



Auditor General's Report on the New Peebles Hospital Project



**Office of the Auditor General
Government of the Virgin Islands
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Executive Summary

1. The New Peebles Hospital building was designed by architects Page Southerland Page (PSP) in 2000 and underwent modifications in 2002 and 2005. The project was put to public tender on 24 April 2006 for construction of a six storey, 150,000 square foot modern health care facility. The cost of construction, initially estimated at \$50,744,734, was adjusted upwards to \$69,102,428 to take into account inflation, insurance and various additions.
2. The contract to construct the new hospital was awarded to the lowest bidder, joint venture Carimex/Mersand/Quantum. The agreement was signed on 22 January 2007 between the Government of the Virgin Islands and the lead company in the consortium Carimex LLC for \$63,927,960. The works commenced in March 2007 and were scheduled to be completed in 548 days.
3. Inability of the parties to resolve significant issues as they arose led to ongoing disputes on the application of contractual provisions, payment authorizations, and the performance security bond, among others. This resulted in strained relations between the Government and the Contractor.
4. Inadequate supervision and control of the works led to many issues of workmanship and safety being observed and logged on a monthly basis without correction.
5. A \$10 million cash advance issued by the Ministry of Finance to Carimex in response to their request for assistance was done without any formal agreement on purpose of the advance and terms for repayment.
6. Concerns about the Mechanical, Electrical and Plumbing works raised by staff of the Health Services Authority's Board led to a request by the Authority for an independent high level review of the MEP installations. The review indicated significant deficiencies in workmanship that could compromise the operations of the new facility.
7. The MEP works (which were 80% completed) were rejected by the Government in January 2010 in response to the results of the independent

high level review. Carimex's submissions for testing and remediating the issues identified with the MEP installations were not accepted by the Government.

8. The Contract with Carimex was terminated on 15 April 2010.
9. James Todman Construction Company (et. al) was awarded two major contracts to finish the New Peebles Hospital Project. The first to complete the Building Envelope and Exterior Works for \$4,174,444.22 and the second for Internal Fit Out Works for \$30,808,870.88. The company was also issued a petty contract in the amount of \$60,000 to weatherproof the building after Carimex was terminated.
10. At 31 December 2013 the Government had paid \$62,868,424 to Carimex, \$35,423,514 to James Todman et al and \$6,646,442 to Page Southerland Page. Still outstanding was a claim of \$27,759,496 that was submitted by Carimex after termination of their contract.

Background

1. Peebles Hospital, known as Cottage Hospital until 1966, was opened in 1922 in a two room structure in Road Town Tortola. Since then the hospital has undergone several expansions, renovations, and upgrading of services.
2. Despite the various changes, the hospital's capacity to satisfactorily provide for the territory's expanding population has diminished over time, as has its ability to provide wider services that are routinely afforded by modern health care facilities. In order to upgrade the quality and administration of health care offered by the hospital, the Government, in the early nineteen nineties determined that adequate infrastructural resources would be necessary and both technical and administrative skills would need to be modernized.
3. To allow for continued service during the upgrade it was decided that the project would be developed in two phases. An extension/annex would be added to the existing hospital to address the critical need for space, support improved services and promote better work flow. Meanwhile plans would be developed for construction, outfitting and commissioning of a new modern hospital.
4. The hospital annex was officially started in 1995. In 1997 renovations were performed to the existing hospital building and the shell of the annex was constructed. Work was stopped in August 1999 to facilitate the strategic planning and design development of health care services in the British Virgin Islands.
5. In 1999 the Government commissioned the management consultant firm of Hornagold and Hills to undertake a comprehensive review of the Health Care Services in the BVI. The Hornagold and Hills report concluded that the existing health care services, including those of the private sector were poor as a result of inadequate investment in the health care infrastructure, insufficient formalized staff development opportunities and fragmented accommodation of public health services.
6. Consultants Hornagold and Hills recommended a sixty bed hospital, providing secondary care, be built on the existing site at an estimated cost of \$30 million. They also recommended that a program team to be appointed to guide the development of the physical structure and the management systems for the

proposed new hospital. The public tender process was waived in April 2000 by the Executive Council to appoint Medical Overseas Holdings (MOH) of the UK as the program team.

7. In May 2000, the tender process was again waived and contracts for the provision of architectural and engineering services were signed with the firm Page Southerland Page (PSP or the Architects) for the design of the new hospital. Under the original terms of the agreement, PSP was to provide an 89,000 square foot, sixty bed structure, equipped to perform a number of modern medical services. The first design entailed a large triangular structure, wrapped around the hillside at an estimated cost of \$100 million, with PSP being paid \$2.33 million for the design.

8. Two and a half years later, in September 2002 after some adjustments to the original plan, a revised plan for an eighty bed, 120,000 square feet structure, was submitted by PSP. After excavation and site preparation works were done, the Government again contracted PSP in March 2005, to redesign the hospital with a view to reducing the overall construction costs and allowing for future expansion. The resulting design increased the size of the structure to 150,000 square feet.

9. The scope of work covered in the second PSP contract (signed on 30 March 2005) included programming and planning, architecture and engineering design, providing construction, mechanical, electrical, and plumbing analysis and documents. The contract cost was \$2.5 million, plus reimbursable expenses. It also included construction administration services and monitoring of the construction work. PSP estimated the cost to build the new hospital at \$50,744,734.40.

10. Management of the project was vested in the Ministry of Health and Social Development's Project Office and more particularly, the Project Engineer who would oversee the construction process. This office also had oversight of all other major construction projects that fell under the Ministry of Health and Social Development.

Audit Objective, Scope & Methodology

11. The objective of this audit is to examine issues that resulted in the project's increased costs and protracted construction period.
12. The Audit was planned and performed in accordance with Government Auditing Standards for Performance Audits issued by the International Organisation of Supreme Audit Institutions (INTOSAI) and where applicable standards provided by the International Public Sector Accounting Standards Board (IPSASB).
13. The Audit focused primarily on events occurring during the period January 2007 to December 2012 although where applicable due consideration was given to events occurring either before or after this period and the expenditure for the project stated in the report included the year 2013.
14. In carrying out our investigation we obtained information from:
 - i. Interviews with key staff in the Ministry of Health and Social Development and the Project Office.
 - ii. Appropriate files, major and petty contracts issued by the Ministry of Health and Social Development, Premier's Office, and the Ministry of Finance, other related documents and reports.
 - iii. Visit to the project site.
15. The scope of the audit was limited in the following respects:
 - i. Files and information related to the period at award of tender and termination of the contract were requested but not received from the Ministry of Finance.
 - ii. A request for an interview made to the Financial Secretary on 18 November 2013 did not generate a response or an acknowledgment.

Tendering

16. *The tender submissions received via the public procurement process exceeded the expected costs for the project. The contractor recommended by the Tender Assessment Committee for the project was not accepted by the Government.*

17. The project for the construction of the New Peebles Hospital was put to public tender by the Government via Notice 5 of 2006, and documents made available to prospective contractors from April 24, 2006 to May 5, 2006. The deadline for submission of tenders was initially stated as Tuesday 18 July 2006 and later extended to 1 August 2006 and then to August 29, 2006.

18. Four bids were received in response to the tender request. These were Manhattan Construction (Bahamas) Limited, Omega Engineering, Carimex Quantum Mirsand and Three O Construction, SE. A summary of these is below.

Contractor	Bid Amount	Duration
Manhattan Construction (Bahamas) Ltd	94,411,000	30 months
Omega Engineering	74,280,000	30 months
Carimex Quantum Mirsand	63,927,960	18 months
Three O Construction, SE	89,518,044	(Not Available)

19. The tenders received were significantly higher than the \$50.7 million preliminary cost estimate initially provided by PSP. The Ministry of Health and Social Development requested the Architects to reassess their previous construction estimate which resulted in a revised sum of \$69,102,428. This new estimate took into account additions that had been made to the scope of works, increase insurance costs and inflation.

20. The only tender which fell within the revised estimate was the submission received from Carimex-Quantum-Mirsand (CarimexQM). Concerns about the technical soundness of CarimexQM's submission led the Tender Assessment Committee to recommend Omega Engineering as the best option for the project. This recommendation was not adopted by the Government as it was considered cost prohibitive.

21. The Government instead undertook negotiations with Carimex LLC, the lead company in the consortium, firstly to ascertain whether the company's tender submission was complete and secondly to secure a reduction in their proposed construction costs from the \$63.9 million bid submitted to an amount closer to the desired \$55 million.

22. A negotiation team comprising the Deputy Chief Minister, Permanent Secretary, Financial Secretary and others met with Carimex representatives on 20 November 2006 to discuss the company's tender submission. Coming out of the negotiations Carimex reaffirmed their ability to execute the project for the stated \$63.9 million as tendered.

23. The Executive Council decided to award the construction contract to the lowest bidder, joint venture Carimex-Quantum-Mirsand, for their original tendered sum of \$63,927,960. The consortium was notified on the 27 December 2006 by the Public Tenders Committee of the Ministry of Finance.

Challenges & Disputes

24. *Conflicts in the interpretation of the contract strained relations between the Government and Carimex.*

25. The contract between the Government and Carimex LLC (Carimex or Contractor) was signed on 22 January 2007 for construction of the New Peebles Hospital in the amount of US\$63,927,960. The standard FIDIC contract was based on the New Peebles Hospital design submitted by Page Southerland Page LLP. The project was scheduled to commence in March 2007 and to be finished in 18 months (August 2008).

26. A cheque in the amount of \$6,392,796, for the mobilization advance was issued to Carimex on 13 March 2007.

27. Throughout the Carimex contract there was significant slippage in the time schedule for completion of the works which was attributed in part to insufficient workmen on site.

28. Seven months into construction, it was evident that there were issues and delays that would threaten the timely and efficient completion of the project. Among these were difficulties with processing workmen brought into the BVI to work on the project, non-responsiveness of the BVI Electricity Corporation in providing essential high voltage facilities to the site despite having been paid for the same and persistent and significant damage and delays to work by a water source that coursed through the work site during heavy rains.

29. By November 2007 the contractor estimated that the project was over five months behind schedule. Throughout the contractual period, the Project Engineer and PSP expressed concern to Carimex that the manpower on site was insufficient to support the project time schedule. Notwithstanding, the monthly reports indicated continuous time slippage from the initial August 2008 completion date.

30. Carimex submitted its first claims in November 2007 to have the contract cost increased by \$673,734.23 with extension of time. These were in the form of four change order requests namely, Lack of utilities to use cranes on sites; Delay in work permits and visas; Soil erosion; and Unavailability of electricity services. These were all rejected by the Project Engineer.

31. Over the term of the contract Carimex would submit more than 100 claims/change orders totaling in excess of \$25 million with associated requests for time extension. Of these, 47 change orders valued at \$8,601,051.44 were approved and the contract schedule was extended by an additional 287 days.

32. Many of the denied change orders would later form a part of Carimex's claim against the Government after the contract between the parties was terminated.

33. Some of the major areas of delays and contention on the project are further outlined in this section of the report.

Addendum No. 2 - Retention Amounts & Interim Payments

34. *The parties' failure to include Addendum No. 2 as a part of the contract document led to an ongoing dispute on payment and retention percentages.*

35. One of the earliest points of contention between the Government and the Contractor was the application of sub-clauses 14.3 and 14.6 of the contract. These clauses dealt with percentage retention and the minimum amount payable on an interim payment certificate.

36. The tender documents initially stipulated the minimum amount payable on an interim certificate at 2% of the contract sum. A subsequent addendum to tender (Addendum No. 2) prepared and circulated by the Ministry of Finance on 13 June 2006 reduced this percentage by half (to 1%).

37. Using the initial percentage, payment certificates would have to be valued at a minimum of \$1,278,559.20 under the Carimex contract to qualify for payment. With the introduction of Addendum No. 2 the minimum payment certificate would be reduced to \$639,279.60. Submissions that fall short of the minimum threshold can be rejected (not certified) for payment by the Project Engineer.

38. In a similar manner, Addendum No. 2 reduced the retention percentage from 10% to 5%. The retention refers to the amount withheld from the Contractor's payment after the Project Engineer has verified the payment claim.

39. To accommodate the Addendum, one of the tendering firms, Manhattan Construction (Bahamas) Limited, submitted their bid for the project using the amended rates and another prospective contractor, Omega Engineering SE, acknowledged receipt of the addendum in their tender submission stating that this was to form a part of the bidding document.

40. Carimex failure to do the same and the Government's oversight in ensuring that the changes were incorporated led to significant discord between the parties.

41. Addendum No. 2 was neither appended to, nor incorporated in, the contract document that was signed between the Government and Carimex. This resulted in the Government applying the initial higher rates for retention and minimum interim payments. This practice ensued despite the objections of the Contractor who repeatedly asked that the Government apply the amended rates and asserted that failing to do so was financially impeding to the project.

42. Neither the Ministry of Finance nor the Ministry of Health and Social Development could locate evidence that the 13 June 2006 memo had been issued. As a result the Contractor's requests to have the amended rates applied were repeatedly denied.

43. In applying the 2% for interim payments, the Project Engineer declined to certify payment submissions for the months of August and September 2008 after his (the Project Engineer's) review of the claims led to deductions that reduced the amounts below the 2% threshold.

44. In response, the Contractor suspended work on 1 December 2008 under clauses 16.1 and 14.6 of the contract to compel the Government to make payment.

45. Certificate #13 was paid on 5 December 2008 in the amount of \$1,512,599. This was deemed insufficient by the Contractor who claimed that the total amount owed was \$6,479,997. A second payment, certificate 14, was subsequently made to the Contractor on 22 December 2008 in the amount of \$3,479,679.

46. In July 2009 the Ministry of Health and Social Development located a copy of the Financial Secretary's 13 June 2006 memo and steps commenced to obtain Cabinet's approval to have the contract accordingly amended.

47. However, because the Government would not agree to adopt the amendment retroactively to the beginning of the contract and Carimex would not accept the amendment prospectively, for future payments only, the amendment was never adopted. The issue would remain a point of conflict to the end of the contract.

Performance Security Bond

48. *The Contractor's substitution of the cash performance security bond (which expired in March 2009), with an insurance security bond, was subject to a protracted approval process leaving the project without this essential feature for almost a year.*

49. Upon signing the contract, Carimex provided two cash bonds deposited into escrow accounts to be held in accordance with the terms of the contract. The first for \$6,392,796 to cover the mobilization advance which would be released back to the Contractor after certified payments on the project reached the amount stated on the bond. The second in the amount of \$3,196,000 for the performance security bond.

50. The performance security bond was required by section 4.2 of the contract to be valid for the term of the contract and the defects notification period which ended 183 days (six months) after completion of the works. This bond was intended to provide a level of protection to the Government in the event that the Contractor failed to perform as required. Most notably the funds could be used to remedy work defects and cover the employer's claims.

51. The performance security bond provided by Carimex in 14 February 2007 covered a two year period - the initial contractual period (18 months) and the defect notification period (six month) – which expired on 5 March 2009.

52. Due to contract delays and variations the completion date for the project had been extended from August 2008 to October 2009. The contract required Carimex to extend the performance security bond to cover the amended contract term and defect notification period (April 2010).

53. Rather than extending the cash bond for the amended contract period, Carimex, already experiencing severe issues with cash flow, chose to have the cash being held in escrow released and opted instead to put in place an insurance

performance bond. The insurance bond required payment of a premium that was less onerous than the cash upfront security previously held. Carimex claimed that the insurance bond format would be equal to the bank guarantee and provide a greater degree of security to the Government.

54. The insurance bond was purchased from a Dominican Republic provider, Seguros Construction, SA, in March 2009 for the same amount as the original bond (\$3,196,398) and covered the period March 2009 to April 2010.

55. The Ministry indicated that it would be disposed to accepting the insurance bond provided that the document satisfied three requirements.

- i. The bond was to be unconditional and payable to the Government upon first written demand.
- ii. The termination date was to be extended to cover the defects notification period.
- iii. The sponsoring insurer had to be licensed to conduct business in the territory.

56. After the cash security bond expired in March 2009 the Government suspended payments to Carimex pending approval of the insurance company by Financial Services Commission and acceptance of the insurance bond by the Government. The suspension of payments was applied under sub-clause 14.6 of the contract which provided that *“no amount will be certified or paid until the Employer has received and approved the Performance Security.”*

57. This action led to further strained relations between the parties as the Contractor, already experiencing cash flow issues, and laboring under the notion that they were being forced to finance the project, continued to work under the contract, but without payment.

58. The interpretation and application of clause 14.6, which was being used to withhold payments to the Contractor, was subject to discussion in late 2009 after BCQS was retained by the Ministry of Finance.

59. In reviewing the issue of the expired performance bond, BCQS, in November 2009, commented that the contract required Carimex to extend the

performance bond and there was no provision for replacing it with a new or different one. BCQS opined that after Carimex failed to extend the bond, the Government's remedies were to either claim the full amount of the performance security or to terminate the contract. It did neither.

60. BCQS commented that the remedy that the Government had applied (ie withholding payments) was applicable only to the first payment and that this remedy should not be relied on for later breaches. They concluded "We can find no remedy for this problem that simply allows the Engineer to stop processing the Contractor's applications for payment."

61. While the legitimacy of applying section 14.6 was being debated, steps to regularize the sponsoring insurance company and the proposed insurance bond were being pursued.

62. This process, which stretched over a period of ten months, involved making an application to the Financial Services Commission (FSC) to secure an exemption for the non-local company to do business in the BVI and liaising with, and through, the Ministry of Finance to provide documents and information for the application.

63. On 23 December 2009 the FSC Licensing and Supervisory Committee approved, in principle, the license exemption for Seguros Construction, SA to provide insurance coverage on behalf of Carimex.

64. Following the FSC approval, efforts commenced to put in place the other two conditions required for the bond to be accepted by the Government - ie that it should be payable on first demand and that the term should cover the defects notification period.

65. Other events occurring concurrently precluded completion of this process and ultimately, the Contractor's failure to provide a performance security bond was used by the Government as one of the two grounds for terminating the contract.

Contractor's Cash Advance - \$10 million

66. A cash advance of \$10 million was issued by the Ministry of Finance to Carimex on 16 April 2009 without any formal agreement between the parties.

67. For successful execution of the project both sides of the contract would have to be capable of supporting the financial demands associated with construction planning, procurement, execution and costs. Throughout the term of the contract, Carimex reported having cash flow difficulties.

68. At the beginning of the contract Carimex was required to put up cash bonds totaling \$9.5 million to cover the performance security and mobilization security. The company was then awarded a mobilization payment of \$6.4 million which it claimed left it with a negative cash flow of \$3 million.

69. In addition, the Contractor claimed that changes in the global economy had resulted in higher interest rates and created challenges in securing loan funding. The Contractor also claimed that the uncertain global economy led to unforeseen increases in the cost of acquiring and transporting construction materials to the BVI and other ongoing contract related delays, issues and disputes.

70. As the works progressed, the Contractor's cash flow position would be impacted by various decisions taken by the Government that led to withholding payments in various forms. Carimex repeatedly complained that their liquidity was being adversely affected by Government's actions. Some such actions, as contended by the Contractor, included:

- i. Retention of 10% instead of 5% on payments;
- ii. Substantial reductions on applications for payment and change orders submitted by the Contractor (without consultation with Contractor);
- iii. Withholding certification of payments for several months while awaiting regularization of the security bond/insurance issue;
- iv. Refusal to accept the Contractor's revised Schedule of Values submittal;
- v. Refusal to pay on submissions that did not meet the 2% minimum;

- vi. Rejection of change orders and variations caused by events that were outside the control of the Contractor.

71. The cumulative effect of these restricted the Contractor's income from the project. This led to complaints from Carimex that they were being forced to finance the New Peebles Hospital project by injecting their own resources and funds but receiving few payments in return. The continuing disputes regarding payments was a major contributing factor in Carimex suspending works on the project in December 2008. It also prompted the Contractor to request evidence of the Government's ability to fund the project.

72. In a letter to the Financial Secretary dated 27 February 2009 Dr Jose Ramon Brea Gonzalez, President of Carimex, painted the project's finances as severe and requested an advance from the Government of \$15 million against the remaining value of the project. This, the letter stated, would be repaid from future progress payments remaining on the contract.

73. On the Ministerial level, there was support for issuing an advance. Both the Financial Secretary and the Permanent Secretary MHSD supported providing the Contractor with financial assistance in the form of an advance on the basis that failing to do so could result in suspension of works, potentially leading to "financial and reputational damage to the Government." The Permanent Secretary recommended favourable consideration be given for the \$15million advance to the Contractor. The Financial Secretary supported a reduced amount of \$10 million.

74. Also supporting the measure was the Premier (Honourable R.T. O'Neal) who extended assurances to the Contractor via their attorneys on 7 April 2009 for a \$10 million advance and advised that this would have to be issued under an agreement separate to the existing contract.

75. On 16 April 2009, the Financial Secretary instructed the Accountant General to transfer the sum of \$10 million to Carimex. The advance was intended to assist in easing the Contractor's cash flow issues to prevent work stoppage on the project. The transaction was however executed without the support of a formal agreement between the parties.

76. In the absence of an agreement, the purpose of the advance and procedure for recovery of the \$10 million was left open. Dr Brea in correspondence dated 11 May 2009 to the Premier confirmed that the advance had been received and indicated that the company had applied the monies to several outstanding claims, many of which had either been denied by the Government or were still awaiting a decision from the Project Engineer.

77. The formulae and method for recovery were still being worked out at the time the contract with Carimex was suspended then terminated.

Medical Equipment Delays

78. *The Contractor was instructed to proceed with roughing in the supporting infrastructure for the hospital equipment without being provided with essential information and specifications required for the installations. This would later result in a substantial amount of work having to be removed and redone.*

79. A recurring issue that arose initially in the pre-tendering stage and would later feature repeatedly as a significant obstacle to the progress of the internal works was the procurement of the hospital equipment. During an initial meeting with prospective tenderers a number of questions were posed by the contractors regarding the equipment information and its availability as it would be essential to the progress of the works.

80. In May 2008, the Contractor wrote to the Ministry stressing the importance and urgency of finalizing the medical equipment for the hospital project. Firstly because the information would be needed by the contractor to “rough-in” the supporting services and infrastructure (plumbing, electrical, gases etc). Secondly to allow time for production and transportation as much of the equipment carry long production and delivery lead times. Delayed arrival of the equipment would likely affect the contractor’s work schedule.

81. The Contractor also offered to design, procure, install and finance the equipment for the hospital. The Ministry responded by advising that procurement for the equipment would be tendered.

82. In July 2008, the Ministry of Health and Social Development entered into an agreement with Medical Equipment Solutions International (MEqSI),

represented by Deborah Long, to provide consultancy services for the procurement of medical equipment for the New Peebles Hospital. The consultant produced a listing of all medical equipment that would be needed in different categories with an estimated cost of \$10,528,947.85.

83. MEqSI produced a 'Major Equipment Schedule' that specified locations of the architecturally significant items, and provided preliminary electrical, structural, mechanical and dimensional information to the PSP and Carimex. This information enabled the construction phase to continue while a delivery schedule of the equipment to be installed was being worked on.

84. By November 2008, the works on site had progressed to the stage where the medical equipment information was needed for roughing in. Both Carimex and PSP wrote to the Minister requesting urgent action.

85. PSP confirmed that the Contractors had reached the point where they needed the medical equipment information for roughing in and that urgent steps should be taken to procure this by month end. PSP also warned that failing to do so would unnecessarily increase the cost of the project and schedule.

86. By January 2009 the information for the medical equipment was still unavailable and the Contractor was advised by the Government's representatives to move forward with the work notwithstanding the Contractor's concern that it could result in "engaging in retrofit work and tearing down walls" later.

87. The work was accordingly performed by the Contractors without the information. This would later result in some of the installations requiring significant modifications to render them compatible to the equipment purchased and lead to claims from the Contractor to recover the related costs for effecting the changes.

88. The bed locators were one such modification. This affected the all the patient rooms and required the supporting infrastructure for nurse calls, power points and phone data to be changed. To facilitate the works, the Contractor the plaster boards would have to be removed to allow for the alterations and replaced. The changes would require significant time and cost to remediate.

89. The medical equipment for the New Hospital was approved by Cabinet on 2 February 2009. The tendering process was waived to expedite procurement of the architecturally significant medical equipment and the consultant Deborah Long retained to assist the Ministry in procuring the same. Other medical equipment was to be acquired by a firm engaged through the tendering process.

Inadequate Supervision

90. *Inadequate supervision and control of the works led to issues of workmanship and safety being observed and logged on a monthly basis without correction.*

91. Given the magnitude, complexity and importance of the project, different levels of supervision were required to ensure delivery of a quality product. The Project Office provided administrative and limited technical supervision and Page Southerland Page was engaged by the Government as the technical experts to provide monitoring of the work being done.

92. PSP's duties included evaluating all areas of construction as well as the installation of mechanical, electrical and plumbing infrastructure to ensure compliance with the design specification and standards. Any defective work, inferior materials, violations of standard, or any problems encountered were to be cited in a report prepared by PSP and given to the Project Engineer and to the Contractor to rectify. In addition, the Contractor engaged various levels of supervisors and managers who were responsible to oversee the ongoing works and ensure quality control.

93. In the initial stage of the project, during erection of the structure, PSP subcontracted its duties to a local firm of structural engineers, Systems Engineering Ltd, who were on site to ensure that standards and timetables were met. During the fitting out stage for the interior of the building and with the commencement of the mechanical, electrical and plumbing (MEP) works PSP's experts from the US visited the territory monthly and spent 1-2 days performing onsite inspections.

94. The results of these inspections were incorporated into reports and forwarded to the Project Engineer together with their claims for travel and other

costs. The reports were also forwarded to the Contractor to take necessary action and perform required corrections to issues identified.

95. Cognizant of the need for improved site supervision, the Ministry examined the possibility of expanding PSP's role for an increased presence onsite. Submissions for a fulltime onsite representative were solicited at various times and received on 6 June 2007 for \$204,000 per annum; 15 October 2007 for \$270,000 per annum; and in 16 November 2007 for \$312,000 per annum.

96. A submission made to Cabinet in December 2007 to engage PSP at \$312,000 per annum was not successful. The Ministry of Health and Social Development was instead advised to invite the local company, Virgin Islands Consulting Engineers Ltd (VICEL), to oversee the MEP works.

97. VICEL submitted a proposal in February 2008 to perform supervision on the project for \$429,600. This was initially approved by Cabinet but later revoked in favour of continuing the arrangement with PSP and Systems Engineering Ltd as this was deemed to provide a more appropriate level of expertise required for this complex and highly specialized project.

98. In the end, the Government's technical supervision of the critical MEP phase in the project was limited to PSP's periodic visits. A later high level review of the MEP works would indicate that the installations and workmanship provided by the Contractor were significantly deficient. This review was done at a stage when the work was extensively advanced (80% complete) and would cost the Government time and resources to assess, remediate and replace.

Schedule of Values

99. *The Contractor's attempts to replace the initial Schedule of Values with an more detailed and representative breakdown of the works was rejected by the Government in favour of keeping the original document that contained errors in provisioning.*

100. The Schedule of Values is a detailed breakdown of the contract amount into its components. It shows the contractor's costing of each component of the project, line by line, and is used as the basis for submitting and reviewing

progress payments. The Schedule of Values is submitted by the contractor with their tender in support of their tendered sum.

101. Addendum No. 3 issued to the prospective contractors in the pre-tender stage of the project advised tenderers that they were expected to breakdown all necessary items in the Schedule of Values as the list provided to them was not all inclusive.

102. Carimex submitted a revised Schedule of Values in January 2008 with changes that sought to correct discrepancies in various line item evaluations that did not affect their overall cost submission for the project which remained at \$63,927,960.

103. The revised schedule was not accepted by the Project Engineer who was of the view that it did not constitute a detailing of the items but rather a reallocation of the amounts and was therefore an amendment to the contract. The files bear no evidence of the Government attempting to discuss, amend or negotiate the proposed changes with Carimex.

104. Throughout the term of the contract, Carimex sought to have the changes adopted to what they considered to be more detailed and representative costing of the project. All attempts to do so were unsuccessful.

105. BCQS would later assess Carimex's revised Schedule of Values as more detailed and realistic than the original version.

106. Absence of flexibility on the part of the Government regarding this request from the Contractor added to the growing discontent between the parties.

Deed of Variation

107. A *Deed of Variation* introduced by the Contractor to reinstate key provisions that had been deleted by the "*Particulars of Contract*" was not adopted.

108. Contract 2M/2007 contained a schedule, inserted near the front of the document that provided "*Particular Conditions of Contract*" to the standard FIDIC

conditions executed between the parties. This schedule deleted several of the standard provisions and had the effect of removing a number of the Contractor's remedies under the contract.

109. Carimex alleged that the deletions occurred at the time the document was signed. They claimed that they had enquired about the changes and were told that the clauses were going to be improved and reinstated. This had not occurred.

110. Carimex, via their lawyers, sought to have the contract amended through a Deed of Variation. The proposed Deed was intended to reinstate the deleted clauses and, in addition, incorporate the provisions of Addendum No 2 that had been issued by the Ministry of Finance in June 2006 to prospective contractors, but had not been included in the final contract document.

111. The Contractor proposed the amendments to take effect retroactively from February 2007, when contract 2M/2007 was signed. The Government agreed to the Deed but required that the provisions be effective from the date that the Deed itself was signed by the parties.

112. The Deed was not adopted as the parties did not agree on the commencement date. BCQS, in advising the Government, sought to facilitate negotiations on the matter by compiling a list of issues and claims that Carimex would be requested to discontinue in exchange for the Government considering their proposed date for commencement. The contract, 2M/2007 between the Government and Carimex, was terminated before negotiations could take place to consider the BCQS proposed concessions.

113. Similar deletions also formed a part of the subsequent contract between the Government and James Todman & Construction, one notable exception was clause 1.9 which dealt with errors in the Employer's requirements.

Other Administrative & Contractual Issues

114. *Other administrative and contractual issues such as delays in processing work permits, double taxation of employees and absence of an escrow account to hold amounts retained contributed to decline in relations between the parties.*

Escrow Account for Retainage

115. The contract provided for the Government to deduct and retain a percentage of the certified interim payments issued to Carimex. This retainage was intended to provide the Government with security for performance and the Contractor incentive to complete. The retained amount is paid to the Contractor upon completion of the contract.

116. By 26 May 2008 the retainage was in excess of \$4.2 million and the Contractor requested the Government to setup of an interest bearing account where the amounts could be held in escrow. The interest accrued would be for the benefit of the Contractor.

117. The request was repeated over the term of the contract by Carimex who felt that they were losing interest on the sums withheld. It was however, never implemented by the Government.

Payroll Taxes

118. The Contractor claimed that their employees were being subjected to an unfair double taxation as they were paying taxes in their native Dominican Republic and also required to pay taxes in the BVI.

119. Carimex, through their lawyers, Forbes Hare, wrote to the Ministry of Health and Social Development on 13 November 2007 requesting reimbursement of payroll taxes paid on behalf of their employees. This claim was based on an alleged verbal agreement they had with the Minister of Health and Social Development during negotiations.

120. The Ministry of Health and Social Development, on the advice of the Attorney General, rejected Carimex's claim stating that neither the Government nor a private person can enter into a contract to not abide by the law and the

provisions of any statute. Furthermore, any contract entered into in violation of a statute would be illegal, void and un-enforceable.

121. The contract between the Government and Carimex clearly stated that the governing laws shall be the laws that are in force in the British Virgin Islands.

122. Similar issues with the Contractor were observed with social security payments during the early part of the contract.

Dispute Adjudication Board

123. With the mounting unresolved issues and deteriorating relationship, the parties in July 2009 agreed to appoint a Dispute Adjudication Board in accordance with the terms of the contract.

124. Attorneys for the Contractor, Lewis Hunt and Co., submitted the names of three possible adjudicators and the Ministry selected retired acting Chief Justice of the OECS Sir Brian Alleyne. Sir Alleyne agreed to serve as adjudicator but was unavailable to commence until January 2010. Notwithstanding the critical state of the project and the deteriorating relations between the parties no replacement was sought to secure early resolution of the issues. As a result the board was never instituted and the matters were not adjudicated.

Project Management & Contract Failure

125. *Ineffective management of the project allowed for prolonged and unresolved disputes, inadequate supervision of the construction work and a breakdown in relations between the parties, ultimately leading to failure of the contract.*

126. From inception, the New Peebles Hospital Project required cross agency input, consultation and advice. Its subject matter however, dictated that the project be managed and coordinated by the Ministry of Health and Social Development.

127. The Ministry of Health and Social Development's coordination responsibilities included ensuring that resources and personnel used on the project were properly vetted, adequately qualified and duly authorized, and that this was done in a timely, economical and efficient manner to facilitate smooth progression of each phase of the project. The Ministry was also responsible for securing resolution to issues as they arose to ensure that these did not negatively impact or threaten the development of the project.

128. The Ministry's Project Office was established in September 2005 to provide oversight, contract management, and supervision of all structural projects under the Ministry's portfolio. Its primary function was to serve as the Government's representative and primary go-between for the parties as well as to oversee development of the New Peebles Hospital. In addition to a Project Engineer, the office was staffed with a Clerk of Works. The Ministry would later also employ an Assistant Project Engineer and a Quality Control Engineer.

129. The Project Office worked closely with the Contractor, and was also tasked with collaborating with PSP, Systems Engineering Ltd (structural engineers) and BCQS (quantity surveyors), to ensure that all technical aspects of the project were done to quality and specification and that these conformed to relevant local and international building codes and standards.

130. The Ministry of Finance was responsible for sourcing funding for the project and signing off on all payments that had been certified by the Project

Engineer and authorized by the Permanent Secretary. It also provided advice and guidance on all matters that were money related.

131. The Attorney General's Chambers vetted all proposed agreements between the parties, advised on changes or variations to contract document and provided legal support on disputes and discrepancies occurring between the parties.

Management Conflicts

132. *Escalating and unresolved issues and disputes on the project soured relations between the parties and led to repeated intervention of the Financial Secretary.*

133. With the progression of the project came an accumulation of unresolved issues between the Contractor and the Government. The complaints came from both sides. The Government expressed concern about the Contractor's lack of progress on the project, quality of their work and the unresolved security bond issue.

134. From the other side came the Contractor's recriminations against the Government for its lack of timely responses to request for information, delays in processing payment certificates, construction delays caused by the late procurement of hospital equipment, increasing construction costs and challenges with cash flow.

135. The Ministry of Health and Social Development's failure to negotiate and resolve issues as they arose increasingly resulted in strained relations between the parties. The Permanent Secretary sought advice from the Attorney General and Financial Secretary for resolving the issues. The standoff however continued.

136. In February 2009, the Financial Secretary proposed that the Minister of Finance play a more active role in the project, possibly by taking over the management of the same.

137. This was followed by a series of actions by the Financial Secretary in which the Ministry of Health and Social Development was largely excluded. The Financial Secretary processed and issued the \$10 million advance to Carimex in

April 2009 that had been approved by Cabinet a month earlier. He commenced steps to have Carimex's outstanding payment claims that had not been processed for the months February to August 2009 assessed for payment and payments of \$3,937,171.66 and \$2,868,360.59 were made to the Contractor on uncertified claims for February to April 2009.

138. The project's administration was not transferred to the Ministry of Finance at this time. In June 2009 the Financial Secretary engaged BCQS Ltd to provide high level support and oversight for the project. The firm was awarded a contract in the amount of \$75,000 for a full review of the New Peebles Hospital Project. The review included contractual issues, design, financing and cost associated with the project.

139. The report from the review highlighted the key areas of dispute that needed to be focused on and BCQS's proposal for their continued services. During the construction phase BCQS would be paid an additional \$25,000 per month for quantity surveying services. Post construction phase, BCQS would prepare and submit to Carimex a statement of Final Account and summary of Variation Account for a cost of \$75,000.

140. Cabinet approved the award of contract to BCQS on 28 September 2009. BCQS was again engaged from 1 October 2009 – 31 December 2010 at \$25,000.00 per month. The major contract for these services was signed almost a year after commencement on 24 August 2010.

141. BCQS's involvement brought about a cohesive and structured approach in dealing with Carimex and the problems that were threatening the successful completion of the project. Most importantly, the monitoring of the project was enhanced and outstanding Change Order Requests (CORs) and variations were evaluated to establish a valuation of Carimex's outstanding claims. BCQS were able to give the Project Engineer the support needed to navigate through the contract terms and strategize actions needed to be taken to give the Government more effective control over the project.

142. The new strengthening of the Project Team and the establishment of the Steering Committee on 28 May 2009 gave the project the impetus needed to address the deficiencies in the management of the project. PSP and BCQS were

able to monitor the quality and quantity of work that Carimex was providing and address them directly during the project team meetings.

143. BCQS also facilitated the recruitment of high level experts to review the MEP work that had been performed by Carimex, they sourced specialized legal council to provide clarity on the issues and offered advice to the Government on their options for advancing the project.

Defective Mechanical Electrical & Plumbing (MEP) Workmanship

144. *An independent review of the MEP works indicated significant deficiencies in the installations that could threaten the operations of the new facility.*

145. On 5 February 2009, the Maintenance Supervisor of the BVI Health Services Authority (BVIHSA), Mr Leon Skelton wrote to the Director of Hospital Services expressing concerns about the MEP installations at the New Peebles Hospital. Citing code violations, poor placement of the plumbing infrastructure and other challenges which would likely lead to major maintenance issues in the short term and “eventually cost a great deal of money and embarrassment to the government to be corrected,” Mr Skelton recommended that an independent team be contracted to conduct an inspection of the plumbing and electrical works.

146. The Board of the Health Services Authority met on 20 February and forwarded a formal recommendation to the Ministry of Health and Social Development to have an independent review of the New Peebles Hospital project performed. The Ministry responded that it would take the matter under advisement.

147. Throughout installation of the MEP works PSP made periodic (usually monthly) visits to the site and prepared field observation reports that were forwarded to the Project Engineer and Carimex. The PSP Reports were prepared in point form and listed items of concern in the order that they were observed during the site walkthrough. The Reports did not discuss the severity of the breaches or the impact (cost and other) that the Contractor's continuing non-compliance would have on the project.

148. PSP did however warn in their reports that “Overall quality control needs to be addressed, as interior scope of work progresses, the amount of materials put in place will increase and coordination and quality will become more critical than ever.”

149. Each month, successive reports were issued with the same faults and with new ones being added. Some of the items were addressed but for the most part the issues were carried forward from one month to the next uncorrected. The Contractor would later assert that the observations and issues identified were the result of works in progress that would be addressed as the project advanced.

150. Up to the time of Mr Skelton’s memorandum in February 2009 no formal instruction had been issued by the project office for the faults to be addressed. The Ag Chief Executive Officer of BVIHSA would later (in July 2009) also raise concerns about MEP installations that were in violation of the National Fire Protection Codes and presented a contamination risk to the medical gas system.

151. Remedial Works Notices requiring Carimex to correct the issues observed by PSP were not issued to the Contractor until November 2009 when the MEP works were almost 80% complete.

152. After BCQS was recruited they were tasked with sourcing a suitable firm to perform the independent review of the MEP works that was requested BVIHSA. Firms were invited in July 2009 to submit proposals for the works and three responded. Arup USA Inc. of Massachusetts was engage to perform the review which commenced in November 2009.

153. While the review of the MEP installations was being undertaken the Government suspended the MEP works on the project pending the outcome. The Contractor, in response, suspended other works on the contract until such time as the MEP installation could resume, claiming that these would require coordination with the MEP works. The Arup review was completed in December 2009 and the resulting report issued to the Ministry of Health and Social Development.

154. The Arup report highlighted some design issues with the drawings but concluded that the design drawings and specifications were generally consistent with industry standards. With respect to the installation of the MEP works the report concluded that:

“In general the installation of the mechanical, electrical, plumbing, fire protection and the life safety systems was not of the level of quality consistent with industry standards. Inconsistencies with the contract documents have been found and standards construction practices have not been followed.”

155. The eighty-seven page report detailed deficiencies in workmanship and noncompliance with standards, while discussing the impact and severity of these shortcomings to the project and the new hospital's operations. In the end, Arup USA Inc. recommended that detailed tests and surveys be conducted to determine what corrective actions, if any, needed to be done to each system to bring them back to the required level for a hospital.

156. Carimex was given a copy of the Arup report in December 2009 and asked to provide a detailed remediation plan for assessing and rectifying the deficiencies. This remediation plan would be reviewed and agreed with the Project Manager and Employer prior to implementation. Meanwhile, the suspension of the MEP works that commenced on 20 November 2009 remained in effect.

157. The Contractor responded on 11 January 2010 that they were “intimately aware of most of the perceived deficiencies” and that these were primarily the result of works in progress. They suggested that since the issues identified in the Arup report included both design and construction matters, these should be reviewed, as a team (Government, PSP, Carimex), and decisions made as to how and when the items would be addressed.

158. With respect to testing of the systems, Carimex advised that they would continue to test in accordance with specifications, manufacturer's recommendations and industry standards.

159. Carimex also contended that the Arup report did not constitute sufficient cause for the suspension of the MEP works.

160. In effect, no comprehensive plan was submitted by the Contractors to assess and address the matters in the report in their initial response.

161. Carimex's response was deemed unsatisfactory by the Government which insisted that the Contractor present a testing and remedial regime for the MEP works in a clear strategy for moving forward. In late January 2010 Carimex retained two firms (Liles Engineering and BCM Consulting Engineers) to examine the MEP works in conjunction with the Arup report and recommend proposals for the said testing and correction.

162. The Liles and BCM reports confirmed many of Arup's observations. They acknowledged that there were issues with the MEP installations (some significant) but suggested that many of these issues were the result of ongoing works. The reports made recommendations for testing and corrections where deemed necessary and commented that the other issues were expected to be corrected as works progressed.

163. Liles and BCM reports were presented to the Government in response to Arup findings and in support of Carimex claims that the installations were generally in keeping with standards and Arup assessment was based on incomplete and ongoing works. This was rejected by the Government.

164. Subsequent to this Carimex made various other submissions in an attempt to alleviate the existing standoff and gain approval for the MEP work suspension to be lifted. These included recommendations for testing, site security enhancements, an assertion that they had retained both Liles and BCM to perform ongoing periodic independent quality control inspections and a proposal for an on-site meeting and walkthrough to secure clarification of the Government's expectations and required actions. That meeting never took place.

165. None of Carimex's submissions either individually or in totality were deemed sufficient for the Government to lift the suspension.

166. Throughout the work suspension period the relationship between the parties suffered further strain with the work stoppage bearing severe resource, financial and reputational implications for both the Government and Contractor. Still dissatisfied with Carimex's efforts to correct the MEP issues, the Government commenced steps to terminate the contract.

167. Carimex, meanwhile, submitted a claim through their attorneys, Lewis Hunt and Co., on 25 January 2010 for extension of time with costs of \$34,743,572.

Termination of Contract

168. *The Contract with Carimex was terminated on 15 April 2010.*

169. With the project in stalemate for over three months, the Government through BCQS retained the services of an expert in construction law to provide advice on the issues surrounding the Carimex contract.

170. UK based construction specialist attorney, Michael Black QC, advised the Government that Carimex was in breach of the contract by failing to provide performance security and (subject to the MEP testing results) by providing defective work. After considering the legal advice from Michael Black QC and from quantity surveyor and consultant to the project BCQS, Cabinet approved termination of the contract with Carimex on 14 April 2010.

171. The Contractor was informed of the termination 15 April 2010. The reasons stated were:

- i. Failing to comply with Sub-Clause 4.2 of the General Conditions requiring the Contractor to provide a Performance Security that complied in substance with that required by the Contract; and
- ii. Failing to comply with Notices issued under Sub –Clause 7.5 to promptly make good the defects and ensure that rejected works complied with the Contract.

172. Carimex was given 14 days notice to leave the Site and deliver any required Goods, all Contractor's Documents and other design documents to the Engineer.

173. Carimex responded that the Government was not entitled to terminate the contract and, in their view, the contract was terminated as a consequence of the Government's repudiatory breach. The Contractor however agreed (without prejudice) to cooperate with the turnover of the site and the staging facilities. This included the storage warehouse, office trailers, office equipment, construction equipment and other items owned by Carimex and their subcontractors.

174. In August 2011 the Government received a letter from the United States Department of Commerce regarding a complaint registered by Carimex against the BVI Government. The Contractor complained that the BVI Government had taken possession and use of its equipment and vehicles valued at \$3.5 million. The complaint also stated that the Contractor's representative had been frustrated with attempts to discuss the matter with the BVI Government's officials. The letter sought to secure a meeting between Carimex and the Government for the purpose of reaching an amicable solution.

175. In February 2012, Carimex submitted an updated claim against the Government totaling \$27,759,496.

176. The Government was not however obligated to act on the Contractor's claim until the construction of the Hospital was completed.

Project Status at Termination

177. Payment Certificate No. 20 issued for November 2009 indicated that at the time the project was suspended in November the contract sum had been amended to \$71,857,395.94, of which, a total of \$62,868,489.59 had been paid to Carimex.

178. The value of the work completed was \$65,526,198.45 but deductions totaling \$7,231,098, were made by the Project Engineer under clauses 14.6 (a) and 14.6 (b) of the contract adjusting the value of the works downwards to 58,295,100.45.

179. Significant deductions were applied under Monthly Overhead of \$1,097,900, Mechanical and Plumbing, \$1,454,800 and Electrical, \$713,100. The latter two were for anticipated testing and remediation work on the MEP installations.

180. The largest deduction was applied under "Bonds and Insurance" for \$3,196,398 to cover the value of the performance security bond that Carimex had failed to extend. This amount is subject to be held by the Government until the end of the defects notification period, after which any balance not applied to defects (not already addressed by other deductions) will be returned to Carimex.

181. A summary of the project status at the time the works were suspended is provided in the schedule that follows.

Overall Project Status		
Works Completed At Suspension Contract		
Contract Amount	71,857,395.94	100.00%
Work Completed	65,526,198.45	91.19%
Balance to Finish	6,331,197.49	8.81%
Completed Works and Stored Materials		
Work Completed	65,526,198.45	91.19%
Stored Materials	1,143,000.00	1.59%
Completed & Stored	66,669,198.45	92.78%
Deductions Per Project Manager for Remediation		
Work Completed	65,526,198.45	91.19%
Deductions	(7,231,098.00)	-10.06%
Adjusted Balance	58,295,100.45	81.13%

182. The mechanical and plumbing works were 83.33% complete and the electrical works were 78.84% complete when the works were stopped in November 2009. The deductions applied reduced completion to 41.27% and 27.96% respectively.

183. The status of the MEP works as determined on Certificate 20 was as indicated in the schedule below.

Mechanical Plumbing and Electrical Installations

	Mechanical/Plumbing		Electrical	
Contract Amount	3,525,000.00	100.00%	2,550,000.00	100.00%
Work Completed	2,937,380.00	83.33%	2,010,535.00	78.84%
Balance to Finish	587,620.00	16.67%	539,465.00	21.16%

Completed Works and Stored Materials

	Mechanical/Plumbing		Electrical	
Work Completed	2,937,380.00	83.33%	2,010,535.00	78.84%
Stored Materials	258,000.00	7.32%	75,000.00	2.94%
Completed & Stored	3,195,380.00	90.65%	2,085,535.00	81.79%

Deductions Per Project Manager for Remediation

	Mechanical/Plumbing		Electrical	
Work in Place	2,795,887.70	79.32%	2,011,646.83	78.89%
Deductions	(1,454,800.00)	-41.27%	(713,100.00)	-27.96%
Adjusted Balance	<u>1,341,087.70</u>	38.05%	<u>1,298,546.83</u>	50.92%

184. Payment Certificate No. 20 showed a negative balance of \$9,248,094.77 indicating that the Contractor had been overpaid. The subsequent three certificates issued for December 2009, January 2010 and February 2010 prior to termination also showed negative amounts, indicating overpayment to Carimex. The overpayment on the February 2010 certificate was \$8,530,915.94.

Assessment of MEP for Remediation

185. *Testing of the MEP installations revealed significant deficiencies requiring costly remediation.*

186. After the contract with Carimex was terminated, the Government engaged James Todman Construction Ltd to weather proof the building to prevent water infiltration. Arup USA was issued a second contract to identify a testing and inspection regime for the MEP installations. The report for the testing (Remedial Scoping Task 1- MEP/FP Testing Regime) was issued in May 2010. Arup was then awarded a third contract, this time to source a suitable agency to test the MEP installations.

187. Arup reported requesting proposals from eight agencies and receiving two responses. These were Hill International for \$795,918 and Turner International for \$193,400. Arup assessed the submissions and recommended Hill International to perform the testing. Cabinet waived the tender process and approved an award of contract to Hill International. The testing was performed in October – November 2010 and a report on the results issued on 19 November 2010.

188. The Hill Report concluded that:
“several large mechanical and electrical systems will likely need to be removed and replaced. The HVAC duct work and Medical Gas Systems were poorly installed as the installer did not follow good

construction practices or the requirements under the contract documents for the installation of these systems. Further, all the 480V electrical feeds that were pulled with the petroleum based grease may need to be removed and replaced, including the existing conduits, as the installation is in violation of the contract documents. Also, all existing low voltage receptacle boxes will require replacement as they are not sized correctly.”

189. The Hill study was performed almost a year after the project was suspended and the contract with Carimex subsequently terminated. In addition to deficiencies in workmanship the report referred to incomplete works, flooding of the electrical switch gear and rusted equipment that had been improperly stored. Some of the damage caused by the equipment existing in an unconditioned environment for an extended period of time could not be assessed.

190. The Hill Report listed final recommendations for the Mechanical, Plumbing and Electrical systems into four categories:

- i. Systems/Equipment Currently Installed and will function,
- ii. Systems/Equipment that will require minor repairs to be put into service,
- iii. System/Equipment requiring replacement or Major Works, and
- iv. Systems recommended for Cost Benefit Analysis to determine whether they should remain in place or be removed and replaced.

191. The areas which were listed for correction in the Hill Report are indicated in the schedule that follows.

Systems/ Equipment	Requiring Minor Repairs	Requiring Replacement or Major Works	Recommend Cost Benefits Analysis
Mechanical	<ul style="list-style-type: none"> - Three chilled water pumps, - Chilled water piping system (dielectric unions, joint sealing and leak repairs) - All VAV boxes (some space coordination issues need to be resolved). 	<ul style="list-style-type: none"> - Replace 15 fans on the rooftop that had been exposed to the elements and showing signs of rust. 	<ul style="list-style-type: none"> - HVAC duct work

Systems/ Equipment	Requiring Minor Repairs	Requiring Replacement or Major Works	Recommend Cost Benefits Analysis
Plumbing	<ul style="list-style-type: none"> - Sanitary waste and venting (slope waste lines correctly) - Storm water (fix two small leaks on level 6) 		<ul style="list-style-type: none"> - Medical gas piping - Domestic water system (hot & cold)
Electrical	<ul style="list-style-type: none"> - Main switchboards - Main transformer - Low voltage circuit outlets boxes - Cable trays are not grounded - Temporary power - Feeder cables at the primary transformer - Completion of locking nuts on all conduit/j-boxes - Replace single device box where multiple devices boxes will be installed - Correct outlet and switch boxes in various rooms to specifications - Check all conduits entering panel boards for missing locknuts, bushing and for tightness - Clean panel boards, transformers and switchboards thoroughly 	<ul style="list-style-type: none"> - Install Floor and wall sleeves - Install insulated bushings on all of the feeder conduits and j-boxes entering electrical equipment - Install Shunt Trips on elevator breakers - To reference GE specifications on ATS and switch gear - Replace water damaged UPS - Complete generator installation - Install cable wedges in conduit risers - Remove of valvoline grease from feeder cable and conduit if necessary - Anchor all equipment for seismic zone 4 - Replace main transformer vault and cable - Replace all feeder cables that failed megger tests 	<ul style="list-style-type: none"> - Replacement of 20amp and 30amp circuits with the correct colour wire (system will function as installed) - Some panel boards installed upside down. Can be modified to work if necessary.

192. Testing for mold was also performed and samples of contamination were found in various sections of the duct work, the drywall and other areas of the facility.

193. In the end, the cost of assessment and testing of the MEP works was \$1,073,525.02 as indicated below.

Cost of MEP Assessment and Testing

Contractor/Firm	Amount
Hill International	736,670.02
Arup USA Inc.	336,855.00
Total	1,073,525.02

Continuation of the Works

194. *James Todman Construction Company (et al) was awarded two major contracts totaling \$34,983,315 to complete the New Peebles Hospital Project.*

195. With the termination of the Carimex contract, the Government sought to put in place other arrangements to finish the works. Management of the New Hospital Project was assumed by the Ministry of Finance and a decision was taken for continuation of the works to be divided into two major contracts. The first would be for the Building Envelope and External Works and the second for the Internal Fit-Out Works.

Building Envelope and External Works

196. *The responsive tenders for the Building Envelope and External Works were rejected and the contract awarded to James Todman Construction Ltd for the works.*

197. A selective tendering process was engaged for the Building Envelope and External Works. Three local companies that had prequalified via an open prequalification process were invited to make submissions for the works in October 2010. These were ADC Construction Ltd., Larry Adams Construction and James Todman Construction Ltd. Their tenders were opened on 18 November 2010 with the following results:

Tender Submissions for Building Envelope and External Works

Contractor	Tender Sum	Days	Status
ADC Construction Ltd	3,593,342.26	248	Responsive
James Todman Construction Ltd.	4,174,444.22	252	Non-Responsive
Larry Adams Construction Ltd	4,800,290.53	240	Responsive

198. The pre-tender estimate provided by BCQS for the works was \$4,267,666.00.

199. James Todman Construction Company Ltd (JTCL) did not satisfy the requirement for the security bond and was deemed non-responsive. The remaining two submissions were assessed by BCQS.

200. ADC Construction Ltd's bid was deemed too low for the proposed works and Larry Adams Construction Ltd too high and therefore not a good value for money option. BCQS recommended that negotiations be undertaken with the two responsive contractors and with James Todman Construction Ltd (provided that the company could correct the bond issue) with a view to securing a better outcome.

201. In response, the Ministry of Finance recommended to Cabinet re-tendering of the project with the same three contractors. Cabinet on 23 February 2011 decided instead to reject the prior tenders, waive the tendering process for the Building Envelope and External Works contract and directed that the New Peebles Hospital Steering Committee to commence negotiations with the non-responsive tenderer James Todman Construction Ltd to undertake the works.

202. A letter of intent was issued to James Todman Construction Company on 3 March 2011 and the Contract for the Building Envelope and external works signed on 11 May 2011 in the amount of \$4,174,444.22. Work commenced in May 2011 and was scheduled to be completed on 6 February 2012.

Internal Fit-Out Works

203. *The Tendering process for the Internal Fit-Out Works was waived and the contract was awarded to joint venture James Todman dck Construction Ltd for \$30.8 million.*

204. The Internal Fit-Out Works contract was to address all the MEP issues identified in the Arup and Hill reports as well as to complete the other unfinished works on the interior of the building.

205. On 23 February 2011 Cabinet waived the tendering process for the internal works contract and authorized the New Peebles Hospital Steering Committee to engage in negotiations with two prospectives, InterHealth Canada and the joint venture James Todman Construction Company and Hill International, simultaneously for the contract to execute the internal works.

206. Six months later in August 2011 Cabinet directed the Peebles Hospital Steering Committee to enter into further negotiations with joint venture James Todman Construction Ltd and dck Worldwide to perform the works.

207. A later Cabinet decision, on 19 October 2011, resolved that the contract for the internal works would not be awarded until that a joint venture entity was formed in which James Todman Construction Ltd, was comfortable.

208. On 4 November 2011 the Government signed a contract with the joint venture James Todman dck Construction Company Ltd (JTdck) for \$30,808,870.88 to perform the works. The trade license for JTdck was issued on 3 November 2011 and the decision was not ratified by Cabinet either prior to, or after the contract signing.

209. Works commenced in May 2012 by JTdck and were scheduled to be completed in 461 days.

210. In effect the Government had signed two contracts totaling \$34,983,315 to complete works that the Carimex contractor was obligated to do for \$8,988,906.35.

Application of Process and Contract Provisions

211. *Continuation of the works saw a change in management approach and greater flexibility in decision making for expediting the works and securing better relations between the parties.*

212. The management of the continued works on the New Peebles Hospital project highlighted significant differences in the way disputes and obstacles were addressed. Management of the project had been assumed by the Ministry of Finance for continuation and in November 2011 transferred back to the Ministry of Health and Social Development.

213. Some issues similar to those that led to a breakdown between the parties in the Carimex contract occurred during the James Todman Construction Company Ltd and James Todman dck contracts and were handled differently by the Government. These included:

Amendment to Contract/Deed of Variation

214. The contract for the Internal Fit Out Works required that the JTdck put up a cash bond of \$3,080,887 as a guarantee to the advance payment. The contractor in correspondence dated 23 May claimed that they were unable to satisfy this requirement because of cash flow issues. Two weeks later the Government waived the requirement for the bond and signed an amendment to the contract removing this clause. This had the effect of releasing the contractor from a three million dollar obligation. In contrast, the deed of variation that should have incorporated the addendum and reinstate other significant clauses to the contract with Carimex was never resolved.

Performance Bond

215. Both contracts issued to James Todman et al for continuation of the works allowed insurance bonds to be issued in satisfaction of security performance requirement. The insurance bond submitted by JTdck for the Internal Fit-Out works was rejected by the Financial Services Commission on 2 February 2012 because it did not satisfy the required minimum solvency margin.

216. A second insurance bond procured by JTdck on 18 April was submitted and through an expedited process approved by the Commission by 18 May 2012. In comparison the process to approve the bond for Carimex lasted ten months.

217. In addition, The Government's non-acceptance of Carimex's insurance bond after it had been approved by FSC was based on the absence of a clause requiring "payment on demand" to the Employer. The JTdck insurance bond did not have this requirement and this was not deemed an impediment.

Supervision

218. With continuation of the works additional resources were engaged to provide improved supervision on the project. Throughout the construction of the New Peebles Hospital, the Project Office was staffed by the Project Engineer and a Clerk of Works. In 2012 local architect Shaina Smith was engaged at \$84,000 per annum to assist with project management and Mr. Daniel DeMeyers (formerly of PSP) was contracted to the team as a quality engineer at \$200,000 per annum for the remainder of the project thereby strengthening the project office and securing ongoing quality assurance for the project.

Project Financing and Costs

219. *The project was financed primarily through loan funding procured from the Social Security Board and Banco Popular.*

220. The 2006 budget estimate for the New Hospital Project was \$60 million in loan funds and \$25.8 million from local resources. By 2013 the Government had borrowed a total of \$95 million for the project.

221. Loan funding of \$50 million was provided by the Social Security Board and drawn down in several installments from 2007 to 2009 to cover certified payments to Carimex.

222. On 29 September 2009 the House of Assembly approved borrowing of \$45 million from Banco Popular de Puerto Rico (Banco Popular) of which \$30 million was to be applied to the New Hospital Project and \$15 million to other projects. The loan agreement was signed by the Government and Banco Popular on 8 October 2009 and was secured, in part, by a \$30 million charge on the assets of the BVI Health Services Authority.

223. The signed loan agreement stipulated that \$30 million would be applied to the New Peebles Hospital Project and \$15 million would be earmarked for other projects, as directed in the House of Assembly's decision. The agreement however went further by including a provision that allowed the Government to apply the full amount of the loan towards the new hospital project.

224. The Treasury records show payment of \$88,566,292 from loan funds at the end of 2013 indicating that \$38,566,292 of the Banco Popular loan was applied to the New Peebles Hospital Project leaving only \$6,433,708 available for other purposes.

225. At 31 December 2013 the project was substantially complete and an amount in excess of \$119 million had been spent on the New Peebles Hospital project. With completion, Carimex's claim (amended to \$27,759,496 in February 2012) will have to be assessed and addressed by the parties. This could potentially result in an increase in the overall cost of the project.

226. Payments to the primary contractors on this project were as indicated in the table that follows. The amounts do not include an additional \$2 million that was spent from a hospital equipment provision as we were unable to determine whether, and how much of that amount was spent on equipment for the new hospital. Other payments are likely to occur during the course of 2014.

Vendor	Total	Development Fund	Loan	Consolidated Fund & Other	
Carimex, LLC	62,868,424.59		52,868,424.59	10,000,000.00	**
James Todman Construction *	35,423,514.63	70,541.37	35,352,973.26		
Page Southerland Page	6,646,442.59	6,646,442.59			
BCQS International	3,034,888.76	2,041,452.21		993,436.55	
Project Office Salaries	2,068,748.43	2,068,748.43			
Medical Overseas Holdings	1,956,418.65	1,956,418.65			
Nagico Insurances	1,041,884.00	624,484.00		417,400.00	
Interhealth Canada	892,628.00	701,584.00		191,044.00	#
Biomedical International	776,010.90	431,117.16	344,893.74		
Hill International	736,670.02			736,670.02	
Arup USA Inc.	336,855.00	191,255.00		145,600.00	
Hornagold and Hill	144,482.24		144,482.24		
Other	3,837,562.95	3,837,562.95			
Total	119,764,530.76	18,569,606.36	88,710,773.83	12,484,150.57	
* Includes payments to JTdck		** Paid from IPOC funds		# funded via an advance	

227. The \$10 million advance made to Carimex in 2009 (shown in the last column) was sourced from the IPOC deposit account and payment of \$191,044.00 to Interhealth was made from an advance account.

228. Payments of \$838,837.78 made to HL Stoutt Community College for a nursing programme and \$8,581,083.84 issued ADC Construction for the Hospital Annex were also made from the New Peebles Hospital Project budget. These amounts are not included in the schedule above.

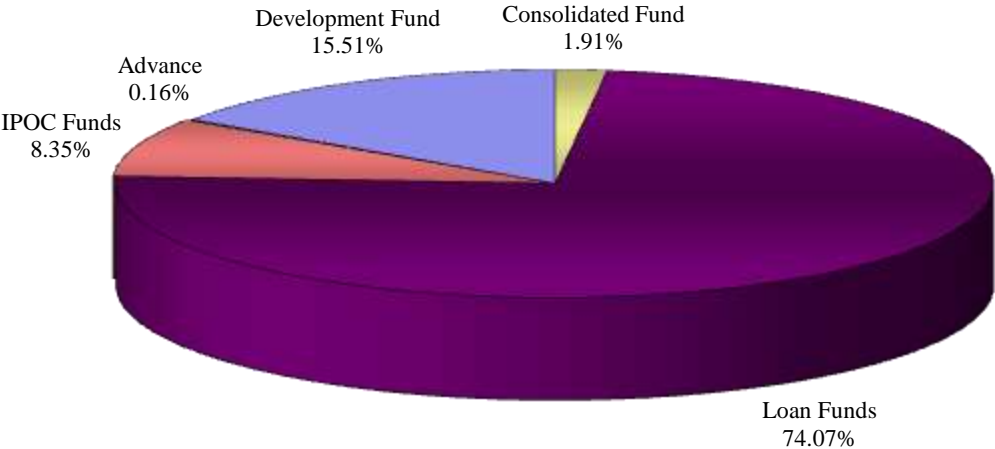
229. The project was spread over a number of years and funded from various accounts under the Ministry of Health and Social Development and the Ministry of Finance. As a result there may be other related expenditures that are not included in the above.

230. Funding for the project was derived as follows:

New Peebles Hospital Project - Funding Sources

Funding Source	Actual Expenditure	%
Loan Funds	88,710,773.83	74.07%
Development Fund	18,569,606.36	15.51%
Consolidated Fund	2,293,106.57	1.91%
IPOC	10,000,000.00	8.35%
Advance	191,044.00	0.16%
Total	119,764,530.76	

Funding Sources



Conclusions

231. The Government selected Carimex for construction of the New Peebles Hospital Project in an attempt by to secure execution of the project by what it considered to be the most cost efficient means and in keeping with the PSP's estimates of reasonable costs. However, based on the submissions of the other contractors and the subsequent variations incurred on the project, PSP's cost estimates may have been understated and the contract amount therefore insufficient for completion of the works.

232. The Contractor's cost submission and timetable were at best ambitious and at worst, unrealistic. The manpower and resources provided fell short of supporting the construction timetable which contributed to the continuous deferral of the completion date.

233. Failure of the Government to resolve conflicts and issues quickly and efficiently led to a breakdown in relations between the parties and contributed to the failure of the contract.

234. Putting the project first meant engaging in effective negotiations on matters impacting performance on the project and goodwill between the parties. The inability of the Government to import flexibility and address matters in a manner conducive to preserving the professional integrity of the relationships under the BVIG/Carimex contract resulted in the escalation of issues that could otherwise have been resolved.

235. The application of contractual terms that served to deprive the Contractor of funds needed to resource the project may have compromised the Contractor's ability to provide a quality product. Other steps should have been explored that would not have a negative impact on the product. This is especially so as the Contractor was known to be having cash flow issues.

236. The Performance Security issue was, unnecessarily, allowed to escalate into a drawn out and contentious affair. The ready solution, of claiming/withholding the full amount, was provided in the contract document and could have been applied in a manner which would preserve the working relations between the parties.

237. Supervision of the MEP works on the project was insufficient and ineffective on both sides of the contract. As a result, the substandard installations on the MEP works were allowed to progress almost to completion before they were brought to a halt by the observations of a third party. This failing resulted in breakdown of the contract and substantial additional costs to the Government.

238. The Contractor failed to correct the issues highlighted in the PSP and Project Engineer's reports and the Project Engineer failed to require them to do so. The monthly reports issued by PSP and the Project Engineer provided regular updates on the status of the project. The reports however did not highlight the significance of the deficiencies in the MEP workmanship and the impact of the Contractor's continued failure to address the issues. As a result the severity of the breaches was not effectively communicated and steps to have the same addressed not suitably pursued until November 2009 when notices to correct were issued.

239. By engaging in direct and independent negotiations with the Contractor to the exclusion of the Ministry of Health and Social Development, the Financial Secretary exceeded his authority on this project that should be limited to advice, support, guidance and process.

240. The addition of BCQS consultants to the Project was effective in providing direction and strategic guidance for the Government. It also provided the Project Office with support and expertise in dealing with the Contractor more effectively.

241. The strengthening of project supervision under the Building Envelope and External Works Contract and the Internal Fit-Out Works contract was beneficial as it provided ongoing quality assurance on the project.

242. Despite the many issues plaguing the project and its implementation the New Peebles Hospital is an impressive facility with the garniture, size and potential to become a leading health care provider in the Eastern Caribbean.

Recommendations

1. Greater consideration should be given to the results of the tender process when it is, in all respects, properly engaged. This includes adoption of the Tender Assessment Board's recommendations. The Board should be comprised of individuals sufficiently knowledgeable about the project and deemed sufficiently skilled to make reliable and sound recommendations.
2. Contract terms should not be used in a manner that could be detrimental to the project. The contract document sets out the terms and conditions of the relationship for mutual benefits of the parties and is intended to promote conditions for the best possible outcome on the project. It is counterproductive and detrimental to apply these terms to the extent where the project might be compromised. It is not possible to anticipate all of the issues at the outset of a project and the parties must be prepared to address disputes as they occur in a manner that is fair and equitable to promote continued goodwill for the best possible outcome on the project.
3. Disputes arising on projects must be addressed early to prevent escalation of issues as these could have an impact on the project's outcome and costs.
4. All senior government officials should undergo a mandatory course in project management. This should include segments in dispute resolution and negotiation.
5. The Public Works Department needs to be strengthened and staffed so that it is capable of providing support and advice on Government projects in distress. The costs associated with the number of external consultants that were brought in to assess this project in the latter stages could have been significantly reduced.

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