Confidential

Assurance Report

Future Hospital Project (FHP)

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The authors acknowledge that this report is based upon the OGC Gateway™ Process Best Practice documents (2007) and related guidance published by the Infrastructure and Projects Authority and the Cabinet Office (June 2011)

Executive Summary and Delivery Confidence Assessment (DCA)

Delivery Confidence Assessment*	AMBER/ GREEN	

Since January 2018, when the outline planning application for the original scheme was refused, considerable work has been undertaken to develop a new and ambitious plan for the future hospital. The revised scheme (Variant 2) has been well received by stakeholders as it offers significant advantages over the original proposal. It also responds to the major concerns from the Planning Inquiry about the scale and massing of the building and its impact on the character of St Helier, its heritage buildings and neighbouring residents. A new application for outline planning permission for the revised scheme was submitted in April 2018 and a decision is expected in October 2018.

Although the scale of change in the new scheme is substantial, we believe it is safe to assume at this stage that the project can be delivered within the financial envelope of £466m set out in the Outline Business Case approved by the States Assembly in December 2017 (P107.2017). We have reached this conclusion because the current cost plan uses the standard Health Premises Cost Guide (HPCG) to inform the costs, and incorporates:

- cost estimates for items outside the HPCG which appear sensible and realistic,
- an additional £10.3m to mitigate for the extended build programme, and the complexities associated with the site,
- substantial allowances for inflation, and
- an economy of scale adjustment and a Jersey location premium, both of which are cautious.

A series of bench-marking and independent review exercises have been undertaken which provide further confidence that the approach taken by Gleeds to the costings in the OBC and, more recently, the Variant 2 scheme is sound.

A contractor (J3 Limited) has been appointed and the co-location of the client/contractor teams is helping to forge good partnership working and strong productive relationships. Further efforts are being made to reduce costs through value engineering and J3 initiatives such as on-island fabrication and skills training courses at the local college.

The revised scheme has introduced a significant number of changes and a call-off of £4.27m against the contingency fund will be submitted. If this is approved by Treasury, then the remaining contingency would be £65.8m (equivalent to 16.4% of the project total). We believe this to be appropriate for a project of this scale and complexity, at this stage in its lifecycle.

The current cash flow forecast shows peaks in 2020 and 2023 and assumes that the full £466m allocation will be spent. It should be noted that that the forecast is based on the current immature cost and project plans. It is probable that the forecast is front-loaded and overestimates the pace of spend in the early stages. Once the more detailed cost and project plans are available, the cash flow forecast can be updated.

There remain some risks and uncertainties for the project, notably (i) the current lack of planning approval, and (ii) the need to produce an updated, fully-integrated project plan and cost plan to reflect the latest developments within the project. We conclude therefore that successful delivery of the new hospital within the capital allocation of £466m remains safe at this stage but management attention needs to be maintained to ensure the risks do not materialise into major issues that may threaten the project's timescale and budget.

Our delivery confidence assessment at this time is **Amber/Green***

* *In the context of the Future Hospital Project, delivery confidence is an independent assessment of the project's ability to deliver the revised scheme for the new hospital within the agreed financial envelope of £466m. This assessment is influenced by the resilience of the project to overcome any identified shortcomings and challenges. It also includes an initial assessment of the cash flow forecasts and reflects specific issues or risks that may threaten the delivery. This assessment is based on current guidance and best practice, FHP documentation provided to us and interviews with a range of project personnel, key stakeholders and external advisors.*

1. Purpose of this Review and Terms of Reference

1.1. This report presents the findings of an independent assurance review of the revised scheme, conducted by Concerto Partners LLP (the Review Team) at the request of the Minister for Treasury and Resources.

1.2. The primary purpose of the review was to:

(i) Provide assurance that:

- the expected outturn capital costs for the new scheme will remain within the previously approved financial envelope of £466 million
- the project budget includes an appropriate level of contingency
- the cash flow forecast is robust, and that the project remains affordable at this stage in the project's lifecycle.

(ii) Provide early warning if there are any areas of concern

(iii) Provide an independent assessment of overall confidence in the project to deliver the new hospital within the agreed budget, at this stage in its lifecycle

(iv) Make any recommendations that may improve overall delivery confidence.

1.3. The review also considered the impact of the revised design on clinical/operational services and any potential cost implications arising out of the new scheme.

1.4. Review Team members are shown on the front cover and a list of interviewees can be found in **Appendix A**. The primary sources of information used in the review are included in **Appendix B.**

1.5. We would like to thank all those who participated in the interviews for their time and support for the assurance review process. Their cooperation and openness enabled us to develop a better understanding of the scope, complexities and challenges of the Future Hospital Project. We would also like to highlight the support we received from Philippa MacAndrew in organising the documentation and arranging the interviews.

2. Background and Context

2.1. The Outline Business Case for the Future Hospital was approved by the States Assembly in December 2017, with a capital expenditure of £396m plus a contingency of £70m. Approval of the £466m total was granted with the caveat that "the contingency will only be released on a case-by-case basis" and that "any unspent monies from the project shall be returned to the Strategic Reserve Fund" in accordance with the States' Financial Direction (see P.107.2017 amendment).

2.2. An initial outline planning application for the new hospital was submitted in July 2017 and a Public Inquiry was held in November 2017. The planning application was subsequently refused in January 2018, concluding that the proposed footprint was too small to accommodate the new hospital and that its height, scale and massing was

detrimental to the character and townscape of St Helier, and adversely impacted the heritage buildings and neighbouring residents.

2.3. A revised outline planning application was submitted in April 2018. The revised scheme made significant changes to the original outline planning application. Key features of the new scheme include:

- Providing a lower, wider footprint for the new hospital, while maintaining the overall size of 50,000 square metres, by:
  - Demolishing the existing the 1960s and 1980s blocks
  - Eliminating the on-site energy centre in favour of an all-electric site.
- Having a three-storey base, with more storeys set back from the base to a height of six storeys in the centre of the site (rather than the nine storeys in the original scheme)
- Ensuring the maximum height of the new building would be lower than the height of the existing 1980s block
- Having one extra half-storey to Patriotic Street Car Park (rather than the two proposed in the original scheme)
- Including Westaway Court in the application.

2.4. The major new build element of the project is now split into two separate blocks with the addition of a new main entrance on The Parade, the enabling works are substantially changed, and the phasing and interfaces are radically different. That said, key stakeholders are agreed that the new solution represents a significant improvement on the original scheme.

2.5. The revised outline planning application has been submitted on the assumption that the costs could be held within the agreed financial envelope of £466m. On the current plan, practical completion of the new hospital is scheduled for December 2024, with the commissioning of clinical services scheduled for the first half of 2025. The refurbishment of the Granite Block and the construction of the new main entrance have planned completion dates in 2026. Work is underway to assess whether some of these dates can be improved upon.

2.6. The revised scheme will be subject to a Public Inquiry in September 2018 and a final planning decision is expected in October 2018. Whilst there is confidence that the scheme addresses the Planning Inspector's earlier concerns, there remains a risk that a planning application may be refused or subject to significant reserved matters.

2.7. In summary, the development of the project is relatively less mature than at the time of OBC approval. However, there is now greater confidence that planning approval can be achieved in the fourth quarter of 2018, having learnt the lessons and responded positively to the Inspectors' findings in January 2018. In that regard the Variant 2 scheme could now be considered less risky.

2.8. The appointment of J3 Limited, although at an early stage, is being warmly welcomed by the wider project community. They are already undertaking work to look strategically at the options to shorten the programme, particularly during the downtime period

between the end of Phase 1A and the start of Phase 1B[1]. They are investigating ways to reduce the costs and the impact of project phases, eg by using off-site but on-island fabrication. These initiatives have the potential to reduce the overall cost of the project.

2.9. Given the scale of change of the design following the refusal of planning permission, it could be argued that a revised OBC should be developed to confirm and validate a new project budget and delivery programme, supported by appropriate governance, review and assurance. However, given that there are no overall changes to the business objectives and, whilst there are significant adds and omits in the cost plan, the overall base capital cost envelope remains within 2.5% of the previous cost plan and the total approved cost envelope is not forecast to change. Therefore, the view has been taken that the OBC remains as previously approved by the States Assembly in December 2017. To carry out a meaningful review of the OBC would take considerable time and effort which we agree would be better spent on moving the project forwards.

REVIEW FINDINGS

3. Capital Costs

3.1. Our view is that the £466m estimated cost of the project at OBC stage remains a reasonable budget for the Variant 2 project proposal at this stage in its lifecycle. This is based largely on our analysis of Gleeds' work but also on the work summitted by the bidders for the main contract and subsequent analysis being undertaken by the chosen contractor, J3 Limited.

3.2. We have not undertaken a forensic check on Gleeds' or J3's work but the following points are worthy of note in supporting our judgement:

- The detailed costs follow a standard industry approach involving the Health Premises Cost Guides (HPCG).
- Significant "abnormals" (the term used to identify and provide cost estimates for items not included in the standard HPCG data) are costed at a conservative level.
- Given the challenging nature of the site and the likelihood of a longer build programme, an additional £10.3m has been included in the latest Gleeds costings, over and above the cost of a normal new build hospital of this size and scale. This is up from £5.4m in the OBC.
- We have carried out a high-level review of the main items of spend across the Future Hospital Project and we have not identified any significant elements of cost that are not identified and quantified in the project cost plan.
- The size, scale and value of the project would normally attract an economy of scale adjustment to the HPCG cost rates that would serve to reduce the total expected cost. In the OBC this adjustment factor was set at 1.00; this figure has been retained in the latest estimate and is conservative.

[1] Phase 1A - Construction of new Block A along Kensington Place; Phase 1B - Construction of new Block B on the site of the existing Gwyneth Huelin and Peter Crill buildings and the current laboratory block.

- Detailed value engineering work will be undertaken as the project moves forward. At the time of the OBC such work identified a net -£7m of savings in capital cost. No numbers have been included in the current cost estimate but opportunities for savings are likely to be available as the project progresses.
- Substantial allowances have been included for inflation (£53m) and a Jersey "location factor" (£45.6m), which caters for the effects of working in Jersey rather than on the UK mainland. While both these figures have a degree of subjectivity they are based on Gleeds' analysis of relevant data.
- The estimate for the major new build element of the project has been benchmarked against comparable UK hospital costs, adjusted for the Jersey location, using data from the Royal Institution of Chartered Surveyors Building Cost Information Service. The benchmarking indicates the estimated hospital costs are in the expected range. On a common basis for comparative purposes the average UK wide figure is £4882/m2 and at OBC stage scheme was costed at £4939/m2. The Variant 2 proposal equates to £5306/m2.
- The bidders for the main contract provided indicative and independent estimates of the cost of the project as part of their bids. Their assessments were based on the previous scheme at OBC stage. While they are difficult to reconcile line by line, the indicative totals provided by the bidders were only slightly higher than the pre-tender construction cost assessment carried out by Gleeds and included in the OBC. This increases confidence that the approach taken by Gleeds to the costings in the OBC and, more recently, the Variant 2 scheme is sound at this stage. As the design is developed, a more comprehensive analysis of costs will be carried out which will provide added assurance.

3.3. We recognise that considerable work has been undertaken over a short period of time to develop the various enabling schemes and the associated cost and programme implications. This is to be commended. However, as a result there are now inconsistencies between the programme and cost analyses for the enabling packages and the Variant 2 scheme, which is less developed at this time. Gleeds and the wider project team recognise this disconnect and the need for work to be done to bring coherence and consistency to the overall project plan and cost estimate. Elsewhere in this report we reflect on the measures to address programme inconsistencies but there is an urgent need to review and reconcile the enabling works costs with the wider project budget as part of a wider cost plan update.

Recommendation: The cost plan should be subject to a comprehensive review to include, among other things, a reconciliation between the updated costings for the enabling works and the wider detailed cost plan for the project. This updated cost plan should be structured to clearly set out the way costs are collected to summary level. It should also reflect the new phasing strategy, to allow an easy comparison of cost plan against individual contract sums and targets.

3.4. Looking ahead, J3 will be producing a range of deliverables in their first formal report on the project in mid-May 2018, including their assessment of the likely cost of the project against the £466m total budget. At the time of bidding they considered the

main construction cost element of the previous scheme could be marginally more expensive (c1.7%) than the allocation for this work within the OBC approved budget. Whilst that estimate could not be easily reconciled against the OBC budget (see above), early indications from J3 are that the small gap they saw at the time of bidding is narrowing. If this is confirmed in the mid-May 2018 report this is positive news and more evidence to substantiate the view that the project can be delivered within the overall £466m budget.

3.5. During our review we identified a number of strategic areas that have the potential to jeopardise the delivery of the project within its £466m budget. The issues are set out below:

- The development of the project plans and costings for the Variant 2 scheme is based on simple area allowances and is still relatively immature compared to the previous scheme. Over the coming months the design will be developed and a fully measured cost plan will be completed that will be more accurate.
- Engagement with clinical and operational teams increases during the detailed design phase and there will be an ongoing pressure to develop the design to suit existing and evolving requirements. This has significant potential to impact on cost. One of the purposes of the contingency allowance is to allow for this reality but it is essential that this type of change is appropriately controlled.
- It is already evident that the early stages of the Gleeds project plan, particularly the date for completion of the town planning process, including the Public Inquiry, are not achievable. That in itself does not mean that the end date for delivery of the project is not achievable. However, if the project were to be delayed by say 6 months longer than set out in the current Gleeds plan, then Gleeds estimate that there would be an additional cost in the order of £5.8m for inflation (plus some direct costs for prolongation of the preconstruction phase). This amount, arising from a moderate delay, should be manageable within the overall allowance for Contingency and Optimism Bias.

3.6. Although some of these issues appear substantial, we consider these to be manageable and do not change our judgement that the OBC budget of £466m, with its assumptions on cost adjustment, inflation and contingency, remains reasonable. As the project progresses, the variance risk will reduce and the factors impacting on cost will become much clearer. A more robust view will be reached once the design and works package procurements have progressed significantly in spring/early summer 2019.

4. Project Contingency and Inflation

4.1. The approved business case included an optimism bias and contingency of £70.4m within the total project budget of £466m.

4.2. Aside from the changes arising directly from the new design, the Project Board have proposed a number of variations in the design from the OBC, which they are looking to include in the Variant Option 2 scheme. These amount to a net increase in cost of £4.27m, which, if approved, will need to be funded from the available contingency funds.

4.3. While these changes are yet to be approved by the Treasury it is expected they will be included within the scope of the project and they have already been factored into the optimism bias and risk/contingency fund within the cost plan, leaving approximately £65.8m. This amount will be validated in the next update of the cost plan. In our assessment of the deliverability of the project, we have assumed that these will be approved.

4.4. The current optimism bias and risk/contingency monies of £65.8m are equivalent to approximately 16.4% of the project cost. This is a substantial sum but in our view is an appropriate amount at this stage in the project lifecycle (which effectively is back at OBC stage) and given the project's complexity.

4.5. The nature of the project, the length of the programme and the presence of a range of influential stakeholders will inevitably bring pressure for legitimate change as the project moves forwards. We therefore welcome the fact that the Treasury are putting in place rigorous change control processes.

Recommendation: The total contingency and optimism bias should be managed as a single contingency fund and be subject to rigorous approvals processes to ensure that any variations in scope are appropriately controlled.

4.6. The cost plan includes an allowance of £56.5m for inflation which has been calculated based on a 3.5% annual inflation allowance and assumes the entire project budget including full contingency allowance is spent. There are some discrepancies between the detailed inflation calculation and the cost plan which require attention as the cost plan is reviewed but these do not fundamentally alter the validity of the approach. The key sensitivities in the inflation calculation comprise the assumed inflation rate and the total spend amount and cash flow profile. Should these key base assumptions change significantly, the impact of inflation on the cost plan will change but at this stage we consider that the approach taken is reasonable.

5. Cash Flow

5.1. The current cash flow projection is based on the immature cost and project plans. It has been developed using a standard S curve projection and assumes that the full £466m project budget including all contingency funds will be spent. Given the short-term pressures on the project plan and the tendency of the S curve model to be front loaded, the cash flow is likely to overestimate the pace of spend, but it adopts a sensible approach given the paucity of information available at this stage. It indicates expenditure peaking in 2020 and then again in 2023. This is not inconsistent with our expectations and does not indicate a spend in any individual year that is unachievable. However, until the updated cost plan and project programme is available the current projections are limited.

5.2. It should be noted that if significant volumes of off-site fabrication are used, particularly for Block B, the cash flow forecast spend profile may be flattened and some of the spend currently profiled for 2023 could be brought forward into 2021 and 2022. This will become clearer over the next 12 months as J3 develops its implementation plans.

Recommendation: The cash flow projections should be updated once the revised cost and project plans are available and should be monitored on an ongoing basis as further information becomes available.

6. Risk Assessment and Management

6.1. The current risk allowance was assessed at OBC stage through two approaches. The first of these was a calculation that combined an optimism bias (calculated in accordance with HMT Green Book rules) and client and design contingencies (calculated as a simple percentage of the construction cost). This produced a total contingency allowance of £70.4m.

6.2. This assessment was then validated through a Monte Carlo analysis of a costed risk register which indicated a 70% likelihood that this £70m total risk and optimism bias allowance would not be exceeded. This analysis was carried out against the assessment of the impact of risks before any mitigation measures are taken and therefore is highly conservative.

6.3. There is an existing risk register that is subject to regular review and which includes a simple assessment of risk mitigation plans and financial impacts. We note that some significant risks that do not appear on the current register (updated March 2018). One such risk is the failure to secure planning permission which would result in further delay and increase in costs. (This risk is recorded in the J3 risk register produced as part of their tender submission. It is also recorded in the SoJ's corporate risk register).

6.4. We have not investigated the project's risk management strategy, so we are unclear of the project risk management processes (eg how risks are identified, quantified, reviewed and managed, together with risk escalation triggers and routes). Given the significant level of change that has taken place and the new key stakeholders that have joined the project team over the past few months, it would be beneficial to carry out a complete review of the project risk environment, the risk management approach, reporting channels, review mechanisms and escalation procedures, and to consider how the register could be used to manage critical interdependencies within the project plan.

6.5. In this context, it would also be an appropriate time to carry out a fresh review of the full range of risks to the project and to revalidate the expected probabilities and impacts arising from each risk. The outputs from this exercise can then be used to inform another Monte Carlo analysis.

Recommendation: The project should undertake a comprehensive review of the risk and issue management strategy and ensure that its risk identification, quantification and escalation procedures are sound and that the risk register is comprehensive. The outputs from this exercise should be used to inform an updated Monte Carlo analysis to provide further assurance that the total available contingency remains sufficient.

7. Procurement

7.1. The procurement strategy is centred around an NEC3 Option C contract which includes a target cost arrangement. A target cost will be agreed for each phase of the hospital at a point that the design and package procurement is sufficiently advanced to ensure that an appropriate target can be agreed. The contract includes a pain and gain share arrangement that means that over and underspend is shared by both the client and the contractor. The pain / gain share arrangement set out in the tender documentation is a standard and well tested form.

7.2. Whilst we have confidence that the contract mechanism is understood by the team and that Gleeds have operated such arrangements previously, the interests of the client and the contractor do differ with respect to the setting of the target, with the contractor being incentivised to ensure that the target is set some way above the real expected delivery cost in order to maximise their opportunity for gain and mitigate any risk of loss.

Recommendation: A sensitivity analysis should be carried out prior to agreement of the final target cost for each phase to identify the impact on the pain / gain share payments of a range of target costs against the outcome expected by the professional team.

7.3. Post agreement of the target cost, any variation to the scheme will involve agreeing a further change to the target cost. This will provide further opportunity for manipulation of the target to maximise returns to the contractor and Gleeds must carry out a robust interrogation of all compensation events in order to ensure that they reflect a realistic view of the impact on the target cost.

8. Programme Planning

8.1. An initial and high-level project plan has been produced by Gleeds setting out the intended delivery dates of the various elements of the programme. Whilst this plan has been updated to reflect the new scheme, ongoing work has meant that parts of the plan are now out of date and some of the indicated dates will not be achieved, particularly over the next 6 months.

8.2. A more detailed programme has been developed for the enabling schemes and J3 is finalising their first draft of the detailed construction programme which we understand will be issued in mid-May.

8.3. The project plan therefore needs a complete update as soon as the J3 draft programme has been prepared to ensure that it is comprehensive and includes all of the key linkages between the various enabling schemes, the main works and the key client and authority decision points.

Recommendation: As soon as the contractor has issued their first draft construction programme, the overall programme plan should be comprehensively reviewed to ensure that it reflects the full range of client activities, the key interfaces between each phase of the programme (including all enabling works) and all key decision points.

9. Clinical and Operational Considerations

9.1. All interviewees were supportive of the revised scheme; it was generally regarded as a significant improvement on the original design. Clinical adjacencies have improved and the increased footprint gives rise to a more coherent and patient-centric design. The new scheme also removes the need to relocate clinical services to temporary accommodation during the construction period. This change reduces costs and de-risks elements of the project.

9.2. Most clinical areas have benefitted from the changes although there are design uncertainties around the siting of some services that still needed to be resolved, such as the mortuary and the Article 47 mental health facility. Work to develop the 1:200 plans will be starting shortly and this will undoubtedly raise new issues. From a clinical and operational perspective, flexibility is an important consideration in future-proofing the design and the potential to re-purpose certain areas of the new hospital over its operational lifetime is expected to form part of the design and build discussions, and change requests will emerge (see para 3.5). Overall, however, no significant changes to the design that might adversely impact costs are envisaged at this stage.

9.3. Although not part of our brief, we noted that an analysis of the revenue implications of the new scheme is underway and the consequences of moving to an all-electric site is being investigated by Arup. Based on the work to date, there appear to be no material changes in revenue costs for the revised scheme during the transition period or at handover of the new hospital to business-as-usual.

APPENDIX A

Interviewees

Name	Role
1. John Rogers	SRO Chief Officer, Department for Infrastructure (DfI)
2. Ray Foster	Director of Estates, Jersey Property Holdings, DfI
3. Bernard Place	FH Project Director, Health Brief, HSSD
4. Richard Glover	Manager, Planning Performance, DfI
5. Mike Penny	Director, Gleeds Management Services, Lead Technical Advisers
6. Robin Whitby	Construction Advisor, Department for Infrastructure
7. Dan de la Cour	Procurement, States of Jersey
8. Ronan Halvey	Cost Modelling, Gleeds
9. Jason Turner	Deputy CEO/Director, Finance & Information Services, HSSD
10. Sarah Howard	Assistant Finance Director, HSSD
11. Richard Bell	Treasurer, States of Jersey
12. Alison Rogers	Director for Financial Planning and Performance, States of Jersey
13. David Ahier	Project Manager, Enabling Schemes, DfI
14. Bruce Preston	Project Director, J3 Limited
15. Rob Sainsbury	Managing Director, Jersey General Hospital
16. Dr Simon Chapman	Ed Consultant, Clinician Advisor to the FHP
17. Dr Patrick Armstrong	T&O Consultant, Clinician Advisor to the FHP
18. Rachel Williams	Director, System Redesign & Delivery, HSSD

APPENDIX B

Documentation

The primary sources of information used in this review include, but not limited to:

- States of Jersey Public Inquiry Report on Proposed New General Hospital, Jersey (Jan 2018)
- Jersey Future Hospital Planning Application
- Variant 2 Design and Cost Update (April 2018)
- FHP Outline Planning Application Cost Plan (dated 27 March 2018)
- Enabling Works Schedule
- Enabling Schemes Programme Definition v1.1 (draft)
- 1:500 Design drawings for the revised scheme (06.04.18)
- 20180412 Cash Flow
- P.107-2017 Future Hospital Approval of Preferred Scheme and Funding (Min T&R)
- Inflation Calculation
- Jersey Hospital Benchmarking Summary v2.0
- JFH Outline Planning Application Cost Plan v3.5
- OPA Project Board Relocation
- J3 Elemental Cost Plan and Risk Register (Nov 2017)
- JFH ITT Tender Evaluation v1.1
- Report on Undertaking Borrowing for the Future Hospital (March 2018)