan; the introduction of procedures for foreigners seeking to acquire land; and on-going monitoring of migration trends to allow additional home ownership issues to be addressed if required.

LAND USE

- 6.18 The main permanent land use effects will result from the loss of agricultural land and effects on recreation. Around 7ha of agricultural land will be lost at Deadwood Plain to build the access road to the airport, although this relatively small land take will not have significant effects on the overall use of the land for farming in the area. With respect to recreation, the only significant impact will be on Rupert's Beach

which will be closed temporarily during construction (see paragraphs 6.48-6.50). Paragraphs 3.30 – 3.31 explain the impacts of the project on private land.

NOISE AND VIBRATION

- 6.19 The most significant construction impacts are predicted to occur during the initial stages at residential properties close to works. This is when the wharf and access road are likely to be built and the quarry will be active. The areas most affected will be Rupert's Valley and Deadwood. For the remainder of the construction programme, the impacts are predicted to be minor as major construction activities would occur in more remote areas, primarily at the airport site on Prosperous Bay Plain. However, some operations, e.g. blasting, will generate noise and vibration which will be significant given the lack of other similar sources of noise on the Island. Impacts will be minimised by placing strict requirements on the Contractor to follow good working practice and disturbance will be managed by a number of measures including control of working hours and restricting the timing and frequency of blasting events.
- 6.20 Once constructed, it is predicted that the airport, and all other built infrastructure included within this project, will not have significant noise and vibration impacts on people and buildings on the island. This is because of: the low number of flights per week; the routes that aircraft will take to avoid flying over people's homes; the timing of flights to avoid periods when most people are sleeping; and the use of defined routes in and out of the airport to reduce traffic in residential areas.

AIR QUALITY AND DUST

- 6.21 The air quality assessment considered the effects of both dust from construction and vehicle emissions. The assessment identified only minor or negligible impacts in terms on the island's air quality. These include temporary nuisance at residential properties and at the Canning Factory and the Argos fish processing plant at Rupert's Bay. These impacts will be addressed through a range of measures such as dampening down dust and regular inspections.
- 6.22 The scheme will generate additional traffic during its construction and once the airport opens. Based on the forecasted traffic levels, the impact on local air quality from vehicle emissions of construction traffic, aircraft flights, airport vehicles and vehicles travelling to/from the airport is predicted to be negligible.
- 6.23 Dust impacts on the ecosystem at Prosperous Bay Plain are summarised below.

CARBON EMISSIONS

- 6.24 Greenhouse gas emissions, particularly carbon dioxide (CO₂), are an issue of global concern. Emissions from aircraft and from ships are significant sources of CO₂. A comparison of air and sea access has been carried out to establish whether a change to air access will result in greater emissions of CO₂.
- 6.25 Emissions of CO₂ have been calculated for a number of scenarios. These scenarios have allowed comparisons to be made between travelling to and from the island from South Africa and the UK by ship and by aircraft. A number of assumptions have had to be made in undertaking the study. Direct comparison is problematic as air and sea access fulfil different functions including the movement of freight. In the future the airport will cater for multiple flights. It would not be practicable for ships such as the St Helena RMS to transport the same number of people to the island.
- 6.26 The study suggests that, especially on a per-trip and per-passenger basis, travelling by air could result in lower CO₂ emissions in comparison with using a ship like the RMS. However, it should be noted that freight would still need to be brought to St Helena using ship, albeit freight transport is likely to be more efficient than using the RMS. In the longer term the increase in flights from 1 per week to up to 10 per week after 35 years would generate greater quantities of CO₂ than continuing with the current or similar sea access arrangements.

TERRESTRIAL ECOLOGY AND NATURE CONSERVATION

- 6.27 The airport and its supporting infrastructure will pass through a number of habitats. Of most importance are Prosperous Bay Plain and Deadwood. The semi-desert habitats at Prosperous Bay Plain appear to be unique and are not found elsewhere on St Helena. Prosperous Bay Plain is a centre of 'endemism', which means that certain species found here (the Wirebird and various species of plants, lichens and invertebrates such as spiders and insects) occur only on St Helena and nowhere else in the world. Indeed, at least 20 species of invertebrate are considered to be found only on Prosperous Bay Plain. Both Deadwood and Prosperous Bay Plain are important habitats for the Wirebird which is critically endangered.
- 6.28 Habitat losses in Prosperous Bay Plain from airport construction will represent a sizable proportion of the area available for these specialist and endemic species. Mitigation will include the creation of new or improved habitat and the restoration of areas used temporarily during construction. Nevertheless, the airport project is predicted to result in a significant adverse impact on ecology. This is in part because of the uncertainty over the success in creating replacement habitat. In addition, there is uncertainty over the future conditions in the Central Basin of Prosperous Bay Plain (the most important area for endemic invertebrates) following the change to the landforms necessary to create a level area for the airport. The

expected increase in wind speeds experienced in the Central Basin is predicted to lead to changes in the composition of the dust and sands in the basin. Thus conditions for the populations of endemic burrowing invertebrates are likely to change. The response of invertebrates in the affected areas cannot be predicted with any certainty.

- 6.29 The formation of broad, level terraces on the sheltered western embankment crossing Dry Gut may in part mitigate losses of fine dusty deposits in the Central Basin and provide a suitable habitat for burrowing invertebrates. However, the effectiveness of this novel approach is uncertain. Other measures include the reclamation of native semi-desert by removal and control of invasive species from the wider area of Prosperous Bay Plain and an enhancement of the population of endemic plants. Eradication of invasive plants from this area is expected to improve habitat conditions for endemic plants, invertebrates and the Wirebird. The mitigation will be applied to an area of Prosperous Bay Plain one and a half times the size of the areas lost to temporary and permanent works.
- 6.30 However, it is unlikely that this alone will mitigate for the loss of Wirebird breeding territories. Improvements to habitats suitable for Wirebird such as pasture reinstatement elsewhere on the island, including Deadwood Plain, will be carried out in order to compensate fully for the impacts on the Wirebird population. This work is set out in a separate study, the Wirebird Species Action Plan, which is being prepared with the assistance of the St Helena National Trust and Royal Society for the Protection of Birds.
- 6.31 In addition, and where practicable, some construction activities near to breeding populations of Wirebirds may need to be restricted during the breeding season. Observations of the reaction of birds to disturbance early in the programme will help determine the effects of continuing operations. If it is considered that significant effects are likely in the medium to long-term, further management measures may be required.
- 6.32 Given the low frequency of flights, and the very gradual increase in the number of movements predicted over the first 35 years of operation, studies indicate that birds are likely to habituate to the routine passage of aircraft and vehicles. Adoption of a strict flight path, avoiding the islands at Gill Point, should further control the impacts to nesting seabirds.
- 6.33 In summary, there will be significant impacts upon the habitats of Prosperous Bay Plain from direct habitat loss and habitat modifications. There are uncertainties regarding the likely success of mitigation. In view of this, and adopting the precautionary principle with regard to mitigation, a large adverse impact is therefore predicted for the desert ecosystems of Prosperous Bay Plain and its Central Basin.

- 6.34 Impacts on the Wirebird population, given the permanent loss of breeding sites, would represent a moderate adverse impact. However, on an island-wide basis the effects on the Wirebird would be neutral assuming implementation of successful and sustained pasture restoration.

LANDSCAPE AND VISUAL AMENITY

- 6.35 The assessment considers effects on both landscape character (the qualities and features that make the landscape distinctive) and visual amenity (change in the quality of people's views). A key component of the EIA has been the development of a Landscape and Ecology Mitigation Plan. This will continue to be developed in conjunction with the detailing of the proposed scheme design and will provide an essential means of minimising the adverse landscape and visual impacts both during construction and in the long term.
- 6.36 With respect to landscape character, a development of this size on an island where the landscape resource is unique and vulnerable to change will inevitably result in some adverse impacts. During the construction phase the airport and supporting infrastructure will result in significant adverse impacts (major or moderate adverse impacts) in most of the areas in and around the area of works. This is because of the considerable amount of activity involved in constructing the airport and its supporting infrastructure.
- 6.37 In the long term, once the airport is open, only three areas (Rupert's Bay/Valley, Prosperous Bay Plain and Dry Gut) will retain significant adverse landscape impacts. Prosperous Bay Plain will experience moderate adverse impacts associated with the extensive earthworks to create the airfield and the resulting changes to key features of this unique semi-desert landscape. Dry Gut will also experience major adverse impacts due to the fundamental change in character resulting from the large embankment structure which will fill the Gut. Adverse impacts will remain at Rupert's Bay due to the presence of the new wharf. In addition, whichever quarry location is selected in Rupert's Valley, adverse impacts will result on landscape character.
- 6.38 With respect to visual amenity, during the construction phase, significant impacts (major and moderate adverse impacts) will result for residential properties in Rupert's Valley, Deadwood, Longwood and Bottom Woods where the construction of the haul road and other construction activity will impact on local views. Residential properties at Government Garage at Bradleys will also experience major adverse impacts as a result of the visual disturbance associated with the extensive construction activity at Prosperous Bay Plain. The visual amenity from various footpaths and scenic vantage points will experience significant adverse impacts during construction.

- 6.39 Once the scheme is completed, the majority of adverse visual impacts will reduce with the landscape planting helping to integrate the airport and permanent infrastructure into the landscape and views. Significant adverse impacts (moderate adverse) will remain at residential properties at Government Garage, Bottom Woods and Bilberry Field Gut where the access road and the airport will form a prominent element within their immediate views.

CULTURAL HERITAGE

- 6.40 St Helena has a rich cultural heritage, both in terms of buried archaeology and standing features. Features of importance which could be affected by the scheme are explained in paragraph 3.29 and Figure 3.7. A number of measures will be implemented to reduce the effects of the scheme on these features including archeological excavation behind Rupert's Lines and in any areas of Rupert's Valley where burial grounds may be disturbed, the partial restoration of the surviving parts of Rupert's Lines and the possible relocation of the Boer War desalination chimney.
- 6.41 Direct physical impacts on features of cultural heritage importance will be avoided or reduced with the exception of the Fisher's Valley Martello Tower which is likely to be significantly affected by construction works. The visual appearance of Rupert's Lines and the Prosperous Bay Signal Station will also be significantly affected due their proximity to new infrastructure. The Signal Station and Martello Tower and path will be recorded prior to their visual and or physical alteration.

ROADS, TRAFFIC AND FOOTPATHS

- 6.42 During construction, traffic on sections of the existing road network will increase as a result of the worker's vehicles, plant movements and heavy good vehicles making deliveries of materials. Measures will be put in place to manage traffic during construction, e.g. a 15mph speed limit will be enforced in residential areas and footways will be provided for pedestrians. The greatest impact of construction vehicles is likely to be felt by the small number of properties in Rupert's Valley and Deadwood. Jamestown could also be affected by increased trips generated by construction workers.
- 6.43 Once the airport opens, airport workers, passengers' trips and fuel deliveries will mean an increase in traffic (albeit at low levels) passing through residential areas including Deadwood and Longwood. The Transport Statement which forms part of the Environmental Statement indicates that the road network, including the proposed new access road, is predicted to have sufficient capacity to accommodate the increase in traffic.
- 6.44 Suitable temporary diversions for Post Box Walks and other footpaths will be provided during construction. Permanent diversions will be provided for Post Box Walks, including Gill Point and the Signal Station, around the northern and southern

edge of the airfield resulting in slightly longer walks over different terrain compared to the existing situation. For this reason impacts on Post Box Walks and other footpaths will be moderate adverse.

GEOLOGY, CONTAMINATED LAND AND HYDROGEOLOGY

- 6.45 Based on an assessment of the ground and groundwater conditions, it is concluded that the construction and operation of the scheme would present no risks to human health, geological conditions or surface water and groundwater, provided that appropriate mitigation measures to control pollution risks are implemented. The assessment also concluded that there will be no significant adverse impacts associated with contaminated land.

MARINE ENVIRONMENT

- 6.46 Rupert's Bay is considered to be of high importance for a number of reasons including its commercial value for landing fish and receiving fuel deliveries and because of its small beach which is an important recreational area. With respect to ecology, the Bay is considered to be of low diversity with a predominance of species-poor sandy substrates.
- 6.47 Potentially significant effects during construction of the proposed wharf on Rupert's Bay can largely be mitigated. The wharf has been located to avoid direct effects on the recreational beach and temporary closures to the beach during construction will be kept to a minimum. The working practices and techniques that will be followed during construction aim to avoid pollution incidents.
- 6.48 The wharf will change the way waves move around the Bay. Permanent impacts could therefore result from the possible movement of the small beach at the southern corner of the bay. Nourishment of the beach with sand arising from dredging would be undertaken to limit any impact. The Contractor will be required to reinstate the picnic area to at least its original state. The development of the new wharf will have adverse impacts on the amenity value of Rupert's Beach, although this is already affected by the presence of the existing BFI and fuel transfer boom. The proposed new wharf will provide significant benefits for commercial users of the bay.

SURFACE WATER

- 6.49 The potential effects of the proposed development on the surface water environment are not predicted to be significant. The effects can be mitigated to neutral or minor adverse through appropriate design and good environmental controls during construction. The mitigation measures will reduce the potential for contamination of the water and erosion.

- 6.50 At present, the water supply for the construction of the airport earthworks is unknown and the options are summarised in paragraph 4.61. The Contractor will minimise the demand for water as far as possible so as to reduce the volume of water that is required during construction and operation.
- 6.51 A maximum of 40m³ per day will be abstracted from a point close to Hancock Hole in the upper valley of Sharks Valley. Should water be taken from Sharks Valley stream close to the waterfall, the Contractor will leave approximately 25% of the flow in the stream. Ecological management and monitoring will be put in place to control the potential loss of water dependent species.
- 6.52 Should a temporary storage reservoir be required in Dry Gut to provide water for construction works mitigation measures will be put in place to protect the channel and the plants and invertebrates occupying the Gut. If the Contractor uses sea water he may only do so subject to him demonstrating that he can meet the strict environmental constraints stated in the Environmental Management Plan. These measures include a requirement that sea water will only be used for the core of the Dry Gut embankment if it is proven that salt will not migrate to the surface of the land or to groundwater.

WASTE MANAGEMENT

- 6.53 Any substantial increase in waste generated both during the construction and the future operation of the airport could impact on the remaining lifespan of the existing waste management facilities on St Helena. The management of construction wastes will therefore be carried out so that the existing problems relating to the island's limited waste disposal facilities are not exacerbated in the short or long term.
- 6.54 The Contractor will put in place policies and actions to minimise the amount of waste produced and to maximise the re-use and recycling of waste. He will be required to prepare a Waste Management Plan in close consultation with SHG, and to maximise the potential mutual benefits from the joint usage of certain facilities. The Contractor will put in place the means of segregating waste for re-use or recycling, either at source or through a waste separation process, appropriate to the facilities available on the island. The Contractor will liaise with the airlines to ensure that the maximum amount of re-use is made of containers and packaging used by the aircraft operators.

COMBINED EFFECTS WITH OTHER PROJECTS ON ST HELENA

- 6.55 Before and after the opening of the airport a considerable amount of development is likely to take place on St Helena as set out in paragraph 3.32. The population, including visitors and tourists, is forecast to increase from about 4000 to around 8000 over an approximate 20 year period. The increase in population will lead to an

increase in house building, which combined with tourism will create additional demand for energy, water and other resources. Existing infrastructure is insufficient to cope and new infrastructure will need to be developed. Some of the improvements to the infrastructure must be put in place prior to the completion of the airport.

6.56 The effects of other projects, and the measures which should be taken to avoid, reduce or compensate for their effects, fall outwith the decision being made for the airport. However, there are some measures that are being taken to ensure that the development of the airport minimises the potential for combined effects with other projects. There are also wider policy and legislative actions which SHG and DFID are taking to manage the effects of other developments. These include:

- The Wirebird Species Action Plan which covers all of St Helena;
- Contractual controls on the Contractor to take account of other works and avoid disruption to other development activities;
- Other projects would be subject to separate planning applications and in all cases would be judged against the policies set out in the Land Development Control Plan and other legislative requirements;
- SHG are proposing to include requirements for Environmental Impact Assessment in their new Land Planning and Development Control Ordinance. If enacted, it will be a requirement to undertake Environmental Impact Assessments of certain projects and to ensure that mitigation measures are incorporated into each project;
- The Sustainable Development Plan identifies a number of actions and programmes including the Commitments of the Environment Charter; and
- A separate strategic assessment of future activities will be undertaken in tandem with the preparation of the Infrastructure Plan.

7. PLANNING POLICY ASSESSMENT

INTRODUCTION

- 7.1 This section reviews relevant planning policies and assesses the development against them. The planning policy framework, which explains the legal context and introduces the key planning policy documents, is set out below. This is followed by a detailed analysis of how the proposed airport development performs against specific planning policies for all relevant topics.

PLANNING POLICY FRAMEWORK

- 7.2 The planning policy framework is provided by a hierarchy of documents as follows:
- The St Helena Strategy which was approved by the Governor in December 2005 and provides the strategic policy context;⁵ and
 - The Land Development Control Plan which was approved by the Governor in January 2007, and sets out the island's land use planning policies.
- 7.3 There is also the Sustainable Development Plan 2007/8-2009/10 which sets out the ways in which the Strategy will be delivered in the short term and the approach to preparing for the delivery of air access. It includes a wide range of policies and strategies covering social, economic and environmental issues.
- 7.4 The Land Planning and Development Control Ordinance 2001 puts the onus on the Land Development Control Agency to make decisions consistent with the Land Development Control Plan. The Airport Development Ordinance 2006 transfers decision-making powers within the ADA to the Governor, and states that nothing done in the ADA with the consent of the Governor shall be held in contravention of the Land Planning and Development Control Ordinance. However, the policies within the Plan provide the policy framework within which the airport proposals are assessed.

5

THE BROAD STRATEGY FOR ST HELENA

St Helena Strategy – Our Vision for the Future

7.5 The St Helena Strategy sets out a vision for St Helena as follows:

“A prosperous peaceful and democratic society for all achieved through sustainable economic, environmental and social development leading to a healthy and eventually financially independent St Helena.”

7.6 The Strategy seeks to stem and reverse aid dependence and population decline, generate long term prosperity, enable the island to become fully integrated in the modern world and build financial independence. The Strategy sets out the island's six National Strategic Objectives, set out below along with a brief explanation of how the airport will contribute to meeting them:

- Improve access to St Helena – the aim is to provide more reliable, frequent and effective access, and provision of air access is a priority;
- Improve the standard of education for the people of St Helena – the provision of air access will have a role to play in improving access to tertiary education facilities abroad, as well as stimulating growth in the local economy to provide the basis for improved education and training at home;
- Development of a sustainable and vibrant economy for the benefit of St Helena – the provision of air access and the resulting development of the tourism sector and related activities is one of the key rationales underlying the development of the airport;
- Develop a healthy community in a safe environment – the provision of air access will help to provide the basis for improved cost effective health facilities on the island through the expansion of the population base. The scheme will also provide emergency evacuation facilities for critically ill people. Safety issues have been fundamental to the design and form of the scheme;
- Promote and develop a sustainable workforce – the development of the airport has a key role to play in achieving this objective through the stimulation of economic growth; and
- Continue to develop and establish the democratic and human rights and self determination of the people of St Helena – one of the aims of air access is to enable the island to work towards financial independence, enhancing the

possibilities for self determination. The wide-ranging public consultation activities for the airport scheme mean that local people have been extensively involved in the development of the proposals.

Broad Strategy in the Land Development Control Plan

- 7.7 The Plan sets out a broad spatial strategy for the development of the island. The development of the airport and supporting infrastructure is clearly crucial to realising the development strategy for St Helena. Provision of air access is a fundamental element of the Plan, and will form the basis for the planned expansion in tourism, the economy, housing and services.
- 7.8 The Plan guides development to the Intermediate Zone, and seeks to control development in the environmentally sensitive Coastal Zone and Green Heartland. The development of the airport and supporting infrastructure includes land in the Coastal and Intermediate Zones, with the ADA boundary extending along the edge of the Green Heartland at Woody Ridge. The scheme has been carefully designed to minimise environmental impacts.

PROVISION OF AIR ACCESS

- 7.9 The Land Development Control Plan allocates land for the airport at Prosperous Bay Plain, and the approximate maximum alignment is shown on the proposals map (see Figure 3.8). The Plan briefly reviews the likely spatial requirements for the airport and explains the need for supporting infrastructure and contractor's requirements. The following policies of the Plan relate to development of the airport:

Policy A.2 – 'Land will be reserved at Prosperous Bay Plain for an airport as shown on the Proposals Map, subject to the matters below, and no development unrelated directly to the airport will be allowed on that site.'

Policy A.3 – 'Proposals for airport construction (including any temporary runway) must be accompanied by an Environmental Impact Statement, to include:

- *Documentation of the biological and geological attributes of the site and a statement as to how these will be protected during pre-construction period, the construction period and during normal operation of the airport.*
- *Measures for mitigating and compensating for environmental damage and landscape impacts and for restoring affected areas.*
- *Measures for minimising noise and air pollution.*

- *Measures to utilise resources most effectively and to minimise energy consumption.*
- *Measures to handle waste materials in an appropriate manner.*
- *A detailed risk assessment and disaster management plan. (A detailed scoping exercise should be undertaken and Terms of Reference for the Environmental Statement should be agreed with the Agency prior to the commencement of the study).'*

Policy A.4 – *‘Proposals for airport construction must be accompanied by a comprehensive plan illustrating: phasing; layout; vehicle access; airport buildings; service infrastructure provision; drainage; landscaping, physical mitigation measures and nature conservation provisions. The plan should also include an Environmental Management Plan which should be agreed with the Agency before development commences.’*

Policy A.5 – *‘The details of all off-site infrastructure provision for the airport must be agreed by the Agency before development is commenced.’*

7.10 This planning application and the proposals it sets out comply with the policies relating to the development of the airport as follows:

- The application is in accordance with the land allocated at Prosperous Bay Plain for the development of an airport (Policy A.2). The application provides the required information for the airport (Policy A.4), as well as for the supporting off-site infrastructure (Policy A.5);
- The application includes an Environmental Statement, Environmental Management Plan and a Disaster Management Plan, comprehensively covering the information required by Policies A.3 and A.4; and
- Minimising the potential environmental impact of the scheme has been a fundamental approach to the development of the design.

TOURISM

7.11 The Land Development Control Plan states that the development of tourism has a major part to play in securing a prosperous future for St Helena and is associated with at least four of the island's national strategic objectives. The growth of tourism is crucial to the island's economic recovery.

7.12 The Plan notes the island's great potential for attracting tourists. It states that there is potential for the island to build on its attributes to increase the contribution made by tourism, and explains that this is dependent on the achievement of improved

access. The development of the airport is therefore fundamental to the development of tourism on the island, and complies with planning policy.

EMPLOYMENT

7.13 The Plan includes development of a sustainable and vibrant economy as one of the island's strategic objectives. A number of factors currently act against the growth of employment on St Helena, the greatest of which is poor accessibility.

7.14 In addition to the fundamental importance of the development of the airport, the provision of the proposed permanent access road will provide improved access to two areas allocated for employment development as follows:

Policy E.4 – 'Land at Rupert's Valley as shown on the Proposals Map is allocated for employment creating development and for use in connection with the generation of electricity. No further residential development will be permitted in Rupert's Valley.'

Policy E.6 – 'Land at Bradleys as shown on the Proposals Map, is allocated for employment creating development, but should not become available until road access is improved, possibly in connection with the airport development.'

7.15 The permanent access road for the airport provides a new link for both Rupert's Bay and Bradleys, enabling appropriate employment development in these locations.

TRANSPORT AND MOVEMENT

7.16 The Land Development Control Plan contains a number of relevant policies relating to transport and movement within the island as follows:

Policy A.D.1 – 'The Agency will generally permit development in accordance with the policies contained within this plan, if the development would:

- *Have a satisfactory means of access for cars and service vehicles and for pedestrians including those with impaired mobility.*
- *Not cause or increase danger to road users.*
- *Maintain or enhance pedestrian routes.'*

Policy T.R.1 – 'No new development involving more than 10 bedrooms or 500 square metres of commercial floor space or involving more than 100 visitors a day shall commence unless and until the Agency is satisfied that enforceable provisions have been made to improve vehicle access to and egress from the site, including the provision of off-site highway improvements.'

Policy T.R.2 – *‘Applications for development of the size set out in Policy T.R.1 above should be accompanied by traffic impact statements illustrating the likely effect of the proposed development on the road network.’*

Policy T.R.3 – *‘With the exception of development in the Jamestown Conservation Area, all new development should be accompanied by off-street parking provisions in accordance with the standards in Appendix 5 to this plan.’*

- 7.17 The Transport Statement which is part of the Environmental Statement accompanying this planning application demonstrates that the development is not predicted to create any unacceptable traffic impacts either in construction or operation. Although there will be significant increases in traffic volumes, the assessment indicates that the existing and proposed road network will have capacity to cope with the increased flows. Adequate vehicular access has been provided for all the elements of the scheme including the airport, BFI, wharf and water supply at Shark’s Valley.
- 7.18 Parking has been provided at the airport site in line with operational requirements. The layout of the airside and landside facilities provides safe and convenient pedestrian access from parking areas to the Terminal Building and aircraft. The airport has been designed to be accessible for all, and includes conveniently located disabled parking spaces, wide and level entrances and surfaces and toilets which are accessible to those with mobility impairments.
- 7.19 The permanent access road has been designed with road user safety in mind. The road’s gradient, turns and width have been designed to ensure that it can be safely used by motorists. Safety measures include crash barriers at corners on steep sections of the road. The permanent access road also includes footways in all locations where the alignment passes in front of residential and commercial property.
- 7.20 The development of the airport and access road will affect a number of recreational walks, which are considered together with other recreational issues below.

NATURE CONSERVATION

- 7.21 St. Helena’s isolation and geological, topographical and climatic features have led to the evolution of unique flora and fauna including a wide range of endemic species not found anywhere else in the world. Policy A.D.2 states that *‘The Agency will not permit development which will unduly damage the landscape or nature conservation interests and in particular endemic species or their habitats.’*
- 7.22 The ecological importance of the island, as well as the island’s landscape features and scenic beauty, has led to the proposed designation of National Protected

Areas. The location of the proposed airport is within a proposed National Protected Area at Prosperous Bay Plain as defined on the Proposals Map (see Figure 3.8).

- 7.23 Policy C.N.1 protects National Protected Areas and states that no development will be permitted in these locations but makes exceptions, including the development of the airport at Prosperous Bay Plain. Policy A.3 requires proposals for airport construction to be accompanied by an Environmental Impact Statement including documentation of the biological attributes of the site and a statement as to how these will be protected.
- 7.24 Policy C.N.2 provides protection for habitats of the Wirebird. This policy states that *'There is a presumption against any development which would damage or reduce the habitat of the Wirebird. Any application for development, including change of use involving land, where the Wirebird exists, over 2.5 acres (1 hectare) should be accompanied by full information on the effect of that development on Wirebird habitat and for measures to be taken to ameliorate any damage to that habitat. The development proposal should be accompanied by specific proposals to ensure any damage to Wirebird sites are mitigated or compensated for and this will be subject to monitoring by the appropriate Agency to ensure the agreed work is carried out.'*
- 7.25 Fisher's Valley is virtually one of the only stream valleys on St Helena to retain wet conditions and green vegetation throughout its length and it probably provides an important drinking and bathing area for the Wirebird and habitat for the indigenous Moorhen. Fisher's Valley is identified in the Plan as being suitable for designation as a Wetland of International Importance. Policy C.N.3 states that *'Any application involving land in the possible Wetlands of International Importance will be referred to the Environmental Co-ordinator for advice as to whether or not the application would significantly affect the ecological, geological or marine-biological interest of the area. The Agency will take account of this advice in coming to a decision.'*
- 7.26 As set out in Section 6 and the Environmental Statement, the assessment of terrestrial ecology identified significant adverse impacts on the Wirebird both at Prosperous Bay Plain and at various site along the haul and access road alignment. However, the proposed development will include a programme of habitat restoration and enhancement which means that the overall island-wide impact on the Wirebird is predicted to be neutral.
- 7.27 A large to very large adverse impacts on the desert habitats of Prosperous Bay Plain was identified, with impacts on the endemic invertebrates being of particular concern. The success of mitigation measures to address these impacts is uncertain.
- 7.28 The serious nature of the ecological impacts on Prosperous Bay Plain is recognised. However, the principle of airport development at this location is established in the Plan, and a range of mitigation measures are included within the

scheme to minimise impacts as far as possible. The project team has explored a range of options for airport development as explained in Section 2 in an effort to reduce environmental impacts. This exercise confirmed the currently proposed scheme as is the only practical approach to delivering the airport. The island-wide impact on the Wirebird is predicted to be neutral, and no significant adverse impacts are predicted for the marine environment of the proposed Wetland of International Importance at Fisher's Valley. The proposals are therefore considered to be in accordance with policy.

LANDSCAPE

7.29 The Land Development Control Plan includes a range of policies which relate to the impacts of development on the landscape as follows:

Policy A.D.1 - *'The Agency will generally permit development in accordance with the policies contained within this plan, if the development would:*

- *Be appropriate and sympathetic in scale, design, layout, siting and density, both in itself and in relation to the adjoining buildings, spaces and views.*
- *Use fencing and roofing materials that are unassertive and are compatible with or sympathetic to their surroundings.'*

Policy A.D.2 – *'The Agency will not permit development which will unduly damage the landscape or nature conservation interests and in particular endemic species or their habitats.'*

Policy A.D.3 – *'The Agency will not permit development which involves the loss of established trees which are acknowledged as having high amenity value in the locality.'*

Policy A.D.4 – *'The Agency will not permit development unless it satisfied with arrangements for landscaping the site. Such arrangements should include measures to remove spoil from the site and, where appropriate, planting proposals and boundary treatments. Such measures shall, where necessary, be made the subject of conditions on any development permission.'*

Policy C.Z.2 – *'Planning applications for buildings in the Coastal Zone will be expected to demonstrate that such buildings will be erected with due regard to the need to maintain the attractive views of the coastline from both land and sea. Such buildings should generally not be erected on or near ridgelines or in elevated or prominent positions.'*

7.30 As set out in Section 6 and the Environmental Statement, the assessment of landscape and visual amenity notes the inevitable adverse impacts of this large scale scheme on the island's unique and fragile landscape. The scheme has been

carefully designed to minimise impacts on views and landscape character, including through the siting of development, the detailed alignment of the access road, use of appropriate materials and compensation planting. Landscape mitigation measures are a key part of the development and are set out in the Environmental Management Plan and Landscape and Ecology Mitigation Plan.

- 7.31 Thus while the landscape and visual impacts of the scheme are recognised, the proposals have been designed to minimise impacts as far as possible. Mitigation has ensured that major and moderate adverse impacts will be as limited as possible.

CULTURAL HERITAGE

- 7.32 Planning policy relating to cultural heritage on St Helena focuses on protecting Listed Buildings and Conservation Areas. Key policies are as follows:

Policy C.B.1 – *‘Permission will not be given for the demolition of all or any significant part of a Listed Building except in very special circumstances and where the Agency is satisfied that:*

(a) Demolition is unavoidable for structure safety reasons.

(b) A detailed record of the building, including special features, fixtures and fittings, has been produced and a copy deposited at the Archives.

(c) Full details of any replacement building or site treatment have been approved by the Agency before demolition.’

Policy C.B.2 – *‘Where demolition of a listed building is permitted, any special features, fixtures or fittings identified in the building record shall be carefully removed and salvaged for preservation or reused in restoration work elsewhere as appropriate.’*

Policy C.B.3 – *‘The alteration or extension of a Listed Building will only be allowed if the Agency is satisfied that the work will preserve the architectural or historic interest of the building.’*

Policy C.B.5 – *‘Permission will only be granted for development close to a Listed Building if it can be demonstrated that the development does not damage the appearance or setting of the Listed Building.’*

Policy C.B.6 – *‘Notwithstanding other policies in the Plan, permission may, exceptionally, be granted in contravention of one or more of those policies if it is deemed by the Agency to be necessary to allow development to ensure the protection or retention of a Listed Building which would otherwise be lost.’*

Policy C.B.11 – *‘Development applications in respect of Listed Buildings and/or Conservation Areas must incorporate full information on siting, design, layout, external appearance (including materials), walls, gates and fences...’*

- 7.33 Policy T.7 is also relevant, which states that *‘Any development that would obstruct the access to, or otherwise damage the enjoyment of any acknowledged tourist attraction, natural or man-made, will be refused’*.
- 7.34 There are a number of features of cultural heritage importance which are within the vicinity of the proposed development. The scheme has been designed to minimise impacts on these sites as far as possible, and impacts on the majority of them are predicted to be minor. Mitigation measures include the rebuilding of the Boer War desalination chimney, archaeological investigation of areas of potential impact and recording of structures which will be affected by the works. Major impacts are predicted only for the historic settings of Rupert’s Lines and Prosperous Bay Signal Station, while moderate adverse impacts are predicted only for Fisher’s Valley Martello Tower and path which may be damaged or destroyed by the airport earthworks. Despite the scale of the proposals, the overall impact on cultural heritage is assessed as being only minor adverse. Further details of the impacts on the island’s Listed Buildings will be provided as necessary as the scheme progresses.

RECREATION

- 7.35 The Plan notes the importance of the island’s recreational facilities including the swimming beach at Rupert’s Bay and recreational walks. Policy T.3 protects tourist and recreation attractions and states that: *‘Development which will obstruct or prejudice the existence, enjoyment or implementation of a tourist/recreational attraction...or other related facilities will be refused.’*
- 7.36 The scheme has been designed to minimise impacts as far as possible. Where impacts on existing walks have been unavoidable, diversions of footpaths have been included within the proposals. While the diversions will result in slightly longer and more challenging walks and the number of additional visitors will increase wear and tear, these important recreational resources will be retained. The Environmental Statement has highlighted the potential impacts on the beach at Rupert’s Bay, and mitigation measures are recommended to minimise the impacts on this important recreational resource. The scheme thus complies with Policy T.3.

ENVIRONMENTAL PROTECTION

- 7.37 The Land Development Control Plan includes a range of policies relating to the protection of the environment as follows:

Policy A.D.1 – *‘The Agency will generally permit development in accordance with the policies contained within this plan, if the development would: not be detrimental to public health, nor pollute the environment, for example, by emitting excessive noise, fumes or other discharges, whether to land, air or sea; not unduly interfere, disturb or conflict with adjoining users;’*

Policy A.D.5 – *‘The Agency will not permit development which will prejudice the effective use of adjoining development land or potential development land, for instance, by preventing access to that land or discharging effluent upon it.’*

Policy A.D.7 – *‘Where proposals include external lighting the Agency will wish to be satisfied that such lighting is at a minimum level necessary and does not have an adverse effect on the surroundings through glare or light pollution and does not interfere with sensitive ecologies, with road safety or with the enjoyment of residential property.’*

Policy S.I.5 – *‘The Agency will not permit development that would impair the supply or quality of groundwater and underground water reserves.’*

- 7.38 The Environmental Impact Assessment included a range of assessments related to environmental protection consisting of: noise and vibration, air quality and dust; contaminated land and hydrogeology; marine environment and surface water environment. These assessments have shown that with appropriate mitigation the majority of the impacts of the scheme in these terms will be neutral or minor. Key exceptions are the moderate adverse noise and vibration impacts caused by construction of the wharfs, quarry and haul road.
- 7.39 Lighting has been provided for the airport, remote obstacles, BFI and wharf in line with operational and safety requirements. The level of lighting is the minimum required for the various aspects of the scheme. The access road will not be lit, minimising light pollution.
- 7.40 The scheme has been carefully designed to minimise environmental impacts and a wide range of measures are included to ensure that pollution of land, air and water is minimised.

UTILITIES, SERVICES AND FACILITIES

- 7.41 Policy A.D.1 of the Land Development Control Plan states that *‘The Agency will generally permit development in accordance with the policies contained within this plan, if the development would not overload existing essential services and facilities.’*
- 7.42 In addition, the Plan includes a range of policies concerning the provision of services for development:

Policy A.D.6 – *‘The Agency will not permit development unless and until it is satisfied with plans for providing services to the plot in the form of water, electricity, sewerage and pedestrian/vehicular access.’*

Policy S.I.3 – *‘The distribution of electricity or telephone by pole mounted cables will be permitted provided that there is no significant effect on landscape or townscape views of acknowledged importance.’*

Policy S.I.4 – *‘Where main electricity or telephone distribution cables pass through Conservation Areas or National Protected Areas (in cases where these have been proposed specifically for their natural beauty) the method of distribution (underground or pole mounted) should be discussed with the Agency who will take appropriate environmental advice where necessary. Implementation should follow the Agency’s advice.’*

Policy S.I.6 – *‘The use of communal systems of drainage will be encouraged where practicable and the use of septic tanks where the outflow could prejudice the development of adjoining land will be refused. In assessing future development proposals the Agency will wish to be satisfied that the environment is adequately ‘safeguarded.’*

Policy S.I.7 – *‘In cases of development which would place significant additional demands on service infrastructure provision, development permission will not be granted unless and until the Agency is satisfied that provision has been made either financially or “in kind” for the necessary additional service infrastructure.’*

- 7.43 The scheme has been comprehensively designed, and the proposals for each element of the scheme include provision of power, water, drainage and sewerage in accordance with policy.
- 7.44 No overhead cables are proposed within the proposed Prosperous Bay Plain National Protected Area, although cables serving three remote obstacle lights on the south west side of the airport will be close by. The Environmental Statement recommends that consideration is given during detailed design to the use of self powering units in this location.
- 7.45 The Plan also allocates a site at Rupert’s Valley for a new bulk fuel storage facility (Policy S.I.1). The scheme proposes the development of the BFI at this site, in accordance with policy.

QUARRYING

- 7.46 The Plan includes a number of policies relevant to the development of the quarry. Policy Q.1 explains that existing quarries are at Donkey Plain and Bryans Rock, and that *‘no other quarrying operation will be permitted by the Agency elsewhere on*

the Island other than that which may be agreed in connection with the construction of the airport, wharf or breakwater, or other major project.'

- 7.47 Policies Q.2 refers to access Policies A.3 and A.4 and states that these '*shall apply with equal force to any proposal for the winning and working of earth or rock-based materials required for the construction of the airport, irrespective of where on the Island those operations take place.*' Policies A.3 and A.4 refer to the need for Environmental Impact Assessment and for comprehensive plans of proposals.
- 7.48 Policy Q.3 states that Policy A.D.9 will be applied to any proposal to work on a new quarry at Rupert's Valley. Policy A.D.9 refers to the need for Environmental Impact Assessments.
- 7.49 At the present time, two alternative options have been presented for the location of the quarry in Rupert's Valley. These have been included in the Environmental Impact Assessment, which has highlighted landscape, noise and vibration, air quality and dust impacts. The details of the quarry and an Environmental Impact Assessment of its impacts will be set out in a separate planning application by the Contractor, when a decision has been made on the preferred quarry location.

AGRICULTURE AND FORESTRY

- 7.50 The Land Development Control Plan seeks to protect land in agricultural use. Policy A.F.1 states that changes of use which involve the loss of productive agricultural and forestry land over 0.4ha will be refused with the exception of a limited number of hotel or other tourist accommodation sites in the Green Heartland.
- 7.51 The development of the haul and access road will require the use of around 7ha of pastoral and arable land at Deadwood Plain, as well as areas of woodland scrub. While this is contrary to Policy A.F.1, the development of this area of agricultural land is an essential part of the overall delivery of the airport and its supporting infrastructure, as envisaged by a wide range of policies in the Land Development Control Plan, as well as other policy documents. The development of this relatively small area of agricultural land will not affect overall farming activities in the area, and the impact is assessed as minor. The scheme has been designed to reduce impacts as far as possible through a range of measures including: minimising land take through the design and siting of development; maintaining access to agricultural land throughout the project as far as possible; reinstatement of agricultural land affected by construction; and compensatory planting of woodland scrub.

WASTE DISPOSAL

- 7.52 The Land Development Control Plan explains that *'Although the island has the capacity at present to accommodate its waste in landfill, this is not regarded as the most sustainable solution in the long term...Practices of minimising waste by repairing, re-using or recycling (on the island or abroad) should be vigorously pursued to avoid future problems.'*
- 7.53 As explained in Section 6, the Contractor will put in place policies and actions to minimise the amount of waste produced and to maximise the re-use and recycling of waste, and will liaise with airlines to ensure that the maximum amount of re-use is made of containers and packaging by aircraft operators.

SUSTAINABLE DEVELOPMENT

- 7.54 The Plan includes a general policy encouraging sustainable development. Policy A.D.8 states that *'Subject to other policies in this Plan, sustainable development will be encouraged which reduces consumption of finite resources such as energy, water, timber and aggregates. Such development might include:*
- *Solar energy panels.*
 - *Wind turbines.*
 - *Measures to collect and re-use rainwater.*
 - *Building materials which use recycled products or timber from sustainable sources of local materials such as stone and composites using local fibres.*
 - *Systems to reduce waste on site or facilitate recycling.*
 - *Development which reduces the need to travel or facilitates the use of public transport.*

Sustainable development aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. It is a goal to which all development projects should aim but the approach will differ from project to project.'

- 7.55 The sustainability of development relates to the impacts of development in its broad sense including social, economic and environmental impacts. The impact of the proposed development on the environment is recognised, both in terms of the environmental impacts on the island, and in terms of the overall increase in carbon emissions resulting from the introduction of air access. However, the scheme also delivers a wide range of significant social and economic benefits, and offers the

island a sustainable, independent future. The provision of air access is a central part of the strategy for the island and the Sustainable Development Plan.

- 7.56 More specifically, the airport proposals have been developed with sustainability in mind as far as possible. The Terminal Building at the airport site incorporates features including windcatchers for natural ventilation. Both the Terminal and Combined Buildings incorporate low energy lighting, solar hot water and measures to reduce water use. The scheme as a whole focuses on the use of local materials to minimise the need to import materials to the island. The Transport Statement recommends the use of coaches to transport passengers to Jamestown.

8. THE CASE FOR THE DEVELOPMENT

- 8.1 The island of St Helena is facing a number of key challenges. The economy is small, in decline, and has a heavy reliance on the public sector for employment and on continued UK aid. The island's population is declining through out-migration, dividing families, increasing pressure on social services and in the long term is likely to lead to declining standards of living. Healthcare on the island is basic, with no means of rapid evacuation for critically ill people.
- 8.2 The island's rich history, unique ecology and glorious land and seascapes make it a potential tourist destination. Various studies have identified the development of the tourist industry as the most likely means of stemming the decline in the population and economy, and stimulating new development.
- 8.3 Access to the island is currently provided by the RMS St Helena which is costly in both time and expense and has, to date, failed to generate tourism on a scale that could reverse the existing declining trends. The RMS St Helena is coming to the end of her working life, and the current contract with the operator Andrew Weir Ltd runs out in August 2011.
- 8.4 An extensive study of a wide range of sea and air options for the island identified the development of a long runway capable of accommodating Boeing B737-800 aircraft with a capacity of 162 passengers (or similar) as the preferred solution to the access issue on cost, social and economic grounds. In 2005, the decision to provide air access to the island was announced.
- 8.5 The development of the airport is a crucial part of the Strategy for St Helena and the Land Development Control Plan. It forms the basis for much of the island's development strategy in terms of the economy, tourism, population growth and housing.
- 8.6 The development of the airport also accords with the specific policies set out in the Plan. Land is allocated in the Plan for the development of the airport. The comprehensive nature of the scheme also means that it accords with policies on transport, services and utilities which require development to provide adequate supporting infrastructure. The scheme incorporates a range of features which seek to minimise use of resources and waste generation, and use of public transport to access the airport is encouraged, in accordance with policies relating to sustainable development.
- 8.7 A wide range of public consultation and information activities have been carried out over many years. Key activities include the Referendum on air access in 2002 and the Public Consultation and Information Week in April 2006. These activities have

demonstrated the high level of public support for the development of the airport, as well as highlighting issues and informing the design of the scheme.

8.8 The assessments of the impacts of the scheme have shown that it will deliver a wide range of benefits in line with policy, including:

- Providing the basis for a step change in St Helena's economy through the development of the tourism sector. Both construction and operational phases will generate a wide range of new business opportunities;
- Providing the potential for the island to become financially self-sufficient in the long term;
- Generation of a wide range of employment opportunities, both through the creation of construction-related jobs in the short term, and through the development of the local economy in the long term;
- Stemming and reversing the current decline in the island's population. The new employment opportunities will present opportunity to Saints living abroad to return home, thus allowing families to be re-united and reducing the incidence of informal fostering by extended family members. These changes will lead to reduced pressure on the social welfare system, allow for more cost effective health services, and restore balance in the island's demographic make-up;
- Improving opportunities for Saints to travel overseas and for expatriate Saints to visits friends and family on the island. This will provide new opportunities for Saints to access services overseas such as tertiary education;
- Providing a means for rapid evacuation of medical emergencies; and
- Providing new infrastructure for the island in addition to the airport, including: the new access route which opens up new development opportunities; the BFI which will improve fuel storage for the island; and the new wharf at Rupert's Bay which will deliver improved cargo handling facilities in the long term.

8.9 The Land Development Control Plan includes a wide range of policies which seek to protect various aspects of the island's environment and assets. The proposals have been developed through an iterative process, with inputs from the Environmental Impact Assessment which has run parallel with the scheme design. A wide range of mitigation measures are fundamental to the scheme, and these are set out in an Environmental Management Plan, with additional information provided in the Landscape and Ecology Mitigation Plan. However, it is inevitable that a scheme of the scale proposed will create environmental impacts in a location as isolated, fragile and unique as St Helena. The key adverse impacts are predicted to be:

- Ecological impacts - Permanent loss of, and/or changes to, parts of the Central Basin of Prosperous Bay Plain. A significant proportion of the unique habitat used by endemic insects and spiders is likely to be affected. Permanent loss of some Wirebird habitat has also been highlighted, although on an island-wide basis the effects on the Wirebird are likely to be neutral. The implementation of ecological mitigation measures, including creation and restoration of semi-desert habitats, will be critical in minimising impacts;
- Landscape impacts - During the construction phase, adverse impacts on landscape and visual amenity in a wide range of locations are predicted. These however, will be short lived, and in the long term major adverse landscape impacts are predicted only at Dry Gut and in localised areas at Rupert's Bay/Valley. Moderate adverse impacts are predicted on the landscape at Prosperous Bay Plain and on views from selected residential properties at Government Garage, overlooking Bilbury Gut, at Bottom Woods and from a range of outdoor locations. All other impacts are assessed as being minor;
- Impacts on the island's cultural heritage – The impacts on the majority of these sites is assessed as being neutral or only minor, with the exception of the alteration to the historic settings of Rupert's Lines and Prosperous Bay Signal Station and the possible impacts on Fishers Valley Martello Tower and path. Benefits include the relocation of the Boer Camp water desalination chimney. The overall impact on cultural heritage is assessed as being only minor adverse;
- Traffic impacts – The development of the airport is predicted to have moderate adverse impacts in both construction and operational phases through increases in traffic. However, the Transport Statement indicates that the existing and proposed road network will have sufficient capacity to comfortably accommodate the increased traffic;
- Impacts on recreational facilities – There may be temporary closures of the beach at Rupert's Bay during construction, although these will be kept to a minimum. Mitigation measures are proposed to ensure that people can continue to enjoy this important recreational resource after construction. The development of the wharf close to the beach will reduce its amenity value, although this is already affected by the presence of the existing BFI and fuel transfer boom. The construction of the airport and access road will require diversion of important recreational walks and footpaths, making them less direct and more challenging;
- Air quality, noise and vibration impacts during construction – Short term impacts are predicted through noise and vibration during the construction of the

wharfs, quarry and access road, and through dust generated by construction of the access road on food processing activities in Rupert's Bay; and

- Increased carbon emissions – Although on a per-trip and per-passenger basis, traveling by air could result in lower CO₂ emissions than use of a ship like the RMS St Helena, in the longer term the increase in the numbers of visitors to the island made possible by air access will result in increased emissions of CO₂.

8.10 The development of the airport and its supporting infrastructure will provide the basis for a step change in the development of the island's economy through sustainable tourism. The scheme will transform the island's future, potentially reversing the current economic decline and out-migration of working adults, and enabling the island to work towards financial self-sufficiency. The airport is a key element of the development strategy for the island. The significant environmental impacts of the scheme are recognised, particularly the adverse impacts on the endemic ecology of Prosperous Bay Plain, and on landscape character and views. However, on balance it is considered that the substantial benefits of the scheme outweigh the potential impacts, and the Governor-in-Council is respectfully requested to support this application.