2 ENVIRONMENTAL IMPACT ASSESSMENT

Introduction

2.1 Environmental Impact Assessment (EIA) is required for certain categories of projects and involves a process of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects which must be considered before development consent (planning permission) is granted.

2.2 The EIA process leads to the presentation of information about the proposed project, along with its associated environmental effects, within an Environmental Impact Statement (EIS) for the consideration by the determining authority in deciding whether planning permission should be granted.

2.3 The EIA process itself has a number of required key characteristics, including that it is:

- **Systematic** – the EIA is comprised of a series of tasks that are defined by regulation and practice;
- **Analytical** – the EIA must be used to inform the decision making rather than promote the project itself;
- **Consultative** – the EIA process must allow for and provide opportunity for interested parties and statutory consultees to provide feedback on the project and assessments undertaken; and
- **Iterative** – the EIA process should allow for environmental concerns to be addressed during the planning and design stages of the project.

Regulatory context

2.4 The need to undertake an Environmental Impact Assessment is prescribed under Article 13 of the Planning and Building (Jersey) Law 2002 and is defined under the Planning and Building (Environmental Impact Statement) (Jersey), Order 2006 (the EIA Order).

2.5 The proposed development is classified as an 'urban development project' and is included within Schedule 1 of the EIA Order. One of the qualifying criteria for Schedule 1 projects, which determines whether the project is an EIA development and therefore requiring the preparation of an EIS, is the floor area of the buildings exceeding 10,000 square metres. As the proposed Jersey Future Hospital (JFH) exceeds this threshold floor area an EIA was considered likely to be required.

2.6 A screening opinion request was submitted to the Department of the Environment in this regard in February 2017 in connection with a previous application for the project

(PP/2017/0990) and the information received in response (Appendix A-1) indicated that an EIA would be required for the proposed JFH. The update to the development proposals in 2018 have not eliminated the stated need for EIA and the screening information from the Department of the Environment is still considered valid.

2.7 Schedule 2 of the EIA Order sets out what information needs to be included within the EIS. This is outlined in Table 2.1 below together with details of where this information is located within this EIS.

Table 2.1: Schedule 2 information requirements

Schedule 2 requirement	Where assessed/ Included in this EIS
A description of the development.	Chapter 3
An outline of the main alternatives studied.	Chapter 4
A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.	Chapters 5-16
A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development.	Chapters 5-16
A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.	Chapters 5-16
A non-technical summary.	Provided with this EIS
An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.	Included within topic assessment chapters (Chapters 5-16)

EIA Guidance

2.8 This EIS has been prepared in accordance with best practice guidance including:

- Supplementary Planning Guidance, Practice Note 18: Environmental Impact Assessment, July 2011. SoJ, Department of the Environment; and
- Institute of Environmental Management and Assessment (IEMA) Quality Mark – this is run by IEMA and is based around a set of EIA Commitments, which organisations registered to the scheme agree to comply with. Arup hold the IEMA EIA Quality

Mark. The IEMA EIA Quality Mark provides registrants with a benchmark for their EIA activities and allows them to demonstrate their commitment to effective practice.

EIA Scoping

2.9 Scoping is the identification, at the early stages of a project, of the likely potential significant issues that may arise as a result of the proposed development. As part of this process the project applicant asks SoJ for its formal opinion on what information should be included within the EIS. Scoping helps to ensure that issues and potential effects are assessed at the appropriate level of detail within the EIA.

2.10 A request for a scoping opinion was submitted to the Department of Environment on 27th February 2017. This request also formally indicated that an EIS would be submitted along with the planning application for Jersey Future Hospital. A scoping opinion was subsequently issued on 12th May 2017 (Appendix A-1) and an application for planning permission submitted in mid-2017 (PP/2017/0990).

2.11 Following the rejection of that initial JFH planning application in January 2018, the Department of the Environment were approached for further planning advice in relation to the renewed JFH application. Interim planning advice was received on 13th February which addresses a number of points related to the environmental assessment work (Appendix A-2). In particular, it was advised that Westaway Court, previously anticipated as being submitted as an independent planning application, should be included within the same EIA process as the main JFH buildings.

2.12 The Department of Environment consulted a list of consultees in informing its Scoping Opinion of the original scheme in 2017. This EIS has been prepared based on the scoping responses received at that time, in addition to updated consultation that was carried out with SoJ by the EIA project team in 2018 to capture any changes to the scope that may have arisen as a result of the updated proposals.

2.13 A list of consultees is provided in Table 2.2 and a summary of the key issues identified during scoping. Additional issues raised during stakeholder engagement and consultations in 2018 for the updated proposals are set out in Table 2.2.

Table 2.2: Scoping consultees

SoJ Consultees
Principal Planner (Development control)
Environmental Protection Officer, Department of the Environment
Head of Waste Regulation, Department of the Environment

Waste Compliance/Operational Service Manager, Department for Infrastructure (DfI)
DfI, Solid Waste
DfI, Operational Services – Drainage
Senior Transportation Planner, DfI, Transport Policy
Hospitality and Leisure Manager, Department of Economic Development
Principal Ecologist and Assistant Director Natural Environment, DoE
Environmental Health Officer, DoE, Environmental Health
Planning Policy and Projects Team, DoE, Planning and Building Services
Principal Historic Buildings Officer, DoE, Historic Environment Team

Table 2.3: EIA Scoping opinion and response – general comments related to EIA

Topic	Key Issues identified in scoping report	Additional issues raised during consultation 2017	Additional issues raised during consultation 2018
Chapter 5 Air quality	Emissions of NO_2 and PM_{10} from construction and post-construction traffic; Generation of dust and particulate matter during construction; Emissions from combustion plant operated at the site; An energy strategy to be formulated as part of the design process.	Recommendation to measure roadside particulates and NO_2 at adjacent sensitive locations throughout the duration of the development.	NRMM should be carefully considered; Proposals for a roof/canopy over part of a road should be considered for air quality.
Chapter 6 Noise and vibration	Increase in noise and vibration from site preparation, earthworks and construction activities; Increase in noise and vibration from construction traffic associated with haul movements; Changes in noise levels from post-operational modifications and alterations.	No additional issues raised.	No additional issues raised.
Chapter 7 Traffic	Impact of the demolition and construction phase on the amenity of pedestrians and cyclists in the vicinity of the hospital; Increase in traffic flows, particularly HGVs, during the demolition and construction stage; Increase in traffic flows as a result of the development proposals, and changes to population demographic and size	Issues related to maintenance and management of highways and footways; Effect of construction on parking provision.	Include proposals in the draft South West of St Helier Planning Framework in all assessments; The Travel Pan should be implemented for the construction period, not just once JFH is operational.
Chapter 8 Biodiversity	Loss of existing habitats and creation of new habitats; Disturbance of protected species, both during and after construction.	Potential need for additional bat surveys on Revere Hotel and Sutherland Court.	No additional issues raised.

Topic	Key Issues identified in scoping report	Additional issues raised during consultation 2017	Additional issues raised during consultation 2018
Chapter 9 Geology, hydrogeology and contamination	Potential for health effects due to contact with contaminants during construction and demolition (including asbestos-containing materials in existing buildings); Mobilisation of contaminants into the water environment during and post-construction; Effects on surface water and groundwater quality from pollution due to spills during construction and from contaminated run-off post-construction.	No additional issues raised.	No additional issues raised.
Chapter 10 Water resources	Designing a foul and surface water drainage systems that meets the design requirements of DfI – Operational Services Drainage Section; Effects on surface water quality due to increased sediment loading during construction; Effects of potential flood risk on the surrounding foul and surface water drainage systems; Effects on proposed JFH from coastal flooding.	Potential coastal flooding should be confirmed.	No additional issues raised.
Chapter 11 Heritage	Effects on below ground archaeological remains on site during construction; Effects on the architectural, historic and cultural importance of identified listed buildings on the site; Effects on the setting of listed buildings in the vicinity of the site during and post-construction.	Townscape assessment needs to include consideration of heritage assets.	No additional issues raised.
Chapter 12 Waste	Minimising and managing waste during the demolition and construction phases, including potentially hazardous materials; Minimising waste as part of the design process; Managing and minimising waste post-operation, including clinical and potentially hazardous materials.	No additional issues raised.	No additional issues raised.

Topic	Key Issues identified in scoping report	Additional issues raised during consultation 2017	Additional issues raised during consultation 2018
Chapter 13 Wind	Changes to the pattern of local winds caused by alteration of building position and heights.	No additional issues raised.	No additional issues raised.
Chapter 14 Socio-economics	Sectoral and economy wide net additional GVA impacts through consideration of gross spend, deadweight, displacement, leakage and multiplier effects; Labour market effects of increased demand for staff in the design and construction phase and post completion; Income effects for population groups; The potential for the new hospital building to act as an anchor building and institution in relation to stimulating innovation and R&D impacts of potential health cluster of future health campus on wider site; The potential contribution of the new hospital building architecture and associated development to the wider regeneration plans for St Helier; Impact on local services and amenities including loss and/or provision of new or upgraded community facilities, private and social housing, areas of open space, walking and cycling routes and public realm.	No additional issues raised.	No additional issues raised.
Chapter 15 Townscape and Visual effects	Changes to the form and arrangement of buildings on the site, including height; Changes to the appearance of buildings and curtilage; Changes to sensitive views from public locations.	No additional issues raised.	No additional issues raised.

Stakeholder Engagement

2.14 In addition to the formal scoping process, stakeholder and public engagement has been carried out over the lifetime of the project to date. Stakeholders have included States Members, property owners within redline boundary, the public, as well as staff at JGH.

2.15 Initially, the purpose of the engagement was to gather information and opinions related to identifying the preferred location for a new hospital. Once a decision on the preferred location had been made, the focus of engagement shifted to informing stakeholders about the environmental issues that have been identified and assessed during the EIA process. At that stage, an opportunity was also made for stakeholders and the general public to comment on the proposals and raise any concerns relating to environmental issues they may have. A summary of engagement events, post confirmation of the proposed JFH site, is set out in Table 2.4.

Table 2.4: Stakeholder engagement summary

Stakeholder Engagement Event	Purpose	Date
States Members Workshops (x3).	Workshops 1 and 2 were used to discuss hospital site options. Workshop 3 provided an opportunity for States Members to hear how their insights had fed into the site selection process.	Workshop 1: 21 March and 28 April, 2016 Workshop 2: 26 May and 7 June 2016 Workshop 3: 18 July 2016
HSSD staff briefing (x3)	An opportunity to brief 188 HSSD staff on the preferred site for JFH.	9 June 2016 10 June 2016 (x2)
Focus Groups (x3)	To seek opinions and ideas from the general public (focus group 1 and 2), and HSSD staff (focus group 3) related to the preferred site for JFH.	21 July 2016 9 August 2016 15 August 2016
Medical Staff Committee Briefing	To discuss potential risks associated with constructing a new hospital adjacent to the JGH and how these risks could be managed during construction.	23 June 2016 5 September 2016
Parish Hall Meetings	To provide an opportunity for parishioners from all parts of the Island to be informed about the preferred site for JFH and to talk with members of both Health and DfI ministerial teams.	St Helier: 3 August 2016 (x2) St Brelade: 8 August St John: 16 August 2016 Grouville: 25 August
Parish Coffee Mornings	To provide an opportunity for people to be informed about the preferred site for JFH.	St Clement: 20 October 2016 Trinity: 22 October St Ouen: 3 November St Brelade: 10 November

Stakeholder Engagement Event	Purpose	Date
Millbrook car boot sale	To provide an opportunity to engage with car boot attendees. The project team actively engaged with 51 members of the public to inform them of the preferred site for JFH.	2 October 2016
EIA consultation	To provide the public with details about what environmental assessment work has been (and will be) carried out in relation to JFH, identifying any environmental issues and how these are likely to be mitigated. To provide an opportunity for people to discuss issues with the project team and to leave comments.	18/19 May 2017
Public exhibition	To provide the public with an opportunity to view the updated proposals, to discuss any issues with the project team and to leave comments.	12-17th March 2018

2.16 A Statement of Community Consultation, submitted in support of the planning application, has been prepared. This describes, in detail, the public engagement that took place in March 2018.

Assessment methodology

2.17 Once the scope of the EIA had been established, individual environmental topics were subject to survey and investigation to establish the baseline conditions that exist before the proposed development proceeds. This was followed by assessment to identify and predict the significance of the likely environmental impacts of the proposed development. The assessment methodologies applied are based on recognised best practice and guidance specific to each topic area; relevant details of assessment methodologies are provided in the appropriate assessment chapters of this EIS.

2.18 The technical studies that have been undertaken for each topic area have generally followed the same approach:

- Collection and collation of existing baseline information of the study area in addition to any supplementary survey work required to fill any data gaps or to update any outdated information;
- Frequent consultation with both internal specialists within the team and relevant external consultees. This has been both within and across topic areas;
- Consideration of the potential effects of the proposed JFH on the existing baseline, followed by identification of possible design changes that would lead to the avoidance or reduction of predicted adverse effects (and likewise the enhancement of any positive effects);

- Assessment of the final scheme design and evaluation of the significance of any residual and cumulative effects; and
- Compilation of the relevant EIS chapter.

2.19 Many of the environmental effects are relevant to more than one topic area and therefore attention has been paid to the interrelationship between them. For example, the cultural heritage assessment, which has considered effects on the Grade 1 Listed Granite Block and other listed assets, has received input from the townscape and visual impact assessment.

2.20 In general, the EIS assessment chapters have followed the same general format set out below, although there is variation between topics:

- **Introduction** - presents the potential scope of assessment and sets the general scene for the topic;
- **Approach and methodology** – a description of the methods used to establish the baseline conditions, identify the likely effects of the proposed development and the assessment of their significance. Details of any consultation are generally included in this section;
- **Assessment criteria and assignment of significance** - a description of the approach taken to identify the magnitude of an impact, the sensitivity of a receptor and how these combine to result in an assigned significance;
- **Assessment limitations** – a description of any limitations experienced during assessment;
- **Assumptions** – a description of any assumptions that have been made within the assessment;
- **Baseline environment** – a description of the current state and circumstances of the receptors and changes that might reasonably be expected to occur over the project lifetime or during periods considered in the assessment if the proposed JFH was not implemented;
- **Design mitigation** – mitigation that has been included within the design of the proposed JFH, i.e. are part of the proposed development and measures not required to be secured through legal agreements or planning obligation agreements;
- **Potential effects of the proposed development** – this is an assessment of the significant environmental effects of the proposed JFH as set out in Chapter 3: Proposed Development. Effects are considered for site enabling works (including demolition), construction and operation of JFH. An assessment of decommissioning was considered not required due to the nature of the project;

- **Prevention and mitigation** – measures that would be implemented to avoid, reduce, control, manage or compensate for potential significant effects. Preliminary measures included to mitigate environmental effects in construction are set out in the Construction Environmental Management Plan (CEMP) (Appendix O-1). Enhancement measures are also set out if relevant;
- **Survey and monitoring** – Where relevant, recommendations for any surveys or monitoring that should be undertaken before and during site enabling works, construction and operation; and
- **Residual effects** – an assessment of the significance of the effects likely to arise as a result of the proposed development following implementation of any mitigation measures.

Identification and significance of effects

2.21 Schedule 2 of the Planning and Building (Environmental Impact) Order 2006 sets out the information that must be included within an EIS. This includes aspects of the environment likely to be affected by the development; a description of the likely significant effects on the environment; and a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

2.22 Developments may affect different environmental elements to varying degrees, and as agreed at Scoping, not all impacts arising from a development are of sufficient concern to require detailed investigation or assessment within the EIA process.

2.23 Within each chapter of this EIS, definitions are given for what environmental receptors (or receiving environments) are being assessed along with a description of what changes the proposed JFH is likely to cause the affected receptors.

2.24 In broad terms, significance is defined to be a function of:

- Resource value (international, State or local level importance)/receptor sensitivity;
- Magnitude of effect (either adverse or beneficial); and
- Temporal scale (temporary or permanent)

2.25 Each topic chapter defines what criteria have been used to establish resource value/sensitivity and magnitude of effect.

2.26 Unless otherwise specified within the assessment chapter, the definitions of timescales that have been used include:

- Short term: Up to 1 year:
- Medium term: 1-6 years; and
- Long term: greater than 6 years.

2.27 Professional judgement, along with relevant and accepted guidance is used within each assessment chapter to assess the interaction between receptor value (i.e. its importance or sensitivity) and the predicted magnitude of change to identify whether an effect is significant and what level of significance should be assigned (e.g. high, medium, low or negligible significance). This is demonstrated by using a significance matrix as set out in Table 2.5. In some cases, this is based on quantitative assessment whereas in others, it is only possible to use professional judgement and qualitative descriptions. In all cases, clear justification for the assessment approach has been set out along with all assumptions and limitations.

Table 2.5: Significance Matrix

		SENSITIVITY		
		Low	**Medium**	**High**
MAGNITUDE	**High**	Moderate	Major or Medium	Major
	Medium	Minor or Moderate	Moderate	Major or Moderate
	Low	Minor	Minor or moderate	Moderate
	Negligible	Negligible	Negligible	Negligible

2.28 Within each assessment topic, where effects have been classified as being of moderate and/or major significance (either beneficial or detrimental), the effect is considered significant in EIA terms. Table 2.6 provides a qualitative description for each of these criteria definitions.

Table 2.6: Definition of significance levels

Significance	Criteria Definition
Major	These effects are likely to be key factors or important considerations at a regional or district scale but, if adverse, are potential concerns to the project, depending upon the relative importance attached to the issue during the decision-making process. They are generally, but not exclusively associated with sites and features of national importance and resources/features which are unique and which, if lost cannot be replaced or relocated.

Significance	Criteria Definition
Moderate	These effects, if adverse, while important at a local scale, are not likely to be key decision making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision-making process. Nevertheless, they are of relevance in the detailed design of the project.
Negligible	Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

Assumptions and limitations

2.29 It has been assumed that information provided by third parties, including publicly available information and databases is correct at the time of publication. Assumptions and limitations specific to environmental aspects are discussed in the relevant topic assessment chapters of this EIS.

Project Team

2.30 A multidisciplinary team has provided advice on the development proposals, identifying and addressing environmental issues that might arise. This team has included the following:

- Arup (all assessment chapters, except those listed below);
- Peter Radmall Associates (Townscape and Visual Impact Assessment);
- Purcell (Heritage Assessment); and
- JBA Consulting (St Helier Coastal Risk Assessment).