



Audit Examination of the East End Harbour Development Project



Office of the Auditor General
British Virgin Islands
15 December 2009

INTRODUCTION

1. The East End Harbour Development Project was conceived as a development initiative for the 7th and 8th districts that would address a number of growing social and environmental issues and provide a base for continued development of the area for residents in particular, but also to facilitate small scale industrial enterprises and provide a boost to tourism in the area.
2. The project involved development of both the marine and terrestrial shoreline with the reclamation of certain areas to expand usable land base. It included the reopening of the **waterways** to improve circulation, promote the development of mangrove clusters and to preserve the delicate marine ecosystems in the area. The project would also include improvements to the physical infrastructure with roads, the possibility of a promenade and provision for drainage and sewerage handling.

AUDIT OBJECTIVES

The objectives of this audit were to assess:

- a. whether a plan with properly defined objectives existed for the development;
- b. whether the project is being implemented as per proposed plan (above);
- c. the impact of the project;
- d. the adequacy of management practices, controls and reporting systems for the project;
- e. whether the associated costs fall within stipulated budget and payments made complied with government policies and procedures;
- f. whether value for money was obtained for all expenditures;
- g. whether there are adequate plans for the usage and maintenance of the site when the project is completed.

AUDIT SCOPE and METHODOLOGY

3. The audit covered all activities associated with the execution of the East End Harbour Development Project. The review encompassed the examination of controls, the acquisition and usage of resources and the work completed to date and an analysis of the proposed plan.
4. In carrying out this audit information was obtained from:
 - i. Interviews which were conducted with requisite government personnel and other key stakeholders;
 - ii. Documents which were held on a file in relation to the project;
 - iii. Observation of reclamation site;

The Project

5. Discussions of the project initially appeared in the East End/Long Look Master Plan which was completed in 1978.

6. In 2000 a proposal prepared by the Chief Conservation and Fisheries officer called "East End, Fat Hogs Bay Waterfront Development Project" provided a basic outline for a three phased implementation plan. It also briefly mentioned the economic and environmental issues for the project, and established timeline for implementation. The report included a list of the relevant departments and agencies whose involvement would be required to move the project forward. This report led to the establishment of a Management Committee which was charged with the responsibility of managing the implementation of the works.

7. In 2001 an amount of \$3.5 million was included in the Chief Minister's capital budget to be phased over a period of three years. One year later, approval was given by the Ministry of Finance and the Ministry of Natural Resources and Labour for site work on the project to commence pending arrangements for a master plan to be developed. Civil and drainage works were initiated in 2002 and spanned a period of approximately four months. The project was suspended at the end of the year.

8. In December 2003, the representatives for the 7th and 8th districts requested that a plan be developed by the Conservation and Fisheries Department so that the project might move forward. In response, the Conservation and Fisheries Department in May 2004 submitted a proposal for re-opening the channel at Joe Rhymer's Bay in what would be a continuation of phase one of the project. The Department solicited and procured a bill of quantities from PWD and estimates from three contractors for this work. Agreements for the three contractors were prepared but not executed.

9. Five months later in October 2004, the Town and Country Planning Department submitted its proposal for the project which presented three options for the development. The major difference in each option was in how the infrastructure would be developed to accommodate vehicular traffic and the impact this would likely have on the project and its stakeholders.

10. The first option provided for the upgrading of Blackburn Highway and existing roads, leaving the development exclusively for recreation, the second option suggested that a coastal road be created along the reclamation to facilitate transportation from the airport westwards. The third (and perhaps least desirable) option provided for a coastal road to be engineered through privately owned property which would involve extensive negotiation and land acquisition by the government.

11. The Town and Country Planning Report also examined the environmental and social impact as well as the effect on the developing pleasure boating industry in the area. The plan did not however provide any estimate of costs.

12. A decision was taken that Option Two would be adopted and that the project should resume, to be executed in three phases. Phase I would cover the area from Penn's Landing to Chalwell Marina, Phase II continues from Chalwell Marina to Major Bay and Phase III would

13. take the project on from Major Bay to Fat Hogs Bay. Each phase would require dredging of the seabed, installation of rock armour and bulkhead and reclamation. Phases II and III would also include the construction of retention ponds (one each). The Ministry then engaged a project manager, HR Penn and Associates, on contract to oversee the works.

14. Work on the site resumed in December 2004 with various contractors transporting material to the area under the supervision of the Project Manager. This continued into 2005 when there was a significant increase in activity. The progress report submitted by the Project Manager for this period indicated that works on Phases I, II and III were taking place simultaneously.

15. As a cost saving measure, attempts were made to use fill/dirt that could be acquired free of cost. This was usually taken from government sites (i.e. Public Works, HLSCC), private individuals who had fill that they wanted removed from their property and from areas around the island where fill had been deposited. Despite this, large sums of money were spent with three companies (Skelton Quarry Ltd, Autland Heavy Equipment Construction Co. Ltd and STO Enterprise Ltd.) to supply core rock material for the project.

16. During the years 2006 and 2007 activity on the project declined significantly and was limited primarily to excavation and dredging as required for Phase II of the plan. Correspondence from the Project Manager to the Chief Minister dated 7 February 2007 stated that the majority of the project had remained unchanged since August 2005 and in order to protect the work that has been completed it was imperative that the remainder of the work be undertaken as soon as possible. The activity on the project was, nonetheless, suspended at the end of 2007. At that time the progress reports indicated that Phase II and a substantial portion of Phase III of the project had completed.

17. At the time of the audit the Project Manager advised that the East End Harbour Development Project was approximately 90% complete. The records indicate that the total expenditure incurred was approximately \$2,060,720.

AUDIT FINDINGS

Project Oversight and Coordination

Commencement of work prior to development of a clear plan of action

18. Work commenced in 2002 before any meaningful research was done on the project viability, potential benefits and impact. Petty Contracts were issued to Pyramid Analytics for engineering services, Tomasteben Ltd for Project Management services and Romney Penn for architectural services,

19. This initial venture involved a significant amount of civil works and resulted in expenditure of \$279,672.00, primarily for the purchase and transportation of fill and also for

payment of professional fees. The works ceased, as they began, in 2002. Attempts to obtain progress reports on the project status and issues for this period were unsuccessful as the relevant files could not be sourced.

Absence of Tendering

20. None of the major contracts executed for this project were the result of the public tendering system. The tender process was waived for the following:

- i. The hiring of a consultant (Tahal Consulting Engineer - \$500,000) to conduct feasibility study;
- ii. The hiring of a project manager, R.A. Penn Ltd for a sum of \$165,000. Although RA Penn was engaged in 2004, the contract was not executed until 13 September 2005.
- iii. The supply of core rock armoring material by Skelton Quarry Ltd at a rate of \$24 per ton for less than 20,000 tons and \$20 per ton in excess of 20,000 and Autland Heavy Equipment construction Co. Ltd, for the project in the amount of \$16 per ton.
- iv. The engagement of a firm (Flex Engineering for a sum of \$145,800) to perform the dredging works required for Phase I of the project;
- v. The engagement of a firm (Flex Engineering for a sum of \$170,000) to perform the dredging works required for Phase II of the project.

21. Estimates were requested for the dredging of Phase 1. Three bids were received by the Project Manager and forwarded to the Chief Minister's Office for review. These were from Sandwise Heavy Equipment Ltd, Bert's Trucking and Heavy Equipment and Flex Engineering. The submissions were deemed too cost prohibitive and a decision was made to pursue formal tendering through the Public Tenders Committee. The contract was subsequently awarded to Flex Engineering (as indicated in item iv above) after the public tender process was waived.

Billing Discrepancy

22. The project manager supervised and coordinated the project and acted as liaison between the Ministry, contractors and others engaged on the project. R.A. Penn Associates held meetings with contractors, carried out site examinations and engaged professional firms to authenticate the services provided by contractors and vendors.

23. In performing his duties he uncovered a discrepancy in the quantity of the fill material that one of the contractors, Autland Heavy Equipment Construction Co., claimed to have delivered to the site.

24. A total of \$267,500.00 was billed on two invoices by the vendor for 45,000 cubic yards of fill material deposited on the site. The Project Manager thought the quantities billed to be overstated and hired a firm of private surveyors (Chalwell Surveying) who assessed the material on site to be 28,477 cubic yards. The surveyors also recommended that payment should be made to the vendor at a rate of \$5.63 per cubic yard.

25. The contractor disagreed with the assessed quantity but accepted a proposal by the Ministry to receive payment for 37,301 cubic yards at a rate of \$5.63 for a total of \$210,004.63.

Inadequate Information Management

26. The examination indicated that information about the project and its progress was not well documented and managed.

27. One of the responsibilities of the project manager was to report back to the Ministry on the progress of the works. There were however no established guidelines for the format and content of the required project reports. As a result, the details provided in the reports failed to provide the Chief Ministers Office with the information that was needed in order to ascertain the status of the project or to make decisions that were necessary for its continuance. Despite this, payments were authorised and the project continued to move forward.

28. Various correspondence pertaining to the project made reference to documents which could not be found on the files. Missing information included the study by Tahal Consultants which proposed a 1.5 million dollar budget for the waterfront development and some site records and reports from the Project Manager.

Town and Country Planning's Recommendations

29. The proposal provided by the Town and Country Department and its subsequent follow up) articulated a number of issues and requirements that needed to be satisfactorily addressed to ensure the effective implementation of the project. During the audit we examined these requirements to assess whether and how they were applied. Some of these are below.

TCP Recommendations

- i. *The BVI Government should assume the role of the developer with the project being administered by the Ministry of Communications and Works with the assistance of the Town and Country Planning Department.*
- ii. *Agreements with individual landowners whose parcels are impacted by the reclamation work should be documented.*
- iii. *Harbour Hydrodynamic studies should be performed in order to evaluate the impact of the project and determine remedies to minimize them.*
- iv. *A sewerage waste management plan should be developed.*

30. Apart from the proposal they submitted for the project, the Town and Country Planning Department, like the Ministry of Communication and Works, was not involved in its implementation. Failure to involve these two government agencies eliminated a valuable source of information and guidance that was necessary for the successful implementation of the project.

31. There are no documented agreements between landowners whose parcels are impacted by the reclamation work.

32. Interviews with the landowners conveyed a sense of frustration over the handling of the project which they expressed in correspondence sent to the Ministry and action taken to block access to the reclamation site (as depicted in the pictures below). Many of the landowners indicated that they would be willing to take legal action against the Government if the matter was not resolved amicably.



33. Some of the complaints conveyed by the property owners in interviews included:
- i. Anger and disappointment that they were not apprised of the project in a formal manner and only became aware of it via town meetings or by observation of the work as it progressed.
 - ii. Feelings of disenfranchisement. Prior to the reclamation project landowners owned beach front property, however after the implementation of this project they lost the right to such property since the reclaimed land now occupies the beach front area. This has made many angry because the change in the location of the land also affects the value of the property.
 - iii. Feeling that they should have the right to own the property created adjacent to their property once the reclamation is complete. They also believe that the reclaimed land, if it is sold, should be sold to them at a reasonable price since the implementation of this project has negatively impacted their property value.
34. In addition, despite the recommendations of the Town and Country Planning Department, no evidence was found to indicate that the *Harbour Hydrodynamic* studies were completed or that a sewerage plan was developed and incorporated. Implementation of the project without the sewerage plan is expected to further complicate the existing sewerage problems in the East End area.

DRAWBACKS

35. The drawbacks of reclamation are apparent at the site. Many of these were due to the fact that the works were incomplete. Some of those observed were:
- i. The prevention of the free flow of water between the land and the sea. This has resulted in the stagnation of the water and a stench in some areas.
 - ii. Entrapment of fishes in the area.
 - iii. Increased sedimentation in the area which is causing the death of marine vegetation.
 - iv. Accumulation of litter in the closed waterway.
 - v. Mounds of dirt and sand which take away from the aesthetics of the area. (see below and the appendix for photos).
 - vi. The absence of any provisions for the maintenance of the area once the project is completed.





Financial Information

36. The East End Harbour Development Project was first included in the Capital Budget estimates for the Chief Minister's/Premiers Office in 2001 with a budget of \$3,500,000.00.

37. By the end of 2002 a total of \$244,234.52 was spent on the project with amounts of \$24,062.50 and \$11,373.00 still outstanding to Pyramid Analytics and Tomasteben Ltd respectively. These amounts were paid at the end of 2003 although the project appeared inactive during 2003 and 2004. At the end of 2004 a total of \$286,872.02 was spent on the project.

38. The major expenses incurred on the project occurred in 2005 – 2007. A review of the payment shows that a total of \$1,773,848 was expended during this period. The total expenditure for the period 2002-2007 was \$2,060,720.95 as shown below. These amounts are within the budgeted \$3,500,000.00 but the works remain incomplete.

Description	Amount
Management	\$155,687.50
Material	776,012.44
Excavation & Trucking	779,441.01
Dredging	313,800.00
Survey	7,000.00
Miscellaneous	28,780.00
Total	\$2,060,720.95

RECOMMENDATIONS

39. Reclamation results in the creation of more land area but if improperly performed, can cause the loss of habitat and the death of marine vegetation due to sedimentation from landfills and increased turbidity. This project if not carefully managed could damage the environment and become a financial burden on the public purse.

40. The recommendations made in the Town and Country Planning Project Proposal are still valid and some of these are included below.

1. The Departments and Ministries with the expertise necessary to assist with the implementation of this project should be consulted and assigned the responsibility of monitoring the project in order to mitigate and minimize environmental damage and project cost. Those immediately relevant are the Town and Country Planning Department, Conservation and Fisheries, Natural Resources and Labour and Communication and Works.
2. A meeting between the landowners in the adjacent areas and the government should be held prior to continuation of this project. The meeting should be used to update landowners about the project and to gather their concerns with a view to addressing the same. The Ministry of Natural Resources and Labour should be present at such meeting. All land issues should, in principle, be resolved prior to continuation of the project.

3. Reports submitted by Project Managers should be comprehensive. They should clearly state the project objectives and scope, identify in detail the work completed in between the reporting periods, indicate milestones reached, and work still in progress. It should also provide timescales for progress and completion.
4. A system should be put in place to allow for verification of works performed by the contractors. This is especially relevant to trucking and day works operators.
5. An environmental impact study and a Harbour Hydrodynamic study should be performed to assess and minimize damage to the surrounding environs.
6. In order to eliminate some of the problems that occurred in the implementation of this project, a manual outlining basic procedures for the management and monitoring of Government projects should be adopted and enforced. The Project Management Unit can be consulted in this regard.

Sonia M Webster
Auditor General
Government of the Virgin Islands

EAST END RECLAIMATION PROJECT



