

**The States of Jersey  
Hospital Pre-Feasibility  
Spatial Assessment Project**

**Jersey General Hospital  
Strategic Outline Case**

**May 2013**

## Notice

This document and its contents have been prepared and are intended solely for States of Jersey's information and use in relation to Pre-feasibility Spatial Assessment.

WS Atkins International Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 50 pages including the cover.

### Document history

| Job number: 5113836 |                     |            | Document ref: Strategic Outline Case |          |            |          |
|---------------------|---------------------|------------|--------------------------------------|----------|------------|----------|
| Revision            | Purpose description | Originated | Checked                              | Reviewed | Authorised | Date     |
| 01                  | Final Draft         | AV         | IST                                  | IAS      | IST        | 27/08/12 |
| 02                  | Final Draft         | AV         | IST                                  | IAS      | IST        | 31/08/12 |
| 03                  | Final – For Issue   | AV         | IST                                  | IAS      | IST        | 07/09/12 |
| 04                  | Final Draft         | IAS        | IST                                  | AV       | SD         | 05/03/13 |
| 05                  | Final Draft         | IAS        | IST                                  | AV       | SD         | 30/05/13 |
| 06                  | Final               | IAS        | IST                                  | DB       | SD         | 09/07/13 |
| 07                  | Final               | IAS        | DB                                   | IST      | SD         | 14/10/13 |

### Client sign-off

|                    |  |
|--------------------|--|
| Client             | States of Jersey                           |
| Project            | Pre-feasibility Spatial Assessment project |
| Document title     | Strategic Outline Case                     |
| Job no.            | 5113836                                    |
| Copy no.           |  |
| Document reference | 5113836.R4-001                             |

**Name:** .....

**Position:** .....

**Date:** .....

**Name:** .....

**Position:** .....

**Date:** .....

## Contents

|  |           |
|--|-----------|
| NOTICE .....   | 2         |
| Document history .....   | 2         |
| Client sign-off .....  | 2         |
| <b>1. INTRODUCTION .....</b>   | <b>6</b>  |
| 1.1. Purpose .....   | 6         |
| 1.2. Methodology .....   | 6         |
| <b>2. STRATEGIC CASE .....</b>   | <b>9</b>  |
| 2.1. The strategic context .....   | 9         |
| 2.1.1. Reasons for change .....  | 9         |
| 2.1.2. Strategic vision .....  | 10        |
| 2.1.3. Investment objectives .....   | 12        |
| 2.2. The case for change .....   | 12        |
| 2.2.1. The existing situation .....  | 12        |
| 2.2.2. Identifying the business need .....                                   | 13        |
| 2.2.3. Demographic changes .....   | 14        |
| 2.2.4. In-patient care pathways .....  | 15        |
| 2.2.5. Establishing the potential range of shifts to intermediate care ..... | 15        |
| 2.2.6. Additional modelling assumptions .....                                | 16        |
| 2.2.7. Analysis .....  | 18        |
| 2.2.8. Initial departmental schedule of accommodation .....                  | 19        |
| <b>3. ECONOMIC CASE: ASSESSMENT PROCESS .....</b>                            | <b>21</b> |
| 3.1. Evaluation process .....  | 21        |
| 3.1.1. Long-list evaluation .....  | 21        |
| 3.1.2. Short-list evaluation .....   | 21        |
| 3.1.3. Benefits and risk criteria .....                                      | 22        |

---

|        |  |           |
|--------|--|-----------|
| 3.1.4. | Benefits and risks scoring process.....                        | 26        |
| 3.1.5. | Costing methodology .....                                      | 27        |
| 3.2.   | Evaluation Outcomes.....                                       | 27        |
| 3.2.1. | Selection of original sites .....                              | 27        |
| 3.2.2. | Long-list evaluation .....                                     | 28        |
| 3.2.3. | Short-list evaluation.....                                     | 29        |
| 3.2.4. | Shortlist configuration review .....                           | 30        |
| 3.2.5. | Reconfigured short-list evaluation .....                       | 31        |
| 3.2.6. | Establishment of the preferred site option.....                | 31        |
| 4.     | <b>COMMERCIAL CASE.....</b>                                    | <b>34</b> |
| 4.1.   | Procurement strategy .....                                     | 34        |
| 4.2.   | Funding strategy .....   | 35        |
| 4.3.   | Potential for risk transfer and risk management strategy ..... | 36        |
| 4.4.   | Personnel implications.....                                    | 37        |
| 5.     | <b>FINANCIAL CASE .....</b>                                    | <b>39</b> |
| 5.1.   | Assessment of revenue costs.....                               | 39        |
| 5.2.   | Assessment of capital costs .....                              | 40        |
| 5.3.   | Capital costs if no performance changes occur.....             | 40        |
| 5.4.   | Affordability .....  | 41        |
| 5.5.   | Risk assessment and key risks.....                             | 42        |
| 6.     | <b>MANAGEMENT CASE.....</b>                                    | <b>44</b> |
| 6.1.   | Project management arrangements .....                          | 44        |
| 6.2.   | Timescales for the development .....                           | 44        |
| 6.3.   | The use of special advisors.....                               | 45        |
| 6.4.   | Specific clinical planning work programmes .....               | 46        |
| 6.5.   | Support for the project.....                                   | 46        |

|      |  |    |
|------|--|----|
| 7.   | SUMMARY .....                                  | 48 |
| 7.1. | The need for change .....                      | 48 |
| 7.2. | Robustness of the evaluation process .....     | 48 |
| 7.3. | Conclusion of the Strategic Outline Case ..... | 49 |

## 1. Introduction

### 1.1. Purpose

01. The need to review the provision of the States of Jersey General and Acute Hospital is a strategic priority for the States and a key objective for the Health and Social Services Department. This Strategic Outline Case has been prepared following a pre-feasibility spatial assessment study that has been undertaken to identify the most appropriate location for the identified future business needs of the General and Acute hospital and the overall strategy for delivery.
02. This Strategic Outline Case describes the process that has been followed in investigating and evaluating a range of options for the development of a new acute general hospital, designed to achieve the objectives established in States Report and Proposition P.82/2012: *“Health and Social Services - A New Way Forward”*. This Strategic Outline Case identifies the options for development that have been considered, explains the benefits and risks associated with each option, assesses the costs associated with the implementation of each shortlisted option and concludes with a recommended way forward.

### 1.2. Methodology

03. This document has been prepared using the best practice standards and format for business cases, as recommended by the UK’s HM Treasury, the Welsh Assembly and Health Facilities Scotland.
04. The approved format for the development of this Strategic Outline Case (and subsequently through outline business case and then full business case), is the Five Case Model, which comprises the following key components:
  - The **strategic case** section - sets out the strategic context and the case for change, together with the supporting investment objectives for the scheme;
  - The **economic case** section - demonstrates that the organisation has selected a preferred way forward, which best meets the existing and future needs of the service and is likely to optimise value for money;
  - The **commercial case** section - outlines at this stage the process for ensuring that any potential deal to redevelop the hospital will be subject to clear and robust procedures for establishing best value;
  - The **financial case** section - highlights likely funding and affordability issues and the potential balance sheet treatment of the scheme;
  - The **management case** section - demonstrates that the scheme is achievable and can be delivered successfully in accordance with accepted best practice.
05. The Health and Social Services Proposition P.82/2012: Health and Social Services - A New Way Forward, approved by The States on the 23<sup>rd</sup> October 2012, sets out the vision of an

integrated care model and a programme of change that will meet the challenges facing the Island's Health and Social Services. Central to the development of this vision is the requirement to have an acute general hospital which is fit for purpose, capable of sustaining the acute care provision requirements for the population and compliments the integrated care strategy being developed for Jersey. P.82/2012 makes clear that a new hospital will be required within 10 years.

06. The pre-feasibility investigations undertaken as part of this Strategic Outline Case, have included a spatial study to identify the most appropriate location for the acute General Hospital, taking into account its needs and requirements both now and in the future. This pre-feasibility study has examined the following key components:
- an assessment of current and future demands on acute healthcare services;
  - an assessment of the size and scale of facilities required to accommodate current and future demands;
  - an evaluation of a long-list of potential sites against a range of benefit and risk criteria and the selection of a short-list of sites for further investigation;
  - an evaluation of a short-list of sites against the same benefit and risk criteria;
  - sensitivity analysis examining key criteria;
  - an assessment of the capital costs likely to be incurred in the development of each of the shortlisted options;
  - 3D-CAD building massing models to illustrate the scale of short-listed developments being considered;
  - establishment of phasing diagrams to identify sequencing associated with the re-development of the preferred site;
  - the development of a conclusive recommendation of the way forward to allow the realisation of the vision expressed in P.82/2012.
07. In summary, having followed the protocols and procedures recommended for the development of Strategic Outline Cases; having evaluated a range of options against benefit, risk and cost criteria; and having consulted with the political Ministerial Oversight Group appointed to oversee health and social services transformation, the Ministerial Oversight Group concluded that the phased redevelopment of the existing General Acute Hospital site offers the most appropriate solution for the provision of acute health care services for the population of Jersey. This will entail the comprehensive redevelopment of the existing facilities such that by the completion of the final phase all accommodation will be provided to the requisite standards of clinical functionality and will permit the continuing provision of acute health care services in a safe, sustainable and affordable manner on this site.

08. The sections of the Strategic Outline Case which follow will describe in detail the processes and evaluations which have taken place to reach this conclusion.



## 2. Strategic case

### 2.1. The strategic context

#### 2.1.1. Reasons for change

09. The development of a new acute hospital is central to a wide range of initiatives which have been identified to meet the challenges facing the Island's Health and Social Services. P.82/2012 makes it clear that a new hospital will be required within 10 years, one that is fit for purpose, capable of sustaining the general and acute care requirements for the population and one that is embedded in and aligned with the proposed new system of health and social care on the Island.
10. The reason for change and why a new hospital is required is that it is inappropriate to continue to provide clinical services in the existing facility which does not meet current building and operational standards nor caters for current and projected future clinical demands. In particular, the following aspects are cause for concern:
  - The existing provision of functional types, sizes and relationships of rooms do not meet current UK healthcare design guidance, space standards and current best working practices;
  - The existing provision of the numbers of beds available and the provision of single bedroom accommodation does not meet current emergency demand, nor projected future daily demands whilst operating at recognised best practice occupancy rates.
11. The constraints imposed by a hospital facility comprising a disparate collection of buildings and associated building services' infrastructure of varying vintages from the mid-1800s to the present day, lead to inefficiencies in linking the various clinical services throughout the hospital and restrict the opportunities for adapting the existing facilities to meet current and future demands.
12. In addition, from discussions with senior management and hospital estates' personnel in conjunction with a review of an asset management property appraisal survey carried out by external consultants in 2008, an assessment of the condition of the existing buildings has been made. Many of the buildings are in poor condition with major upgrades/replacement of the fabric, fittings, lifts, and building mechanical and electrical services required in the near future. The thermal properties of the masonry buildings are well below current standards and, consequently, the buildings are not energy efficient to current standards and expectations. A report on the condition and development potential of the existing General Hospital buildings is included in Appendix 5.4
13. The alteration and refurbishment of the existing buildings will never, as a consequence of the inherent condition and compromises in space and clinical adjacencies, allow the same level of benefits to be secured as would be possible in the development of a replacement

hospital on an alternative site or in a comprehensive planned and phased redevelopment and replacement of the existing hospital buildings and site.

14. The new hospital will respond to a number of pressing issues which fall into two key groups:
1. Responding to the strategic imperatives of developing an integrated care service on the island where the acute and community based health services are designed to complement and support an integrated strategy.
  2. Responding to the very obvious physical requirements for a new hospital to address the following headline issues with the current hospital:
    - Inefficient and aging design - poor clinical adjacencies;
    - Poor space standards - compromising effective care delivery;
    - Lack of flexibility;
    - Poor separation of clinical and non clinical flows;
    - Sub-optimal infection control through the predomination of multi-bedded bays
    - Poor gender separation and lack of privacy;
    - Poor supporting mechanical and engineering infrastructure;
    - Poor provision of fire compartmentation to allow progressive horizontal evacuation.
15. The Green Paper - Caring for Each Other, Caring for Ourselves (May 2011) clearly identified that three guiding principles were identified with stakeholders in Jersey through consultation:
1. 'Safe' - While many health interventions involve inherent levels of risk, that patients and service users should not be exposed to an undue level of risk;
  2. 'Sustainable' - that services should be organised in a way that is not vulnerable to change in the short term;
  3. 'Affordable' - that the model of services represents value for money relative to other potential models.

#### 2.1.2. Strategic vision

16. P.82/2012 clearly summarises the clinical vision for acute care and is summarised below:
- To deliver a new hospital, built to modern standards, within the next 10 years. The hospital will continue to be integral to the health and social care system, and will be supported by that system. The workforce will be skilled, motivated, modernised and supported by IT and a fit-for-purpose estate - with services developed in the right priority order to meet the needs of Islanders;

- Integrated working with non-hospital organisations and settings will be supported by clinical leadership, particularly within community settings; for example by developing nurse-led services, consultant-led outreach services and, potentially, GP-led hospital based services where there is clinical evidence to support these models;
  - Demand for unplanned care will be more appropriate, through a combination of service and behavioural changes, facilitated by funding for GP appointments for key patient groups, triage and streaming appropriate, minor attendances to a co-located GP service;
  - Core inpatient services will be prioritised and sustained, in order to support emergency provision. As such, Islanders will continue to be cared for on-Island where this is clinically appropriate, and the range of services will expand where this is clinically viable;
  - Clinical Support Services will remain central to the delivery of high quality, patient-centred healthcare. At least 70% of clinical decisions are made on the basis of test results, and the hospital of the future will place an increasing emphasis on its entire range of diagnostic services to support rapid diagnosis and assessment, treatment and longer term care management;
  - Hospital resources will be used effectively and efficiently, providing excellent, integrated care; length of stay will continue to reduce, with discharge planning improving and an increase in alternatives to hospital care available to relieve the pressure on beds.
  - Income for the hospital will be optimised to ensure that the right balance of publicly-funded and privately funded care continues to be delivered.
17. The above vision was distilled into the development principles to be developed:
1. Create a sustainable service model - efficient, effective, engaging the public in self-management and with consistent access and thresholds;
  2. Ensure clinical/service viability - overcome the challenges of low patient volumes, delivering high quality care and minimising risk;
  3. Ensure financial viability - reduce the impact of diseconomies of scale, with value for money, an understanding of the costs of care in Jersey and robust procurement;
  4. How should we fund health and social care? - establishing a charging model that incentivises care and cooperation
  5. Optimising estate utilisation - ensuring the estate is fit for purpose and utilised to maximum efficiency
  6. Workforce utilisation and development - supporting and utilising the workforce to the best of their abilities

7. Clinical governance - sustaining a culture of safety, learning and transparency
8. Use of business intelligence - with robust data to support decision making based on fact, and including patients and the public in service design and decision making

### 2.1.3. Investment objectives

18. These guiding principles have been developed and distilled in the context of this pre-feasibility study into a set of investment objectives, against which a set of benefits criteria have been used to assess the potential site options.
  - **Objective 1:** Create a hospital which is capable of sustaining future demand and ensures ease of access for the island's population
  - **Objective 2:** Optimise the estate to be as efficient and effective as possible
  - **Objective 3:** Improve the quality and effectiveness of the hospital in providing care to the population, particularly where current services require complete replacement
  - **Objective 4:** Support the workforce to be able to perform to the best of their abilities

## 2.2. The case for change

### 2.2.1. The existing situation

19. Jersey General Hospital is situated in St. Helier and operates as the only acute hospital facility on the island. The population of Jersey at the end of 2011 was approximately 98,000 (as per the latest 2011 Census information available in September 2012). Jersey General Hospital therefore occupies a reasonably unique position in that it serves a population which is considerably smaller than a comparable acute general hospital would serve in the United Kingdom.
20. This Strategic Outline Case has been updated to take account of the revised population projections for Jersey, based on the 2011 Census. The activity and capacity modelling, on which the hospital key functional content has been based, utilises actual healthcare activity information for 2011/12. This actual activity has been projected forward using the latest updated population projections at September 2012. The updated capacity model reflects the revised population projections delivered by the States of Jersey Statistics Unit. The model is based on the revised inwards migration scenario titled '+350' (assuming a net inwards yearly migration to the island of 350 people); further sensitivities utilising other migration scenarios have also been run ('+700' migration and 'net nil' inwards migration) to test the effect of different migration scenarios on overall bed numbers.

21. The overriding issues that affect Jersey General Hospital are those which are found in other island situations where acute provision is required to support a comparatively small population. Such issues include:
- Diseconomies of scale that need to be accepted;
  - The extent to which specialisation occurs at the hospital, issues concerning adequate training and experience for on-island clinical staff and the extent to which some activity is provided externally;
  - The overall range of clinically appropriate services that are most effectively provided by the hospital, compared to a community setting, both now and in the future;
  - The requirement for a Health and Social Services system that is fully integrated in the future, a requirement that is just as critical to efficient and effective health care provision within a small island population as it is for a larger population, not constrained by physical boundaries.

In addition, the way health services are funded, and the models of care delivered, whilst closely resembling the UK National Health Service, are in many key ways unique to Jersey and have evolved as a result of its status as a separate jurisdiction.

#### 2.2.2. Identifying the business need

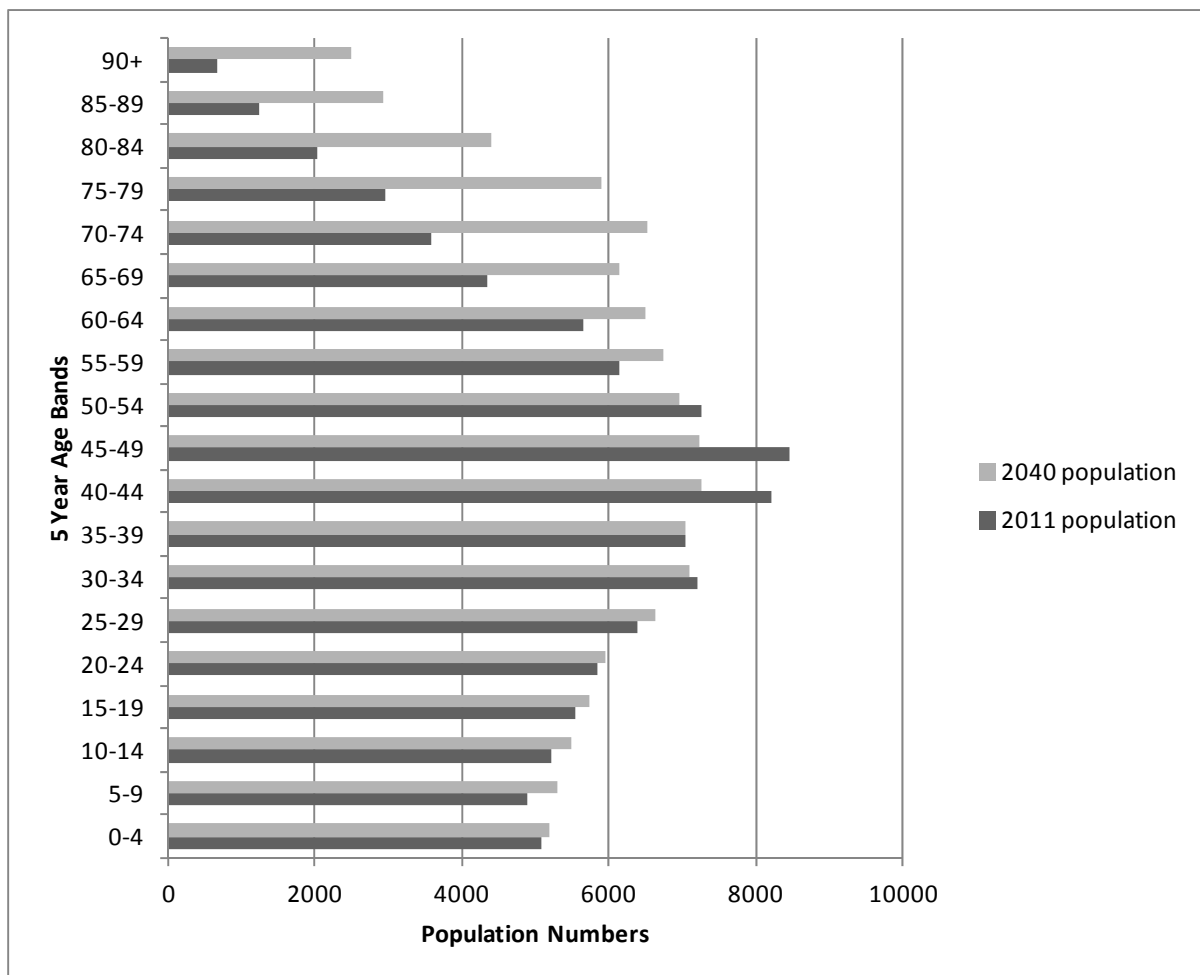
22. The overall condition of the Hospital is deteriorating rapidly. Reconfiguration of the current building will, in nearly all aspects, require significant refurbishment costs to address infrastructure issues whilst at the same time not addressing the inherent space, clinical flow and adjacency issues.
23. Complete redesign of the hospital is required to meet the current and future acute clinical needs of the population and such detailed master-planning and clinical reconfiguration will form an integral part of the future development of a new hospital at the next phase of development.
24. A detailed strategic model has been developed to support this SOC which identifies the future key functional requirements based on an analysis of the current hospital activity and a forward projection based on the anticipated effects of demographic changes, known additional variations in workload and the effects of performance changes, particularly with reference to the developing community based strategies designed to place patients in a location which most appropriately suits their needs. Details of the Pre-Feasibility modelling and analysis for In-patients are provided in Appendix 1.3 and for the Emergency Department in Appendix 1.4.
25. The most significant effects on the sizing of the future hospital concern achieving best practice space allocation to service current clinical need, the impact of demography and the potential to reduce the longer lengths of stay that currently occur within the hospital

by creating community based care packages to support patients away from an acute hospital ward environment.

2.2.3. Demographic changes

26. The following graph identifies pictorially the anticipated change in population numbers and proportions by age group from 2011 to 2040 based on the September 2012 population projection ('+350' inwards migration). The graph shows the actual population of Jersey by age band as was the case in 2011 and then projected forward to 2040. The key issue in terms of the impact on health need for the island rests in the very obvious increase in the elderly population.

Figure 2.1: Graph of population projections from 2011 to 2040



27. The change in population numbers by age groups over 65 shows a marked increase in population which is very much in line with trends throughout the United Kingdom. The population between 75 and 89 more than doubles to 2040 and the population over 90 grows from 669 to 2,469 (a 370% increase) which has a significant effect on overall bed

requirements when modelled as it is the older age categories of patients that consume the most hospital resources, particularly with regards to bed requirements.

28. The graph clearly demonstrates that the population increase, which is apparent for older adults, will have a marked effect on the resources and capacity required to care for those patients in 30 years time and this effect is modelled through with respect to future bed requirements and also out-patient and emergency care requirements.

#### 2.2.4. In-patient care pathways

29. The Pre Feasibility capacity model that has been developed responds to the strategy contained within the States Proposition P.82/2012: "Health and Social Services: A New Way Forward" that, for both elective and emergency activity, an increasing proportion of patients can and should be more appropriately cared for outside of an acute hospital ward. The appropriate community based environments into which they can be transferred are ones which focus on active rehabilitation and mobilisation either within a step up / step down environment or another domiciliary environment such as a care home or the patient's own home where care can be efficiently and effectively provided.
30. Such a modelling approach can be applied to all patients groups, be they surgical, medical or indeed approaching the end of their lives. For the purposes of the pre feasibility study, a range of performance scenarios relating to those proportions of patients who could be more appropriately either rehabilitated or cared for away from an acute ward environment following a period of acute care allows a range of potential overall bed requirements to be developed, this is discussed in detail below.

#### 2.2.5. Establishing the potential range of shifts to intermediate care

31. The pre feasibility model identifies both elective and emergency activity by length of stay and applies the following assumptions to those longer lengths of stay according to the principles laid out earlier. The following figure summarises the assumptions contained within the model at this time. The model is capable of making assumptions at a detailed specialty level in addition to the summarised set of assumptions shown below.
32. A range of assumptions have therefore been modelled, reflecting those considered within the Health and Social Services White Paper "Caring for Each Other : Caring for Ourselves" (2012), as this set of assumptions will have the greatest effect in terms of shifting bed days away from the acute environment towards community based care.
33. Scenario 1 (low) assumes "do nothing different at this stage" and therefore correlates with the original Scenario 1 of the White Paper of continuing as usual. Scenario 2 was not considered sustainable following consultation. Scenario 3 partial (medium) and full (high) achievement variants make assumptions regarding the extent that those patients who currently reside more than 7 days and beyond can be cared for in an alternative environment. The model assumes a graduation in terms of the extent that lengths of stay can be "trimmed" in this way, the effect being that the longer a patient currently stays in

hospital, the more likely they are to be appropriately decanted and cared for in a community environment.

- 34. This methodology of trimming longer lengths of stay is commonly used within the UK and has been applied to a number of geographical clinical service strategies including all regions within Wales, Scotland and a number of hospitals within England. Its key advantage is that the assumptions are grounded in the reality of the activity currently occurring within the hospital at the present time. Future clinical service development that will occur as part of the more detailed OBC production, incorporating the effects of service redesign can inform and amend the overarching assumptions contained within the model at the SOC phase. Discharge strategies when developed can then be reflected in the actual proportions of activity trimmed down to a specialty specific level. The assumptions detailed below have been used as start point assumptions for a range of major clinical service strategies and are therefore considered robust enough at this stage for the purposes of estimating additional bed requirements when combined with the additional bed pressures as a result of demographic changes.
- 35. The key effect of trimming activity in this manner is that those longer lengths of stay, where it can be assumed that there is little clinical involvement in the patient’s recovery, are targeted; shorter lengths of stay where clinical inputs may still be ongoing are trimmed to a lesser extent.

*Figure 2.2: Summary of trim scenarios applied to IP lengths of stay*

|                  | Elective |        |      | Emergency |        |      |
|------------------|----------|--------|------|-----------|--------|------|
|                  | Low      | Medium | High | Low       | Medium | High |
| Less than 7 days | 0%       | 0%     | 0%   | 0%        | 0%     | 0%   |
| Over 7 Days      | 0%       | 10%    | 20%  | 0%        | 10%    | 20%  |
| Over 14 Days     | 0%       | 20%    | 40%  | 0%        | 20%    | 40%  |
| Over 21 Days     | 0%       | 30%    | 60%  | 0%        | 30%    | 60%  |
| Over 28 Days     | 0%       | 40%    | 80%  | 0%        | 40%    | 80%  |

- 36. As an example, a patient currently staying say for 28 days will stay for approximately 24 days under the Scenario 3 (medium) partial achievement (a 15% reduction in total length of stay) and approximately 20 days under Scenario 3 (high) full achievement (a 30% reduction in total length of stay).
- 37. It is assumed for the purposes of sizing the scale of the future hospital at this time that Scenario 3 can be fully achieved longer term through appropriate investment in community based strategies contained within P.82/2012.

**2.2.6. Additional modelling assumptions**

- 38. In addition to the effects of performance assumptions for in-patient care, Appendix 1.3 details the effects on the key functional content relating to out-patient and emergency department care, these additional assumptions regarding performance that have lesser effects on the overall sizing of the future hospital include:



- Shifts of short stay elective activity to day cases. Within the base data, a number of elective surgery spells are identified as in-patients when they currently have a length of stay of zero days, the model assumes that all such spells will in the future be classified and treated as day cases, in addition the model is able to take account of and shift varying proportions of short stay elective surgical in-patients to a day case environment in the future. The proportions of short stay elective work that can shift will vary based on the current length of stay: a greater proportion of those elective in-patients staying for 1 day can shift to being treated as day cases compared to those currently staying 2 days. At present, a prudent assumption that 60% of patients staying one day will shift to day case treatment and no shifts for patients staying more than one day will occur;
- Reductions in the number of inappropriate attendances at the Emergency Department by diverting such cases to primary care provision;
- Reductions in the number of admissions as part of the community based strategy to provide enhanced community care support for patients identified to be at risk. In addition to trimming lengths of stay (which has the most significant effect on future bed numbers in terms of clinical strategies), further assumptions regarding admissions avoidance have also been modelled to reflect the strategies contained within the White Paper. In the future the increased use of step up facilities and other community support strategies can reduce the number of admissions to hospital. Such strategies are to be considered and implemented as part of the transitional arrangements over the next ten years. For the purposes of modelling the following assumptions have been made:
  - Admissions avoided are more often associated with those admissions with lower lengths of stay and therefore lower lengths of stay for emergency activity can act as an acceptable proxy for assessing episodes that can be avoided.
  - As lengths of stay increase it is less likely that the admission could be avoided in the first place, the model for trimming longer lengths of stay already reduces bed demand as described above

Scenario 1 assumes no change in assumptions. Scenario 3 (partial and full completion variants) assume a % reduction in admissions through avoidance strategies, primarily associated with very short lengths of stay e.g. 0 and 1 day length of stay, and then tailing off in terms of applicability as lengths of stay increase. Currently the model is set to allow for different proportions of admissions to be avoided up to a length of stay of 4 days. The effect of such avoidance has a more significant effect on actual spells avoided but comparatively little effect on bed numbers (because the lengths of stay in question are low).

Such seemingly significant reductions in admissions for these emergency patients only have an effect of 4 and 6 beds for the partial and full achievement of Scenario

3 respectively in 2011, increasingly proportionately in future years. So the effect at this stage on the scaling of a future hospital is not significant.

- Reductions in the ratio of follow up out-patient appointments compared to new appointments.

### 2.2.7. Analysis

39. The analysis of current activity based on 2011/12 data clearly demonstrates that there is considerable pressure on beds to cope with current demand. In addition the way the current bed stock is configured does not allow them to be used as flexibly as desired. Re-provision of beds in a more flexible manner (utilising single rooms) is an imperative to allow sufficient capacity to cope with future demand. Key issues here are the use of single rooms and a shift towards 7 day a week operation for all elective beds. The model can identify future bed content if these assumptions are not instigated, but any future development would need to incorporate additional bed numbers if the planning assumptions are not met.
40. The figure below summarises the future bed requirements, on which the sizing and costing of the future capital development has been based.

*Figure 2.3: Table summarising future bed requirements for Jersey Hospital*

|                                      | 2010 beds (actual) | Modelled Bed requirements based on 2011/12 Activity | Modelled bed projections to 2040 |                                |                             |
|--------------------------------------|--------------------|---|----------------------------------|--------------------------------|-----------------------------|
|                                      |                    |   | Scenario 1                       | Scenario 3 partial achievement | Scenario 3 full achievement |
| Zero Length Of Stay In Patient beds  |                    | 11  | 17                               |                                |                             |
| adult emergency                      | 168                | 131   | 260                              | 233                            | 206                         |
| adult elective                       |                    | 46  | 62                               | 31                             | 28                          |
| Less admissions avoidance strategies |                    |   |                                  | -5                             | -7                          |
|                                      | 168                | 188   | 340                              | 259                            | 227                         |
| Paediatrics beds                     | 15                 | 17  | 13                               | 13                             | 13                          |
| Neonatal cots                        | 8                  | 9   | 9                                | 9                              | 9                           |
| Obstetrics beds                      | 26                 | 23  | 29                               | 29                             | 29                          |
| Private beds                         | 28                 | 13  | 18                               | 18                             | 18                          |
| <b>Total In Patient Beds</b>         | <b>245</b>         | <b>250</b>  | <b>409</b>                       | <b>328</b>                     | <b>296</b>                  |
| Adult day case beds/trolleys         |                    | 13  | 18                               | 20                             | 20                          |
| Paed day case beds/trolleys          |                    | 2   | 2                                | 2                              | 2                           |
| <b>Total day case beds/trolleys</b>  | <b>0</b>           | <b>15</b>   | <b>20</b>                        | <b>22</b>                      | <b>22</b>                   |

41. Excluding Day Case beds/trolleys at present, the hospital had a bed complement of c.245 beds in 2010. Scenario 1 identifies that significant demographic pressures would require that bed complement to rise to 409 beds (an increase of 164 beds) by 2040 if strategies were not put in place to treat and care for patients in an alternative manner. This

scenario of a simple continuation of the current acute care profile is described as a continuation of business as usual but is unsustainable in the longer term.

42. A further scenario (Scenario 3) is identified of which two variants are shown; one is the effect of partial achievement of the community and other strategies as described within the H&SS White Paper, and one for significant achievement. The detailed modelling that has occurred to augment Scenario 3 within the White Paper is fully described in the Strategic section of this SOC. The key issue in terms of future sizing of the hospital is the trimming of long lengths of stay (for all patient groups). The two sub scenarios correspond to Scenario 3 as termed in the White Paper and have been used to identify the future scale of the hospital based on the extent and timing of achieving strategic change to care delivery.
43. By 2040 an additional 83 beds (totalling 328 beds) would be required under Scenario 3 - partial achievement and an additional 51 beds (totalling 296 beds) under Scenario 3 - full achievement.
44. Additionally the model identifies separately to the calculation of new hospital bed requirements, the increase in bed numbers required in the short term to alleviate current bed crises within the hospital. Bed number pressures will continue to grow up to the development of a new hospital and by 2017 it is anticipated that up to 50 additional beds will be required in the short term to enable the acute hospital to continue to function without being in permanent bed crisis. The calculation of additional short term beds takes into account future growth, current shortages and also allows for the inefficient configuration of current beds in the hospital.

*Figure 2.4: Short Term additional Bed Requirements prior to New Hospital Development*

|   | Actual     | Modelled Bed Requirements |            |            |
|---|------------|---------------------------|------------|------------|
|   |            | 2011                      | 2014       | 2017       |
| IP Beds                                     |            | 188                       | 198        | 209        |
| Private beds                                |            | 13                        | 13         | 14         |
| <b>Total</b>                                | <b>196</b> | <b>201</b>                | <b>211</b> | <b>223</b> |
| Allowance for inefficiency of current stock |            | 10%                       |            |            |
| Effective Bed Requirement                   |            | 221                       | 231        | 243        |
| Additional requirements                     |            | 25                        | 35         | 47         |

#### 2.2.8. Initial departmental schedule of accommodation

45. The outputs from the above are all included within the relevant high level schedules of accommodation, based on overarching departmental functional areas, that have been produced as a result of this modelling process and which have informed the site assessment process - refer to Appendix 1.5.

46. The current gross area of the hospital is approximately 38,863m<sup>2</sup> in area. W.S. Atkins' work to define the future business need for the acute hospital indicates that a new hospital would require a significant increase in area just to meet current hospital space standards. The total area of the proposed new hospital, assuming community and other strategies described in P.82/2012 are fully implemented, is approximately 63,644m<sup>2</sup>.
47. The impact of not implementing the community-based care strategies identified in P.82/2012 has a significant effect on the hospital size. If P.82/2012 had not been approved, the increase in the hospital area requirements would rise by approximately 9,200m<sup>2</sup> to give a total area requirement of circa 72,844m<sup>2</sup>.
48. The impact of this change in terms of capital costs which support the decision to invest in community services is significant, being calculated at c.£60 million should community strategies not receive the investment required to successfully reduce the demand currently met through acute hospital based care. Furthermore, the additional revenue costs associated with increases in bed numbers and activity would need to be calculated and confirmed.

### 3. Economic case: Assessment Process

49. The purpose of the Economic Case is to assess site options against the investment objectives as defined through the benefit criteria and risk criteria and, subsequently, assess the costs of short-listed options.

#### 3.1. Evaluation process

50. The process by which a preferred site option for the development of the new hospital was established went through a long-list evaluation followed by a short-list evaluation from which a preferred site option was established.

##### 3.1.1. Long-list evaluation

51. This established a short-list of potential development sites by:
- Identifying a long-list of potential sites;
  - Gathering technical information for each site relating to planning and transportation considerations, utility information relating to electricity, water and drainage, environmental issues, and hospital estates' information relating to existing buildings and sites.
  - Developing high level site development plan proposals to indicate, in principle, if each site could accommodate a new hospital with a gross floor area of approximately 64,000m<sup>2</sup> and a preferred ground floor area of approximately 18,000 to 20,000m<sup>2</sup> to provide optimal configuration of critical departments (Accident and Emergency, Theatres and Diagnostics) along with suitable site access and separation of traffic flows.
  - Carrying out a non-financial assessment of each site comprising:
    - Developing, assessing, scoring and ranking each site's development proposals against a set of benefit criteria associated with the investment objectives of the project (refer to section 3.1.3.1 below);
    - Develop, assess, score and rank a register of risks relating to the risks of construction and operation of each site (refer to section 3.1.3.2 below);
    - Developing a final amalgamated benefits and risk ranking combining the results of the individual assessments to establish a risk adjusted benefits ranking used to determine the three best potential sites for short-listing.
52. The outcome of the long-list evaluation process was considered by the Ministerial Oversight Group on 9 July 2012, who gave approval to proceed to the next stage for the final preferred site evaluation of the recommended short-list of three potential sites.

##### 3.1.2. Short-list evaluation

53. This established a recommended preferred site by:

- Gathering further, more detailed, technical information for each site supplementing that obtained at long-listing stage;
- Developing the previous long-list site plan proposals in greater detail to establish potential departmental relationship floor plans for each building from which a better understanding of the mass and height of each option could be evaluated;
- Carry out a financial assessment of each site comprising:
  - Assessing, scoring and ranking each site’s development proposals against the same set of benefit criteria associated with the investment objectives of the project used in the long-list evaluation;
  - Assessing, scoring and ranking a register of risks relating to the same set of risks of construction and operation of each site used in the long-list evaluation;
  - Developing costs for each of these options;
  - Developing an amalgamated benefits and risk ranking combining the results of the individual assessments to determine a risk adjusted benefits ranking and determine a final value for money ranking based on the risk adjusted cost per benefit score to establish the preferred development site option.
- Presenting to the Ministerial Oversight Group the outcomes of the assessment process for consideration with that Group making a political recommendation of a preferred site to the Council of Ministers and States Assembly as appropriate, and for subsequent inclusion in the Outline and Full Business Cases.

**3.1.3. Benefits and risk criteria**

54. Each of the long-listed sites was assessed and scored against a range of benefit and risk criteria as identified below to enable a ranked order of evaluated sites to be established.

**3.1.3.1. Benefits criteria**

55. The investment objectives identified as key to this project in section 2.1.3 above have driven the development of an agreed set of benefits criteria against which the all the site options have been assessed. These are summarised in the following figure:

*Figure 3.1: Investment objectives and benefits criteria*

| Investment objectives  | Key benefits criteria  |
|--|--|
| <p><b>Objective 1:</b> Create a hospital which is capable of sustaining future demand and ensures ease of access for the island’s population</p> | <ul style="list-style-type: none"> <li>• Massing and Planning issues, including the sites being large enough to accommodate the potential capacity and service requirements for the hospital and the sites to adhere to the Island Plan policies.</li> <li>• Transport and Access issues, including ease of access and efficient and effective access by cars, commercial vehicles, public transport and emergency vehicles and provide adequate parking.</li> </ul> |

|  |   |
|--|---|
| <p><b>Objective 2:</b> Optimise the estate to be as efficient and effective as possible</p>  | <ul style="list-style-type: none"> <li>• Response to the Island’s Infrastructure and Geography, including the supporting utility infrastructure being capable of meeting the demands of the proposed development.</li> <li>• Construction and Buildability issues, including ease of construction logistics.</li> </ul> |
| <p><b>Objective 3:</b> Improve the quality and effectiveness of the hospital in providing care to the population, particularly where current services require complete replacement</p> | <ul style="list-style-type: none"> <li>• Clinical and Non-clinical Support Functionality, including each site’s capability of accommodating all support functions effectively.</li> <li>• Clinical Care and Patient Related Functions, including optimisation of clinical adjacencies and functionality.</li> </ul>     |
| <p><b>Objective 4:</b> Support the workforce to be able to perform to the best of their abilities</p>  | <ul style="list-style-type: none"> <li>• Staffing and Support issues, including the effect on staff recruitment and retention.</li> </ul>   |

56. The above benefits criteria were further developed and expanded in scope to allow a wide ranging review of the options against what is naturally a diverse range of issues that need to be considered when deciding on a preferred site location and are identified below.

*Figure 3.2: Full list of benefits criteria against which options are assessed*

|            |  |
|------------|--|
| <b>1.0</b> | <b>Massing and Planning Issues</b>   |
| 1.1        | The site must be considered capable of accommodating the potential capacity requirements for the hospital, including potential future expansion and/or change. |
| 1.2        | The potential site must fit within and not be out of accord with the Island Planning and Spatial Strategy and HSS strategy                                     |
| 1.3        | The site should not have any planning restrictions associated with it that pose an unacceptable risk to development at this stage                              |
| 1.4        | Site required for the total hospital development should be immediately available without major infrastructure and other issues                                 |
| <b>2.0</b> | <b>Transport and Access Issues</b>   |
| 2.1        | The site should afford ease of access to the majority of the island's population   |
| 2.2        | The site should allow efficient and effective access by private and commercial transport   |
| 2.3        | The site should allow efficient and effective access by public transport   |
| 2.4        | The site should allow adequate parking facilities available for staff, patients and visitors   |
| 2.5        | The site should allow efficient and effective access by emergency vehicles   |
| 2.6        | The site should allow efficient and effective access for separating traffic flows  |

|            |   |
|------------|---|
| <b>3.0</b> | <b>Response to the Island's Infrastructure and Geography</b>  |
| 3.1        | The site should present minimal risks to its safe and on-going running in terms of the weather and environment  |
| 3.2        | The site should be capable of supporting key infrastructure for the hospital  |
| <b>4.0</b> | <b>Clinical and Non Clinical support Functionality</b>  |
| 4.1        | The site should be capable of accommodating or being supported by the full range of clinical and non clinical support functions   |
| <b>5.0</b> | <b>Clinical Care and Patient related Issues</b>   |
| 5.1        | The site should allow for the optimisation of clinical adjacencies and functionality  |
| 5.2        | The site should allow for the future hospital to be flexible in its future design and construction and allow for future proofing of all acute and non acute services as part of a clear, sustainable, forward masterplanning strategy |
| 5.3        | The hospital should be capable of accommodating key functional content, based on, but not wedded to current UK room scheduling guidance and current best practice   |
| 5.4        | Quality of patient environment - views and social spaces  |
| 5.5        | Convenience of access for friends, family and visitors and access to town/shopping facilities   |
| <b>6.0</b> | <b>Staffing and Support Issues</b>  |
| 6.1        | The effect of the site on staff recruitment and retention and patient disruption at the time of transition  |
| 6.2        | The ongoing effect of the site on staff recruitment and retention   |
| 6.3        | Staff, patient and visitor security relating to location and out-of-hours safety  |
| <b>7.0</b> | <b>Construction and Buildability issues</b>   |
| 7.1        | Ease of construction logistics  |
| 7.2        | Access to site for construction vehicles, deliveries and waste removal  |
| 7.3        | Protection of existing hospital services and avoidance of disruption during the build process   |

57. Following the assessment and scoring of each of the sites against this list of benefit criteria a preliminary ranked order of sites was developed.

**3.1.3.2. Risks criteria**

58. In addition to the detailed development of the benefits criteria to assess the options, a detailed risk register has also been developed by Atkins to identify risks of procurement, construction and operation associated with each site. These risks have been developed and evaluated as part of the option appraisal process outlined below.

59. Each site was assessed in respect of potential risks and an updated ranked order of sites was created. To allow the selection of 3 sites to be recommended for short-listing, benefits and risks for each site were combined and a subsequent, final composite ranking was created.



60. The main risks associated with the proposals were identified as follows:

*Figure 3.3: Summary of Risk Register associated with Site development options*

|     |   |
|-----|---|
| 1   | PLANNING AND ENVIRONMENT  |
| 1.1 | Failure to obtain necessary Planning consents   |
| 1.2 | Further provision / costs required to satisfy Strategic Environmental Assessment (SEA) / Environmental Impact Assessment (EIA) requirements |
| 1.3 | Public opinion and local media against selected site  |
| 2   | TRANSPORT   |
| 2.1 | Failure to overcome transport issues raised by Transport Impact Assessment (TIA) and environmental issues                                   |
| 2.2 | Site does not help to achieve reduction in car usage  |
| 3   | SERVICES INFRASTRUCTURE   |
| 3.1 | Electricity: increased cost of providing robust power supplies  |
| 3.2 | Water supply: Increased cost of providing robust water supplies   |
| 3.3 | Drainage capacity: Increased cost of providing robust foul and surface water drainage systems   |
| 4   | CLINICAL AND NON-CLINICAL SUPPORT   |
| 4.1 | Failure to meet preferred departmental and room relationships   |
| 4.2 | Risk of disruption to existing health services  |
| 5   | STAFF AND PATIENT ISSUES  |
| 5.1 | Location of new hospital is not readily accessible to majority of island's population   |
| 5.2 | Flexibility, commitment and morale of staff is compromised due to the location of the new hospital  |
| 6   | CONSTRUCTION  |
| 6.1 | Risk of infection control issues affecting patients resulting in increased clinical support and extended lengths of stay                    |
| 6.2 | Proposed construction overheats Jersey construction economy   |
| 7   | DEVELOPMENT OPPORTUNITY   |
| 7.1 | Additional cost or opportunity cost inherent with development of this site  |

### 3.1.4. Benefits and risks scoring process

#### 3.1.4.1. Benefit scores

61. Each of the sites was assessed and scored against the range of benefit criteria identified above. The range of potential scores attributable to each benefit was as follows:
- 1: proposal did not achieve benefit sought;
  - 4: proposal marginally achieved benefit sought;
  - 7: proposal broadly achieved benefit sought;
  - 10: proposal fully achieved benefit sought.
62. The sum of these individual benefit scores create an overall benefit score for each site thus allowing the sites to be ranked in order of benefits.

#### 3.1.4.2. Risk scores

Each site was also assessed in respect of potential risks and again a ranked order of sites was created. The range of potential risk scores was as follows:

| Impact rating |                     | Likelihood rating |  |
|---------------|---------------------|-------------------|--|
| 1             | Minimal impact      | 1                 | No / minimal probability of occurrence |
| 2             | Some minor impact   | 2                 | Low probability of occurrence          |
| 3             | Noticeable impact   | 3                 | As likely to happen as not             |
| 4             | Significant impact  | 4                 | High probability of occurrence         |
| 5             | Catastrophic impact | 5                 | Almost certainty of occurrence         |

63. To establish a total score for each individual risk, the impact and the likelihood scores were multiplied together, and the sum of these individual risk scores create an overall risk score for each site thus allowing the sites to be ranked in order of risk.
64. The scoring of options against the benefits criteria has occurred when the benefits criteria have been both un-weighted and weighted.
65. To allow the selection of three sites to be recommended for short-listing, the benefit and risk rankings for each site were combined and subjected to a sensitivity check and a composite ranking was created.
66. This appraisal process has followed best practice in making objective the assessment and appraisal process wherever possible. Having assessed the results of both non-weighted and weighted methodologies, the differential between the scoring of options is not

considered material so the un-weighted scores have been used as the prime source for the subsequent evaluation and investment decisions.

### 3.1.5. Costing methodology

67. A potential development proposal has been established for each site option and a costing exercise has been undertaken for each of these based upon assessments of the associated development timescales for each option. The costs which have been included as relevant to the decision are as follows:
- Capitalised Construction Costs incorporating:
    - Construction costs;
    - Professional fees;
    - Equipment costs;
    - Contingencies;
    - An inflation adjustment; and
    - A provisional location adjustment (uplift) factor.
  - Non-works costs incurred to make a site available for development, such as land acquisition.
68. A more detailed explanation of these costs can be found in section 5.2 below.

## 3.2. Evaluation Outcomes

### 3.2.1. Selection of original sites

69. A working party of officers from States of Jersey Property Holdings, Transport and Technical Services, Health and Social Services and Treasury and Resources, as advised by officers from the Planning Department and the Managing Director of the States of Jersey Development Company, compiled an initial list of 24 potential sites for further evaluation. This list identified all significant sites that might be available in the next 3 to 5 years, including existing healthcare sites, green-field and brown-field site options.
70. This was reduced to a long-list of 10 sites by the working party who also considered whether the potential massing and height of the new hospital, based on that of the existing general hospital, could be accommodated on any particular site
71. The initial 10 potential sites that were examined comprised the following:
- Site 1:                      Redevelopment of the existing General Hospital site;
  - Site 2 + 23 + 24:      The Overdale Hospital site and Fields 1550 and 1551;
  - Site 3:                      The St. Saviours Hospital site;

- Site 4 + 14:      The Esplanade Car Park and Zephyrus / Westwater / Crossland site;
- Site 8:            Land adjacent to Jersey Airport;
- Site 10:          Land at Warwick Farm;
- Site 16:          Jersey Gas Works site;
- Site 19:          Westmount Quarry;
- Site 21:          Samares Nurseries at St. Clement;
- Site 22:          Field 1219 Grande Route de Monte a L'Abbe.

### 3.2.2.      Long-list evaluation

72. Each of the 10 long-list site options was developed and assessed by WS Atkins on the basis of providing a single-phase, new-build hospital on each site with all accommodation to current UK NHS space and design standards, with the exception of the existing General Hospital site option which was based on a phased redevelopment replacement of the existing buildings on the site, but with the retention of all or part of the existing listed Granite Building.
73. Each site option was scored against the benefits and risk criteria with those sites scoring the lowest excluded. In addition, where material shortfalls in the suitability of sites were found (such as overall size restrictions or significantly compromised clinical functionality), these sites were also excluded at this stage.
74. On the basis of this long-listing analysis, the following sites, in order of ranking, were recommended for further, more detailed, short-listing appraisal; all other options having been discounted and excluded at this stage:
- Rank 1=:**      Redevelopment of the existing General Hospital Site
  - Rank 1=:**      New-build development on the Esplanade Car Park and Zephyrus / Westwater / Crossland site
  - Rank 3:**      New-build development on the Warwick Farm site.
75. The details of the long-listing scoring and the terms of which sites were excluded and the predominant reasons why those sites were excluded are included in Appendix 2.4.
76. The short-listed recommendations were reviewed by the Ministerial Oversight Group on 2<sup>nd</sup> August 2012 once the short-listing assessment had occurred. The short-listed options were accepted as being the preferred and possible options to take forward for more detailed assessment, with the exception of site 4 + 14, the Esplanade Car Park and Zephyrus / Westwater / Crossland site.
77. The combined Site 4 + 14 was rejected by the Ministerial Oversight Group as the individual sites were too small individually to accommodate the size of the whole hospital development; the separation of the sites by the main road presented significant

obstructions to providing the necessary clinical and operational links between the sites; and the Ministers believed that the potential development of these sites for the Jersey International Finance Centre should have priority, as it offered a greater potential contribution to the island's economy.

78. Consequently, an alternative site option based on the Zephyrus / Crosslands site, and a new site incorporating the existing Aquasplash and Cineworld sites was identified (Zephyrus / Crosslands / Aquasplash / Cineworld) and taken forward as a replacement to the Esplanade Car Park and Zephyrus / Westwater / Crossland site, together with the existing General Hospital site and the Warwick Farm site for further planning and assessment to determine the selection of the preferred site choice.

### 3.2.3. Short-list evaluation

79. Utilising the same benefit criteria and risk categories as deployed at the long-listing stage, the sites were again appraised utilising the additional development information subsequently gained during this short-list stage.
80. To test sensitivities of the selection at this short-listing stage again, weightings were applied to both the benefit criteria and the risk criteria and the results compared with the non-weighted assessment. Both the non-weighted and weighted assessments generated broadly similar results and ranking. Consequently, un-weighted criteria were subsequently used for all financial evaluations. At this stage indicative cost plans were also produced for each of the short-listed options in accordance with Health Facility Cost Guidance produced by UK NHS, and the risk adjusted cost per benefit calculated.
81. When these benefit scores are combined with the risk scores, and the risk adjusted cost per benefit applied, the final ranking from the initial short-listing was
- Rank 1: The current General Hospital Site - scoring 164 points - (from a possible maximum of 240 points);
  - Rank 2: Warwick Farm Site - scoring 146 points - 3% less than the current General Hospital Site;
  - Rank 3: The Zephyrus / Crosslands / Aquasplash / Cineworld Site - scoring 132 points 40% less than the current General Hospital Site.
82. The full results of the non-financial and financial evaluation are detailed in Appendix 2.7.
83. The outcome of the initial phase of site assessment was presented to the Ministerial Oversight Group on 11<sup>th</sup> September 2012. At this time, the estimated costs of acquiring the interests in the Zephyrus/Crosslands/Aquasplash/ Cineworld sites meant this performed less well than the others short-listed, but the existing General Hospital site and the Warwick Farm site could not be meaningfully separated in assessment scores. The existing General Hospital Site had less planning risk, but a higher cost and dis-benefits associated with the necessity to phase development whilst the existing hospital was operational. The Warwick Farm site had significant planning risks associated with the site being out of

keeping with the Island Plan and involving a large development in a rural setting, and had associated transport dis-benefits, but offered the benefits of a new build site with optimal configuration of clinical departments.

84. The Ministerial Oversight Group therefore asked for a number of challenges on the brief and further sensitivity analyses to be carried out relating to the costs of transport services and property purchase and disposal. These were considered by the Ministerial Oversight Group on 25<sup>th</sup> September 2012 at which time the Group asked for a site search to be carried out in consultation with the Minister for Planning and Environment to ensure no alternative site should be considered, and that further detailed work on configuration of shortlisted sites should be undertaken including the development of 3 dimensional images to enable the trade-offs of different sites to be understood. This work was undertaken under the auspices of a sub-group of the Ministerial Oversight Group, to which the Minister for Planning and Environment and Transport and Technical Services were invited to attend.

#### 3.2.4. Shortlist configuration review

85. A further site search was therefore undertaken using the Department of Planning and Environment's Geographical Information System in November 2012. At the same time, a number of alternative sites were suggested by the Minister for Planning and Environment as being worthy of review. The viable sites from these two processes were identified and considered by the Ministerial Oversight Sub Group on 5<sup>th</sup> December 2012. The Group agreed the viable sites should be passed to Atkins to undertake a revised long-list evaluation, but no further sites were found to out-perform the original short-list when the Ministerial Oversight Sub Group considered this on 1<sup>st</sup> February 2013. The outcome of the long-list revised evaluation is detailed in Appendix 2.11.
86. Although Warwick Farm offered the opportunity of a new-build development option on a green-field site, in considering the short-listed options the Ministers did not consider this site to be suitable because it would require re-designation of this green zone land site, which they were acutely aware States Members had not supported during the debate on the Island Plan in 2011. This view was supported by the fact that, during recent debates, States Members had resisted the re-zoning of any green zone for other uses. In addition, the visual and development impact of such a large building in this rural setting would have been out of keeping with the surroundings coupled with considerable transport impacts which were not considered sustainable. Consequently, Warwick Farm was not taken forward further as a short-listed option.
87. To satisfy themselves that the site selection process was fully robust, Ministers required a subsequent review of different configurations of the two remaining shortlisted site options; the current general hospital site and the Waterfront site.
88. With regards the existing general hospital site, concern had been expressed by Ministers regarding the potential height of up to 9 storeys indicated in the initial development proposals, particularly along Kensington Place. Consequently, following further review by

Planning Officers, planning massing guidance was released which introduced a limited building height of five medical floors along Kensington Place, five to six floors on Newgate Street and Gloucester Street and seven floors in the centre of the new hospital building and along The Parade.

89. In response to this, the potential site development area was adjusted to include consideration of acquiring further adjacent properties which might help to reduce the overall height of the proposed building, and consideration was given to utilising the space occupied by the original, 19<sup>th</sup> century listed Granite Building hospital, thus assisting in meeting the planning guidance referred to above.
90. Following consideration of two potential alternatives, the Ministerial Oversight Sub-Group also confirmed that the Zephyrus / Crosslands / Aquasplash / Cineworld site should not be considered further as the positive benefits and risks associated with the development of this site option could not overcome the significant financial penalty arising from the re-provision and re-location of current occupiers of this site. Ministers confirmed that it should be replaced with an alternative Waterfront site configuration replacing the Aquasplash and Cineworld sites with Les Jardins de la Mer. Details of these subsequent, differently configured, site options are included in Appendix 2.12.

### 3.2.5. Reconfigured short-list evaluation

#### 3.2.5.1. Risks and Benefits evaluation

91. The development and evaluation of these subsequent site configuration options then identified a lower cost new-build Waterfront option (Zephyrus / Crosslands / Les Jardins de la Mer) and a massing guidance-compliant redevelopment of the existing general hospital site option which were subsequently assessed and scored in accordance with the short-list evaluation process. 3-dimensional computer generated views of these proposals were also generated to aid decision making and are shown in Appendix 2.11.
92. Both of the sites were assessed and scored against the same range of benefit and risk criteria and cost assessment previously identified and a rank order of these two sites was established as follows:

**Rank 1:** Zephyrus / Crosslands / Les Jardins de la Mer, with a total construction and land cost of approximately £432,765,000;

**Rank 2:** The existing General Hospital Site, with a total construction and land cost of approximately £461,693,000.

### 3.2.6. Establishment of the preferred site option

#### 3.2.6.1. Other development considerations

93. The site evaluation, however, could not take account of the indirect impact of a Waterfront development reducing a potential source of income for the States which would be needed to support general funds at a time when the hospital would need to be paid

for, or of the full impact that the long-term development of a hospital in the central business district of the island might have on the future economic development of the Island.

94. Of the two shortlisted reconfigured options, the views expressed at the Ministerial Oversight Group Sub-Group at their meeting on 22<sup>nd</sup> February were that, although the Waterfront options had attractions in terms of potential benefits, costs and ease of construction, any Waterfront option would be out of keeping with the existing Esplanade Quarter Masterplan and require considerable lost opportunity costs to replace or compensate for the loss of existing uses. In addition, the options developed were considered likely to have a detrimental impact on the development of the Jersey International Finance Centre which, itself, would form an income stream essential for the development of the new hospital. An Economic Impact Assessment was undertaken by the States Economist on the potential impact which confirmed the impact could be significant. Consequently, the Ministers confirmed that there should be no further consideration given to any Waterfront site option.

#### 3.2.6.2. Preferred site

95. With the decision not to progress further with the Warwick Farm and all Waterfront site options, the redevelopment of the existing General Hospital site was therefore confirmed as the preferred option.
96. The comprehensive redevelopment of the existing general hospital site, on a phased basis will result in the provision of a new healthcare environment such that, by the completion of the final phase, all accommodation will be provided to the requisite standards of clinical functionality and will permit the continuing provision of acute health care services in a safe, sustainable and affordable manner.
97. The phased redevelopment of the existing general hospital site can meet all of the investment objectives set for the project, in that it would:
- Provide a healthcare facility which is capable of sustaining future demand and ensure ease of access for the island's population;
  - Optimise the acute healthcare estate to be as efficient and effective as possible and will reduce recurring annual maintenance costs;
  - Improve the quality and effectiveness of care provided to the population of Jersey, particularly where current services require complete replacement;
  - Support the workforce to be able to perform to the best of their abilities.
98. The project would also produce the following benefits
- Allow the re-provision of new in-patient, out-patient, diagnostic, treatment and support services in accommodation which will comply with latest health care facility guidance;



- Minimise the risks of planning challenge due to the site already being identified for health use within the 2011 Island Plan;
- Maintain current transportation links within St. Helier;
- Allow the continuation of healthcare delivery from this historic St Helier location;

99. However, it is clear that any such development would necessitate a careful examination of the technical and clinical complexities associated with the required phased redevelopment of this site.

### 3.2.6.3. Preferred site costs

100. A summary of the estimated undiscounted costs for the existing General Hospital preferred site option is shown below:

| <b>Construction and land related costs</b>         |                     |
|--|---------------------|
| Capitalised Construction Costs                     | £452,943,000        |
| Costs of land acquisition and proceeds of disposal | £8,750,000          |
| <b>Total Construction and Land costs</b>           | <b>£461,693,000</b> |

101. The details of the above costs and, for comparison, those of the other short-listed site options, can be found in Appendix 2.14.

## 4. Commercial case

102. The purpose of the Commercial Case is to set out the planned approach the States of Jersey will be taking to ensure there is a competitive market for the development of the new hospital. This in turn will determine the basis of a commercially beneficial procurement and achieve the best value for money for the development.
103. This section of the business case will be developed more fully during the Feasibility Study at Outline and Full Business Case stages during which greater detail regarding the procurement, legislative and organisational arrangements for the development will be set out.

### 4.1. Procurement strategy

104. Following agreement of this pre-feasibility stage, detailed work will be undertaken to determine and assess the most likely procurement route to be followed for this scheme. There are a number of approaches available to be considered which will allow the States flexibility and control over the funding, design, build and maintenance of the redevelopment. The options available to the States at this time are:
- A traditional centrally funded approach using publically funded capital;
  - A potential partnering approach to the development process.
105. A review of the commercial risk allocation regarding the project will inform the determined procurement strategy but, at present, it has been assumed that a phased construction will be undertaken using a traditional procurement and funding methodology.
106. The procurement process will need to comply with the requirements of the States of Jersey Corporate Procurement Department 'Procurement Toolkit', including the use of Procurement Strategy PS/2, and the States of Jersey Treasury and Resources Department 'Financial Directions', as well as international good practice on procurements of this scale and importance.
107. There are a number of considerations and parameters that will be followed in the detailed future production of this procurement strategy, including:
- Delivery of goods and services needs to be through on-island partners wherever it is feasible and appropriate to do so;
  - The small size and lack of specialism of the design team adviser sector and construction service on Jersey will mean partnership with other providers is likely to be necessary;
  - Continuity of clinical and support services will be essential given the absence of alternative hospital provision on-island;
  - Unfamiliarity of off island delivery partners with island restrictions may be a factor in the ability of those partners to efficiently and effectively deliver services;

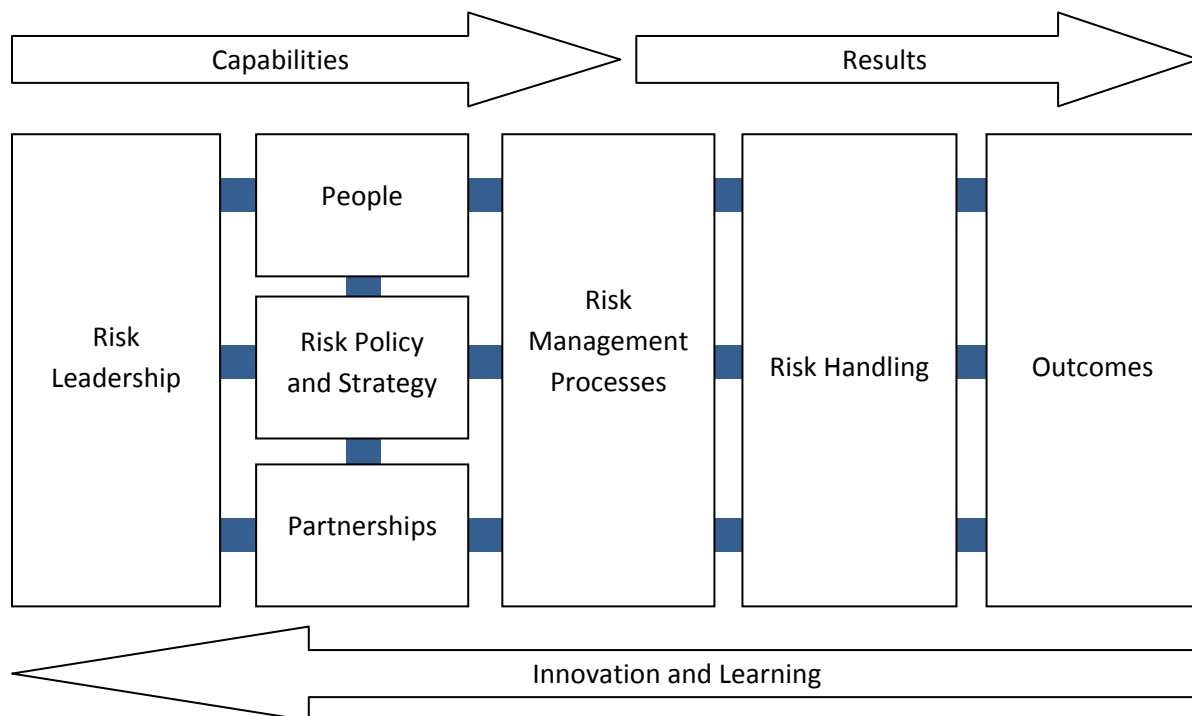
- The island also has unique controls in relation to regulation of undertakings, local employment and housing qualifications;
- The particular way hospital services are provided, funded and delivered in Jersey will be a key consideration;
- Jersey has its own legal and financial system and the strategy will make provision to ensure that any such issues are clearly identified where they are a key procurement issue when dealing with off Island Partners;
- Jersey is outside of the EU and has its own procurement processes. The size and scale of this project will require a bespoke procurement strategy to be developed to comply with Jersey's own regulations but also to ensure that the procurement strategy is comprehensive;
- The States will ensure that it retains the flexibility to input into the design, speed of project delivery and a high level of quality control. The procurement strategy will identify the need for detailed clinical planning and design to commence rapidly after the SOC is approved in order for the States to achieve the timescale set out in the Management Case.

#### 4.2. Funding strategy

108. The States of Jersey maintains a healthy balance sheet valued at more than £2bn with significant reserve/funds in the region of £3.4bn, some of which do not form part of the consolidated balance sheet. The accounts clearly demonstrate the effects of the decisions taken to safeguard Jersey's public finances and maintain a strong position compared with many other jurisdictions across the world. The stated intention of the Treasury Department is not to borrow or use monies allocated for investments from these funds but instead to provide external funding as a source of finance specifically for both the proposed hospital and housing projects. By doing this, it will not only help the States deliver effective services, but also help boost the economy and safeguard the island's capital infrastructure for generations to come.
109. It is recognised, that the States needs to implement a funding structure which can support the delivery of its overall objectives and give sufficient flexibility to support the diverse activities across the States of Jersey. The States future funding arrangements may, for a major investment in the hospital, which has long term benefits, decide to borrow in order to finance the project and spread an element of the cost to future tax payers who will also benefit from the new facility.
110. A financial advisor has been appointed to recommend options for the best capital market debt solutions. Once a workable solution is identified, a proposition will be taken to the States to seek their approval for the proposed borrowing strategy, in compliance with Article 21 of the Public Finances (Jersey) Law 2005.

### 4.3. Potential for risk transfer and risk management strategy

- 111. This section provides an initial assessment of how the associated risks might be apportioned between the States and the third parties who will be commissioned by an open and transparent competition to design and build the redeveloped hospital. A detailed analysis of the potential risk transfer will occur at Outline and Full Business Case stages, once an agreed approach to the commercial arrangements has been concluded.
- 112. The general principle is to ensure that risks should be passed to 'the party best able to manage them', subject to value for money (VFM) assessments. Such an approach will comprise part of the overall risk management strategy that will be adopted as part of the project.
- 113. The risk management strategy will follow H M Treasury guidance on developing an effective strategy as contained within 'The Orange Book - Management of Risk, Principles and Concepts', developed further as part of the Risk Management Assessment Framework. A graphical summary of the structure to the approach is reproduced below.



- 114. Initial consideration, as part of the initial risk management and handling process of risk transfer is outlined below and is summarised from the Office of Government and Commerce approach to handling long term contracts.
- 115. The States of Jersey will assess the suitability of future partnering arrangements based on a structured assessment of its own capabilities to manage the development contract based on outcomes, outputs or inputs (in order of decreasing scope for partnering approach) and comparing the results of such a review with an assessment of the market place and its

ability to deliver the project along this partnering spectrum of scope. The greater the ability to contract and manage the development through partnering, the greater will be the ability to share a greater proportion of development risks.

116. The following list outlines the areas that can be considered as having potential for risk transfer and allocation between private sector providers of goods or services and The States of Jersey. The procurement route which will be decided as part of the OBC feasibility stage will set the level of risk transfer available to the development project for the following risks in accordance with guidance:
1. Design risk;
  2. Construction and development risk;
  3. Transition and implementation risk;
  4. Availability and performance risk;
  5. Operating risk;
  6. Variability of revenue risks;
  7. Termination risks;
  8. Technology and obsolescence risks;
  9. Control risks;
  10. Residual value risks;
  11. Financing risks;
  12. Legislative risks;
  13. Other project risks.
117. The allocation of risks will be subject to amendment at OBC stage as detailed risk assessments are developed and the procurement strategy and process is finalised. Such risks could potentially be allocated contractually within the final agreement and associated payment mechanisms.

#### 4.4. Personnel implications

118. With the introduction of commissioning processes following P.82/2012, all general and acute hospital services will be subject to review to confirm that they continue to offer best value to the States. However, the States do not at this time assume that there will be any significant staffing issues relating to the transfer of staff to third party suppliers. The working assumption, to be confirmed at the Outline Business Case stage, is that staff will remain in the direct employ of the States of Jersey. There are therefore no known personnel implications regarding transfer of staff to other sector employers; however, the management case will address at OBC stage the important personnel implications of the

transitional phases of the re-development in terms of recruitment and retention as well as communication and involvement of all key staff in the re-development process.

## 5. Financial case

120. The purpose of the Financial Case is to set out the indicative financial implications of the preferred option (as set out in the economic case in chapter 3). This incorporates the identification of the capital costs associated with the preferred short-listed option and the consequential relevant revenue costs associated with the development. This section develops the impact of the redevelopment in the light of the whole quantum of cost that is relevant to the operation of the proposed new acute hospital.
121. The procurement route that will be used for this development is to be finalised following acceptance of this Strategic Outline Case; at that point the most appropriate accounting treatment of the future assets can be considered and incorporated into the affordability calculations. The Strategic Outline Case at present therefore does not indicate the effect on the balance sheet of the future development nor does it include for the effects of depreciation within the current quantum of costs used as a baseline for this affordability assessment.

### 5.1. Assessment of revenue costs

122. This financial section of the Strategic Outline Case applies the revenue effects of the redevelopment to its overall quantum of cost as well as developing the assessment of the future revenue costs associated with the effects of demography and future service and performance strategies that have been outlined above in chapter 2, the Strategic Case. The Outline and Full Business Case will further develop and finalise these overall affordability assessments as the detailed design and planning processes serve to firm up the assumptions contained within the Strategic Outline Case.
123. The anticipated revenue stream for the acute hospital has been assessed and developed by referencing the revenue impacts of the following relevant issues:
- Establishing the baseline quantum of costs for the acute hospital. The quantum for 2013 has been analysed and projected forward, based on a range of cost drivers that are considered most applicable to each cost category;
  - Cost drivers are based on future activity assumptions when service related (e.g. future numbers of patient attendances) or are area related when costs are most often associated with the area that a hospital occupies (for example cleaning or heat and light costs);
  - The quantum of cost has been projected forward 30 years. Future activity taking account of demographic changes and capacity projections along with future hospital areas and the manner in which the functional content of the hospital will be arranged all impact on the future quantum of costs;
  - Inflation has been included within the financial modelling; the effects on future costs can be viewed both with and without the effects of inflation. Inflation has

been applied as advised by the States of Jersey's Treasury at a combined rate of 2.5% per annum.

124. The budgeted quantum of revenue cost for the hospital is £108.3 million. Increases in activity as a result of demography coupled with the effects of performance changes result in a predicted increase in the quantum of cost to £140.0 million at 2042 before the effects of inflation are added in. Inflation is assumed to run at 2.5% per annum over the course of this forecast, the total quantum with inflation is estimated at £284.3 million. The detailed assessment is contained within Appendix 4.2.

## 5.2. Assessment of capital costs

125. A costing exercise was undertaken for each of the short-listed options. The costs which have been included as relevant to the decision are as follows:
- Capitalised Construction Costs incorporating:
    - Construction costs based on UK Department of Health Departmental Cost guidance notes;
    - Site specific construction on-costs which vary between sites;
    - Professional fees for both internal and external professional services that will be required to be engaged to complete the project;
    - Equipment costs to cover specialist and loose equipment supplied by the States of Jersey and not included in the departmental costs above;
    - Contingencies covering a 5% planning approval risk and a 10% optimism bias;
    - An inflation adjustment taken at the mid-point of the construction process based on quarterly data published by Building Cost Information Services; and
    - A provisional location adjustment (uplift) factor to take into account differences in tender prices between the Jersey market and normalised UK Department of Health cost guidance. An uplift figure of 30% was identified by the States of Jersey for this project.
  - Non-works costs incurred to make a site available for development, such as land acquisition.

A more detailed explanation of these costs is noted in the Financial Case Appendices.

## 5.3. Capital costs if no performance changes occur

126. A significant sensitivity in assessing the value that is achieved through investment in community services is the potential increase in capital costs should investment not occur. Scenario 1 of the White Paper (no change), would lead to a significant increase in the number of in-patient beds required in the hospital by 2040 (409 beds compared to 296 as identified within the Strategic Case section of this document) along with other increases



as a result of this additional area. Furthermore, there would be more modest rises in area requirements associated with ambulatory care.

127. A high level calculation of the additional area required to accommodate the additional functional content required yields a potential increase of c. 9,200m<sup>2</sup> to a potential size of c. 72,844m<sup>2</sup>. Using an average total construction cost per m<sup>2</sup>, the potential additional capital spend required would be c. £60 million. There is therefore a strong financial imperative to invest in community services to both drive and support strategic clinical change within the acute hospital to avoid potential increases in capital costs and additionally consequential revenue costs associated with activity that can be more appropriately undertaken within the community.

#### 5.4. Affordability

128. The hospital content has been considered according to UK NHS best practice and with modern standards and the project detailed in accordance with best practice cost information for a project at this stage of development.
129. Considerable challenge to the hospital provision has been undertaken as part of the development of P.82/2012 resulting in assumptions being taken about the successful implementation of community and other health strategies, which will limit the size and hence the cost of a new hospital. In response to further challenges by Ministers to some of the healthcare and facility briefing and development assumptions, further work was carried out to validate the assumptions on:
- the cost estimate methodology adopted;
  - the principles of healthcare planning used to develop the proposed schedules of accommodation for the new hospital;
  - the impact of varying the provision of single bedrooms;
  - benchmarking against other recent acute hospital projects;
  - the potential for value engineering at the next and subsequent stages;
  - the potential for the redevelopment of the existing general hospital buildings, and
  - the car parking development assumption adopted.
130. Ministers acknowledge the cost information has been developed appropriately, but remain highly concerned about the affordability of a new hospital given known and anticipated pressures on public finances in the development period and the likely need for borrowing to fund any new hospital.
131. Ministers advocate that the following process of challenge is necessary to give greater certainty to cost proposals during the feasibility process.
- Development of a new hospital will require a detailed and fundamental review of all hospital services to benchmark these against best practice and identify the best

means of delivery that offers optimum value for money. The review will include a detailed assessment of private sector provision, income generation, provision off-island and opportunities presented by remote care and medical technology. This review will develop output specifications that can then inform a revised blueprint for a new hospital.

- Development of a phased solution should be considered that would limit the risk of investment exposure to the States of Jersey but retain a viable and improving hospital at all stages. This will necessitate clinical engagement to ascertain and agree the extent of clinical services provided within each development phase to ensure a workable continuity and an expansion of the clinical services provided within the whole hospital to meet the clinical models of care at each stage.
- Early contractor engagement and a buildability assessment would be recommended to ensure that the construction period is minimised and opportunities taken to drive out value.

### 5.5. Risk assessment and key risks

132. The key risks which need to be addressed during the next Feasibility Stage and how they could be managed are as follows:

| Risk element  | Proposed management  |
|---|--|
| Achieving an affordable solution  | Undertaking a service review and best practice challenge with clinicians to identify opportunities for efficiency.<br><br>Robust challenge of spatial standards and cost assumptions with clinicians.<br><br>Following excellent procurement practice including consideration of early contractor involvement. |
| Ensuring the phased solution offers good Value for Money  | Development of whole life costs and review of alternative service delivery opportunities including private practice and overseas delivery of services.   |
| The risk of delay on existing services and costs  | Maintaining good project management processes and rapid and timely decision making.  |
| Unknown ground conditions Asbestos / deleterious materials / Utility Infrastructure services' connections | Comprehensive site investigations and surveys.   |
| Acquisition of adjoining properties   | A robust and timely property acquisition process   |
| Planning approval related to the listed buildings on site and neighbours of adjoining properties.         | Consideration of all alternatives before proposing any change to listing.<br><br>A robust sustainability assessment process.   |

| Risk element  | Proposed management  |
|---|--|
| Risks associated with construction next to an operational hospital and decommissioning of buildings to be demolished. | Appointment of skilled design and construction teams proficient in development of hospitals while in operation |
| Cost of temporary building services re-routing and connections access arrangements including stairs and lifts.        | Minimising temporary and abortive work through smart engineering design and management                         |

133. Risk areas such as those identified above, and others yet to be determined, will be considered during the Feasibility Stage with relevant stakeholders and risk mitigation strategies developed to control or eliminate these risks where possible. Risks will be “owned” to ensure that throughout the process efforts are made to address each of the risks identified and to minimise the financial impact upon the overall project.

## 6. Management case

135. The Management Case of the SOC addresses the ‘achievability’ of the scheme. It sets out the actions that will be required to ensure the successful delivery of the scheme and describes how it will ensure the project will be managed effectively.

### 6.1. Project management arrangements

136. This project is an integral part of the Health and Social Services Transformation Programme as set out in P.82/2012: Health and Social Services: A Way forward. The relationship of this project to that programme has been set out in chapter 2, the Strategic Case, and separate governance arrangements are in place for that wider programme.
137. A project reporting structure will be deployed in accordance with best practice and an outline example of this is included in Appendix 5.1.1. Following approval of this SOC, detailed project structures and management arrangements will be put in place. The anticipated key roles and responsibilities are indicated in the table in Appendix 5.1.2.

### 6.2. Timescales for the development

138. If the Strategic Outline Case for the proposed new hospital finds favour as part of proposals for transforming Health and Social Services considered by the States, the intent would be to establish at the earliest opportunity a multi-disciplinary Construction and Design Team to undertake a Feasibility Study for the approved site. Project Milestones will be developed in detail; the following Figure identifies initial project milestones.

*Figure 6.1: Project milestones and initial anticipated dates*

| Milestone  | Preferred Site:<br>Redevelopment of<br>the existing General<br>Hospital Site |
|--|--|
| Submission of pre feasibility outcome to the States                              | September 2013   |
| Anticipated approval of preferred site and approval of funding for redevelopment | October 2013   |
| Appointment of Feasibility Design Team   | October 2013   |
| Feasibility study for initial phase  | October 2013 to June 2015  |
| Outline Planning consultation and approval period                                | July to September 2014   |
| Detailed Planning consultation and approval period                               | January to March 2015  |

| Milestone  | Preferred Site:<br>Redevelopment of<br>the existing General<br>Hospital Site |
|--|--|
| States approval of construction procurement strategy   | September 2015   |
| Mobilisation of Contractors  | October - December<br>2015   |
| Construction (initial phase)   | January 2016 - July<br>2019  |
| Initial Phase Services and facilities operational (phased at the Existing General Hospital Site) | July 0 December 2019   |

### 6.3. The use of special advisors

139. Specialist advice will be required to progress this development and the required extent of these services will be dependent on the type of procurement and the experience and availability of the in-house team. Advice most commonly procured for a development such as this, along with an indication of the associated scope of services, is outlined below. This list is not meant to convey a necessity for all aspects of advice to be procured but it covers the range of issues that have to be considered when compiling a comprehensive and robust set of employer's requirements:

- Employer's representative: Project management;
- **Procurement and Legal advice:** Contract advice and negotiation, Land and property, Vires, Procurement;
- **Quantity surveying and cost consultancy:** Capital costs, Whole life costing, Design and construction co-ordination as applicable;
- **Financial:** Support to financial modelling, Technical financial issues, Commercial advice / negotiation, Due diligence;
- **Insurance advice:** Technical insurance issues, Legal documentation, Insurance advice and negotiation;
- **Architecture and Design:** Building design, Master planning, Phasing strategies (in consort with healthcare planning), Lead consultant for Design Team;
- **Strategic Healthcare and Clinical Planning:** Clinical strategy, Output specifications, Clinical planning, Consultation and facilitation, Business Case facilitation / production;
- **Mechanical and engineering:** M&E specification and design, Energy management strategy and specification;

- **Structural Engineers:** Structural specification and design, Utilities infrastructure, Roads / car parks;
- **Planning consultants:** Urban design, Planning advice applications;
- **Environmental consultants:** Environmental and Health impact assessments, Environmental strategy;
- **Traffic Planning consultants:** Traffic impact assessment, Sustainable Travel and Transport Planning;
- **Specialist equipping advice:** Equipment specifications, Equipment schedules, Equipment procurement strategy;
- **Facilities management:** FM service models, FM specifications;
- **CDM co-ordination:** Health and safety during construction and in use.

#### 6.4. Specific clinical planning work programmes

140. The next stages of planning the hospital re-development will require a detailed clinical planning programme to be developed to support the physical construction of the new hospital. That programme will comprehensively cover the following key strategic and planning requirements as part of the development process:

- **Revisiting the strategic modelling process:** testing and challenge of the strategic modelling assumptions;
- **Structured clinical planning process:** development and approval of the Models of Care, Output-based Specifications, and Schedules of Accommodation;
- **Development of 1:200 scale general arrangement plans;**
- **Production of Room Data Sheets.**

Further details of these requirements are included in Appendix 5.2.

#### 6.5. Support for the project

141. The States of Jersey stakeholders for this development have expressed their support as follows:

- The Treasury and Resources Department Jersey Property Holdings have overseen delivery of the project with the support of the Project Team.
- Health and Social Services Senior Management Team have supported the development of the SOC throughout the process of production;
- Hospital Executive Management and Clinical Directors of the hospital have been consulted about the development of activity analysis that informs the SOC;

- The Ministerial Oversight Group Sub-Group, supported by Ministers for Planning and TTS, reviewed the configuration options and recommended outcome.
- Full Ministerial Oversight Group and the Council of Ministers will be asked to support before public consultation and then submission for States approval of funding for feasibility, site purchase and transitional arrangements (which are the subject of a separate study).

## 7. Summary

### 7.1. The need for change

142. The reasons for change and why a new hospital is required have been clearly set out in the States of Jersey's Papers P.82/2012 and R.125/2012.
143. It is increasingly inappropriate to continue to provide clinical services in the existing hospital facility which does not meet current building and operational standards, and does not cater for current and projected future clinical demands. In particular, the following aspects are cause for concern:
- The existing provision of functional types, sizes and relationships of rooms do not meet current healthcare design guidance, space standards and current best working practices. There are a number of significant compromises in the configuration of the existing hospital which have arisen as a consequence of the sporadic development of the site over the past 150 years;
  - The existing provision of the numbers of beds available and the provision of single bedroom accommodation does not meet current emergency demand, nor projected future daily demands whilst operating at recognised best practice occupancy rates;
  - The current configuration of the general hospital results in increased risks arising from control of infection issues and fire compliance issues which cannot be fully addressed within the existing accommodation.
144. The constraints imposed by a hospital facility comprising a disparate collection of buildings and associated building services' infrastructure of varying condition, many of which requiring substantial upgrading as identified in the condition report, and of varying vintages from the mid-1800s to the present day, lead to significant inefficiencies in linking the various clinical services throughout the hospital and severely restrict the opportunities for adapting the existing facilities to meet current and future standards and demands.

### 7.2. Robustness of the evaluation process

145. The evaluation process that has been undertaken as part of this Strategic Outline Case has been based on the agreed standards and format for business cases, as recommended by the UK HM Treasury, the Welsh Assembly and Health Facilities Scotland.
146. This appraisal process has followed best practice in making the assessment and evaluation process objective wherever possible; scoring the potential development options against agreed benefits and risk criteria, both when the benefits criteria have been un-weighted and weighted. A logical process of evaluating potential sites for the new hospital, at long-listing stage, at short-listing stage and during final assessment has permitted careful consideration of each option and has allowed the identification of a clearly preferred option to be developed through the next feasibility stage.



147. Sensitivity analysis has also been applied to the results of the assessments to verify that the outcomes of the evaluations are robust and not sensitive to marginal changes in evaluation. Overall development costs associated with each of the shortlisted options have been assessed and have been considered during the evaluation process. Cost has not been the principal driver in site selection activities but has been incorporated into the final assessments of this Strategic Outline Case. The final recommendation of a preferred site has been identified by the political Ministerial Steering Group appointed for the task.

### 7.3. Conclusion of the Strategic Outline Case

148. The conclusion of this Business Case is that to achieve the objectives of the States of Jersey's Papers P.82/2012 and R.125/2012, it is necessary to contemplate the comprehensive redevelopment of the existing general hospital site, on a phased basis, such that by the completion of the final phase all accommodation will be provided to the requisite standards of clinical functionality and will permit the continuing provision of acute health care services in a safe, sustainable and affordable manner. This conclusion has been reached as a consequence of the evaluations that have been carried out on the long-listed and subsequent short-list sites, considering benefits, risks and cost implications as well as wider planning issues.
149. The phased redevelopment of the existing general hospital site will:
- Necessitate a careful examination of the technical and clinical complexities associated with the required phased redevelopment of this site;
  - Provide a healthcare facility which is capable of sustaining future demand and ensure ease of access for the island's population;
  - Optimise the acute healthcare estate to be as efficient and effective as possible and will reduce recurring annual maintenance costs;
  - Improve the quality and effectiveness of care provided to the population of Jersey, particularly where current services require complete replacement;
  - Support the workforce to be able to perform to the best of their abilities;
  - Allow the planned re-provision of acute health services for the population of Jersey within a managed programme of investment in quality facilities.

# ATKINS

200 Broomielaw  
Glasgow G1 4RU

Tel: 0141 220 2000  
Fax: 0141 220 2001

