

NIDCO'S COMMENTS

on the Armstrong Report
prepared for the Joint
Consultative Council for the
Construction Industry and
submitted to NIDCO for its
Consideration

NOVEMBER 2014

National Infrastructure Development Co. Ltd.
3 Melbourne Street, Port-of-Spain
Tel. 1 (868) 624-5543
www.nidco.co.tt



[page intentionally left blank]

Background

This document has been prepared in response to a request made by the Joint Consultative Council for the Construction Industry (JCC) via a letter dated October 10, 2014 addressed to the President of the National Infrastructure Development Company Limited (NIDCO).

Following this formal request, NIDCO convened a meeting with representatives of the JCC and its own external consultants to discuss the matter. At the meeting, NIDCO agreed to prepare and submit a report to the JCC, containing its comments on what is commonly referred to as the 'Armstrong Report'.

This report is prepared for the consideration of the JCC only. Both the JCC and NIDCO are very conscious of and respect the fact that there is pending before the High Court a constitutional motion CV2012-03205 filed by Dr. Wayne Kublalsingh and six (6) other Claimants. This report is produced at the request of the JCC and is not intended for use in the proceedings before the High Court and neither the JCC nor any other party is at liberty to use this report for such purpose.

This document is structured in two parts. Part One contains the several responses made by NIDCO to the JCC, upon receipt of the Armstrong Report in February 2013.

Part Two presents an account of the actions taken by NIDCO, subsequent to the publication of the Report.

PART ONE:

1 Response to the Armstrong Report by NIDCO and its Consultants upon Receipt of the Report

On February 13, 2013, NIDCO, through its President, Dr. Carson Charles, received an electronic version of a report from the JCC entitled '*Report of the Independent Review Committee of the Debe to Mon Desir Segment of the San Fernando to Point Fortin Highway*'. The Report, submitted under the sole signature of Dr. James Armstrong, the Review Committee Chairman, was presented as the output of a 60-day technical study undertaken on behalf of the JCC to determine whether the State had carried out the relevant studies in respect of the Debe to Mon Desir section of the Solomon Hochoy Highway Extension to Point Fortin (SHHE) project.

At a meeting held on December 3, 2012 NIDCO had undertaken to make available to the JCC all relevant documentation in respect of the Debe to Mon Desir section of the SHHE and the JCC had undertaken to examine all the documentation on the project provided by NIDCO and all other relevant documentation and to produce a Report within 60 days to NIDCO for its consideration and its publication thereafter. It was expressly agreed and understood among the parties attending that meeting that work would continue on the sites of the Highway released to the Contractor.

Following the meeting, the JCC proceeded to settle its own Terms of Reference for the Committee to be chaired by Dr. James Armstrong. Neither NIDCO nor the Government had any input into these Terms of Reference.

NIDCO has considered the Report.

Immediately upon receipt of the electronic version of the Armstrong Report, NIDCO assembled an internal technical team which included the Vice President of Engineering and Programme Management (Civil Engineer), the Senior Project Manager (Civil Engineer), and the Valuation Consultant (Chartered Valuation Surveyor). This internal team made an in-depth analysis of the Reports, including its conclusions and

recommendations. Further, NIDCO's President forwarded the Report to the company's external consultants, namely, Dr. Rae Furlonge (Partner, APDSL); Dr. George Sammy (EcoEngineering); and Andrea Abel (Trintoplan) seeking their urgent comments on the Report's findings. The Report was also sent to the Head of the Environmental, Health and Safety Unit of the Ministry of Works and Infrastructure (MOWI).

On February 14, 2013 NIDCO sent the first response letter to the President of the JCC, acknowledging receipt of the emailed Armstrong Report and explaining the immediate steps NIDCO had taken to review the Report. The letter further requested the JCC to delay publication of the Report to allow for time to address several inaccuracies and inconsistencies that were observed in the Report. These initial concerns included:-

- several statements being factually incorrect;
- some conclusions made did not correlate with the analysis and conclusions of the respective consultants;
- some statements could be easily misconstrued, based on the manner in which they were presented.

NIDCO also expressed its concern that the Report appeared to have been compiled by the Committee Chairman, without the benefit of review and consensus by all members of the Committee.

In addition to this first response of February 21, 2013, NIDCO's President also contacted the President of the JCC by telephone and requested him not to publish the report until the matters of concern raised by NIDCO were addressed. It should be noted that the agreement contained in the press statement issued on December 3, 2013 was that the Report was to be produced within 60 days for NIDCO's consideration and its publication thereafter. In this telephone discussion, the JCC was also advised that NIDCO and its external consultants were studying the Report, which, from preliminary review, had already revealed several factual inaccuracies. It would therefore have been negligent to have published the Report with these errors. The JCC President agreed to allow NIDCO to submit its comments.

Subsequent to NIDCO's internal review of the Armstrong Report, NIDCO responded to the JCC in other letters, one dated February 21, 2013 and another dated February 25, 2013 indicating that the organisation had given in-depth consideration to the Report and clearly outlined NIDCO's position on the findings of the Report. In this correspondence, NIDCO outlined the recommendations that had merit, those that it disagreed with and the reasons for its objections.

The concerns expressed by NIDCO in the letter to the JCC dated February 21, 2013 included the following:-

1. The Report was a collection of working papers prepared independently by various consultants with an Executive Summary prepared by the Chairman. This was procedurally flawed as there was no Report of the Committee. The several papers prepared should be considered working papers and a single, cohesive document representing the findings, analyses and recommendations of the Committee as a whole should have been prepared and signed by all Committee members before transmitting to NIDCO.
2. No consideration was given to the fact that there was in place a \$5.2 Billion construction contract between NIDCO and the Contractor. It was neither proper nor reasonable for the consultants to conduct analyses or arrive at recommendations without giving consideration to the very significant financial and other consequences of suspending or truncating any portion of the contract.
3. There was no protest or appeal against the grant of the CEC by members of the HRM. There was also no protest consequent upon the announcement of the project by the Government in 2010, the turning of the sod in January 2011 or the well-publicized signing of the contract by NIDCO in July 2011.
4. There was no evidence that NIDCO had proceeded with the project in violation of any law.
5. NIDCO agreed with the HRC's view that the entire Highway needed to be planned as part of a comprehensive land use/transportation planning exercise for south Trinidad and confirmed that this was indeed done. NIDCO cited the National Physical Development Plan and South West Regional Plan.
6. NIDCO noted that the HRC had concluded that the EIA was not acceptable although it acknowledged that it addressed the requirements of the TOR. It was not acceptable for the HRC to make an accusation that the EMA improperly "relented" without having given the EMA an opportunity to respond in this matter.
7. In respect of Human Settlement, outline approval had been granted by the Town and Country Planning Division for the Petit Morne Site and Cabinet had already approved the site for the relocation of persons affected by the Highway. The MOWI was in the process of preparing an application for final planning permission and NIDCO did not intend to commence relocation until these approvals were received.
8. The Debe to San Francique Highway Action Committee had identified potential sites for relocation and selected Petit Morne as the preferred alternative. It was

not appropriate for the HRC to select its own site at Golconda having regard to the view expressed by the aforesaid group.

9. Although the primary purpose of the Highway was to reduce traffic and meet the transportation needs of the public, this was treated as a minor issue in the report.
10. The comments under Hydrology and Hydraulics were inappropriate in that they pertained to the Design/Build approach and reflected opinions on procurement policy rather than Hydrology and Hydraulics.
11. There was no instance of entry onto property without legal authority. Due process was at all times followed and the constitutional rights of persons are not being abrogated during the acquisition or other process.
12. The recommendations constitute a list of instructions to cease all work along an entire section of the roadway, which does not itself constitute a single community. It pays no regard to the consequences for the existing contract and the cost to Government and tax payers.
13. There was no identification of the areas of the section where there may have been no significant environmental or other danger.
14. No account was taken of the balance to be made between the risks associated by not proceeding, stopping all work or proceeding only in particular areas.

The letter of February 25, 2013 was sent to update the previous letter, by replacing the comments in respect of Land Tenure and Acquisition, as follows:

1. In respect of Land Tenure and Acquisition at page 8 of the Report, NIDCO assured that there was no entry onto property without legal authority and that under section 3 of the Land Acquisition Act, authority is granted to carry out surveys and investigations. It was also common practice for investigations and studies to be done prior to the start to the acquisition process for the purpose of acquiring a CEC, preparing project estimates or conducting feasibility studies. In such situations, entry was not made onto property without the permission of the owner or occupier. Section 4 notices had been published for all areas released to the contractor.
2. The HRM was not in existence six or even three years ago and no complaint was ever received from community groups of improper conduct.
3. At no time was entry made for construction purposes without Section 4 authority.

4. There was a difference of opinion between the HRC consultants and NIDCO over policies which should govern the treatment of trespassers and/or squatters and these bear no relationship to the issue of due process insofar as the acquisition process is concerned. The law was and has been followed scrupulously.
5. In respect of the statement that NIDCO had not provided written documentation on land acquisition and resettlement measures, no such request had been made.
6. All acquisition procedures followed and all settlements arrived at were done in accordance with the law and was the process previously followed for other Highway acquisitions and all negotiations were carried out by the Commissioner of Valuations, up to that time.

Attached for easy reference, at Appendix 1, are the following documents that constituted NIDCO's response to the JCC following the receipt of the Armstrong Report:-

- (1) Letter from NIDCO dated February 14, 2013, addressed to the President of the JCC (referred to previously);
- (2) Letter from NIDCO dated February 21, 2013, addressed to the President of the JCC (along with comments from both internal and external experts who reviewed the Report on NIDCO's behalf), also referred to previously;
- (3) Letter from NIDCO dated February 25, 2013, addressed to the President of the JCC, amending one (1) item of the previous letter and articulating further concerns;
- (4) Letter from NIDCO dated February 25, 2013, addressed to the President of the JCC, consolidating the previously expressed concerns;
- (5) Detailed technical comments from EcoEngineering Consultants;
- (6) Detailed technical comments from Trintoplan Consultants Ltd;
- (7) Detailed technical comments from Kelvin Ramkisson, Attorney-at-Law;
- (8) Detailed technical comments from the Ministry of Works and Infrastructure, HSE Unit;
- (9) Comments from NIDCO's Vice President of Engineering and Programme Management.

Part Two

2 Actions Taken Subsequent to the Receipt and Consideration of the Armstrong Report

Since the publication of the Report in March 2013, NIDCO has continued consideration of the matters raised in the Report. In respect of the recommendations made, NIDCO has carefully considered them and where applicable and appropriate, has taken steps to address same.

As Project Manager, NIDCO is responsible for ensuring that the people of Trinidad and Tobago receive value for money from this major infrastructure investment. NIDCO has therefore continued to engage in consultations and technical studies, from which adjustments have been and are being made to the design and construction works being carried out under the SHHE project.

Below is an account of how the recommendations of the Report were considered by NIDCO, as part of the ongoing process of consultations, reviews, re-engineering and project evaluations in the construction of the Highway:

Recommendation No. 1:

IT WAS RECOMMENDED THAT no further work be undertaken on the Highway site until all of the conditions contained in the CEC have been fulfilled, including the need for all plans (including Storm Water Management Plan and the Water Management Plan) specified in the EIA to be submitted to the EMA, and for approvals to be obtained from the relevant agencies.

NIDCO ADVISES THAT:

- The Flood, Water Quality and Sediment Management Plan, was submitted to the EMA on August 7, 2012 in accordance with the conditions stipulated in the CEC. Further, the EMA has raised no queries or concerns in relation to this issue.

- All regulatory approvals for the Debe to Mon Desir alignment have been obtained and all conditions as required by the Town and Country Planning Division have been fulfilled, inclusive of approvals from the Regional Corporations.
- All regulatory approvals for all three relocation sites¹ for the Project have been obtained. These include - Certificates of Environmental Clearance, Town and Country Planning Permission, Highways Division Approval, Drainage Division Approval, Fire Services Approval, Water and Sewerage Authority, Regional Corporation Approvals.
- The construction of the Highway is being implemented using the Design-Build Model. This procurement model allows for design and construction activities to occur simultaneously. It is common industry practice that certain plans, such as the traffic management plan, storm water management plan and others are developed not for the entire alignment of the Highway but for various sections and sub-sections as the construction schedule stipulates.

Recommendation No. 2:

IT WAS RECOMMENDED THAT no further work be carried out on the site until all of the conditions attached to Notice of Grant of PP referenced T7M:0440/2007 and Notice of Grant of PP referenced T8N:0443/2007 are fulfilled.

NIDCO ADVISES THAT:

- Without exception, all required final planning permissions from the Town and Country Planning Division, the Regional Corporation approvals and Certificates of Environmental Clearance for all segments of the Highway have been obtained in the legally required sequence.

Recommendation No. 3:

IT WAS RECOMMENDED THAT a proper Social Impact Assessment (SIA) be undertaken before a decision is made whether or not to continue with the Debe to Mon Desir segment of the Highway, given the potential for severe adverse impacts on the resident population and other stakeholders within the immediate and wider area of impact, including the potential severing of extended family ties. In this regard non-relocated residents, and the agricultural stakeholders who would be affected by the loss of their

¹ The sites identified for the relocation of farmers, displaced residents, and landless residents (referred to as 'squatters') are Golconda; Petit Morne, Ste. Madeleine; and Picton, Debe, respectively.

lands, as well as the non-relocated business people who would be affected by the Highway, also need to be drawn into the study.

NIDCO NOTES THAT:

- The HRC Consultant, Mr. Eden Shand, attested to the adequacy of the SIA in satisfying the requirements of the Terms of Reference for the EIA. He further indicated that there was sufficient information to enable a decision to be made on the SHHE project. The Consultant concluded that the EIA complied with the social components of the TOR.
- In March 2013, NIDCO was instrumental in forming a multi-stakeholder Community Working Group for the Debe to Mon Desir section, in fulfilment of a CEC requirement. The Group is comprised of senior and technical officers of the MOWI, NIDCO, AECOM, OAS Construtora, as well as civil society and local government representatives. The Group meets on a monthly basis to discuss social, developmental and construction matters in relation to the SHHE project. The Group has had six meetings to-date and no issues regarding adverse social impacts have yet been raised.
- In respect to the latter part of this Recommendation No. 3, that *“SIA studies should include attention to the alternate routes proposed by the HRM and by MOWT/NIDCO”*, it should be noted that eminent Transportation Consultants, Dr. Rae Furlonge of APDSL and the HRC Consultants, Dr. Philbert Morris and Dr. Trevor Townsend, all agreed that the HRM proposal is not the preferred alternative as it does not provide sufficient capacity for future traffic growth in the area.

NIDCO ADVISES THAT:

- NIDCO has always maintained its sensitivity towards the communities and individuals affected by the construction of the Highway. Hence notwithstanding the HRC Consultant’s favourable opinion on the adequacy of the SIA conducted, NIDCO has proceeded to develop and implement a Social Impact Mitigation Plan, utilizing all information gathered to-date on the Debe to Mon Desir section of the SHHE project. The Plan addresses the social, psycho-social, cultural, economic and environmental issues that impact individuals and the communities in this part of the SHHE project.

The policy objectives behind the Social Impacts Mitigation programme are as follows:

- a. Involuntary resettlement is to be avoided, where feasible, or minimised, exploring all viable alternative project designs.
 - b. Displaced persons are to be consulted and will have opportunities to participate in the planning and implementing of resettlement programmes
 - c. Suitable locations(s) are to be provided to accommodate displaced persons in an effort to preserve or improve their livelihoods and standards of living.
 - d. Fair compensation will be provided for all persons displaced by the SHHE project.
 - e. Relocation of communities are to be done in a holistic way so as to preserve their social, recreational and cultural activities.
 - f. Opportunities for economic activity are to be provided, where feasible, for stakeholders within the relocated communities.
 - g. Special provisions will be made for disabled/differently-abled persons.
 - h. Environmental degradation of ecosystems is to be avoided, where feasible, or minimized so as to sustain the availability of goods and services from them.
- The following measures have been implemented to-date to mitigate the adverse impacts of the construction of the Highway:
 - a) **Reduction of the Right-of-Way (ROW)** - of the Highway from an originally proposed 100m to 60m in some areas in the Debe to Mon Desir section, where feasible. This measure has resulted in a significant reduction in the number of residential structures to be acquired from some 315 originally to approximately 215 in the optimised ROW.
 - b) **Establishment and maintenance of a Community Outreach Centre** in Debe (2011) and a second Outreach Centre in Fyzabad (2014). These centres represent NIDCO's commitment to providing the community with information, physical and psychological support and a channel for ongoing consultation. The Centres operate as a channel for submitting claims for compensation; receive and respond to residents' concerns, individually and collectively; disseminate information through various means such as open houses, town hall meetings and in-office meetings.
 - c) **Provision of free Counselling Services** by a professional psychologist, operating out of the Debe Outreach Centre.

- d) **Acquisition of land by Private Treaty**, through which mutually agreed settlements are reached prior to the acquisition of properties and demolition of structures. To date, a total of 156 of the 275 claims received from residents in the Debe to Mon Desir communities have been fully settled after negotiations.
 - e) **Provision of land for the resettlement of displaced residents**. Displaced residents have been provided with fully developed housing lots at Petit Morne, Ste. Madeleine, at a significantly subsidised price of TT\$50,000. In addition, similarly developed housing lots in Picton, Debe have been allocated to previously landless residents; while farmers will receive 2-acre parcels of agricultural lands in Golconda. The housing development sites have been designed to Town and Country Planning requirements and include spaces for commercial activity, community centres, schools, religious facilities and playgrounds.
 - f) **Provision of suitable rental accommodations** to relocated residents for a period of approximately one (1) year to allow for persons to make new permanent living arrangements.
 - g) **Making provision for family units to remain intact** during the relocation process by providing families with the option to select relocation lots in blocks.
 - h) **Convening of a Community Working Group** for the Debe to Mon Desir section, which fulfills a requirement of the CEC received from the EMA. This multi-stakeholder Committee, which is comprised of project personnel, representatives of local government and community representatives, meets monthly to address residents' concerns, share project information and receive community feedback/input – a structured mechanism that allows for the ongoing engagement of the community throughout the construction process.
- Further, with the support of NIDCO and the MOWI, the main Contractor has initiated the following social activities within the Debe to Mon Desir section and the wider region:
 - a) Publication and circulation of newsletters on providing information on project progress and other useful information.
 - b) Meetings with stakeholders and communities every two (2) months
 - c) OAS Job Recruitment Drive in Penal, Siparia, Point Fortin, La Brea and Fyzabad, in conjunction with the Ministry of Labour to offer employment to residents along the alignment of the Highway.

Recommendation No. 4:

IT WAS RECOMMENDED THAT a Resettlement Plan (showing compliance with the CEC condition that the applicant should pursue resident relocation and resettlement utilising best industry practices) should be prepared and submitted to the EMA before any decision is finalised regarding the resettlement of affected persons.

NIDCO ADVISES THAT –

- The EMA did not and does not require a resident relocation and resettlement plan as a condition precedent to starting work on the Debe to Mon Desir section.
- Notwithstanding, the Government, by way of Cabinet Minute No. 2075-2011/08/11, agreed to make provisions for lands to be utilised for the relocation of affected persons due to land acquisition for the San Fernando to Point Fortin Highway Extension. Specific provisions were made for –
 - The allocation of 5,000 sq. ft. of residential lands at Hermitage to each affected resident
 - The allocation of two acres of agricultural lands at Hermitage to active farmers
 - The allocation to squatters of residential sites at either Housing Development Corporation or Land Settlement Agency sites.
- In keeping with best industry practice and the objective of the Social Impact Mitigation Plan, the selection of the relocation sites was made in an agreement between the government and representatives of the affected community. The Debe-San Francique Highway Action Committee at a meeting on March 3, 2011 between government representatives and residents (including farmers) indicated that the preferred area for relocation was Hermitage. In a subsequent meeting on May 9, 2011 the Action Committee identified alternative sites for relocation, due to the lack of readiness of the Hermitage site, and selected Petit Morne as the preferred alternative for residents and Golconda as the alternative for farmers.
- As noted previously, the relocation of residents has been progressing in accordance with the government's mandate. Displaced residents have been provided with fully developed housing lots at Petit Morne, Ste. Madeleine, at a significantly subsidised price of TT\$50,000. In addition, similarly developed housing lots in Picton, Debe have been allocated to previously landless residents;

while farmers will receive 2-acre parcels of agricultural lands in Golconda. The housing development sites have been designed to Town and Country Planning requirements and include spaces for commercial activity, community centres, schools, religious facilities and playgrounds.

Recommendation No. 5:

IT WAS RECOMMENDED THAT no further engineering operations are to be undertaken on the land at Petit Morne, St. Madeline on which it is proposed to relocate persons residing in the path of the alignment until all necessary approvals are obtained from the relevant agencies.

NIDCO ADVISES THAT –

- Final planning permission for the Petit Morne sites has been obtained from the TCPD and the Regional Corporation. Final planning permission has also been obtained for the Golconda agricultural site and no CEC is required for the relocation of farmers.
- All regulatory approvals for the Picton site has been granted in the form of final planning permission from the TCPD, the Water and Sewerage Authority, the EMA, the Trinidad and Tobago Fire Services, the Drainage Division, the Highways Division, T&TEC and the Regional Corporation.

Recommendation No. 6:

IT WAS RECOMMENDED THAT a quantitative surface and groundwater hydrology model and study of the wetland as a hydrodynamic system should be undertaken in the public interest as part of Best Practice before an informed decision can be made as to whether or not this segment of the Highway should proceed as proposed.

NIDCO NOTES THAT –

The HRC's own Hydrology Consultant indicated that previous studies had met the requirements for the SHHE Project. Further, Dr. Armstrong also concluded that "In the area of hydrology and hydraulics it was felt that the Hydrology Report of 2007 fulfilled the objectives of determining the hydrologic information required for inputs to the hydraulics for bridge and culvert preliminary designs at points of intersection of the highway and river crossings" (pg. 8).

NIDCO ADVISES THAT –

- The Highway is being built using the Design-Build model. As part of its work, the Contractor is undertaking further detailed hydrological and hydraulic studies to ensure that the Highway does not negatively impact the existing drainage system along its alignment. The Drainage Division is required to approve all drainage studies and designs on an on-going basis.
- Further, NIDCO has awarded a contract to Royal Haskoning BV of the Netherlands in association with Haskoning Caribbean Ltd. to conduct feasibility studies and detailed design consultancy services for the South Oropouche River Basin Flood Mitigation and Integrated Watershed Management Project. The objectives of this Study are to develop alternative solutions (i.e. adaptation of drainage infrastructure, water resources uses and overall watershed management) and best management practices, in order to -
 - a) Reduce the frequency and severity of flooding in the basin, thus reducing the risks to lives and livestock and preventing damage to public and private properties and infrastructure;
 - b) Increase the potable water supply, i.e. to capture approximately 3 million imperial gallons per day of storm water (through a process of flood control) for treatment and use for domestic, agricultural and other purposes;
 - c) Reduce the impact of flooding on the socio-economic activity in the watershed e.g. losses to the productive sector as a result of flooding disruption;
 - d) Mitigate environmental degradation and health hazards caused by floods;
 - e) Stabilise the riverbanks;
 - f) Control sedimentation and erosion in the rivers;
 - g) Optimize the use of water resources within the basin;
 - h) Increase agricultural land acreage by controlling saltwater intrusion and reducing flooding.
- A key component of this consultancy will be the development of four (4) hydrological models, each describing the hydrological regime of this Basin. To this end, the consultant will undertake comprehensive analyses of the hydrological and hydraulic characteristics of the river basin, aimed at determining the present operating conditions and design parameters to be applied. The

hydrological analysis will be done taking into consideration the construction of the SHHE Project.

Recommendation No. 7:

IT WAS RECOMMENDED THAT an Environmental Economic Study of this Project must also be undertaken to inform a decision whether or not to proceed with this Highway segment. This should include a cost-benefit analysis, comparing the economic costs of the various alignment alternatives that were assessed to demonstrate the costs of the adverse effects compared with the projected benefits.

NIDCO NOTES THAT –

- A detailed feasibility study was in fact conducted for the SHHE project in 2006 by LEA Trintoplan Consultants Ltd. In that study, an adequate economic evaluation was done for the project. A cost benefit analysis was done as part of the feasibility study. NIDCO has given due consideration to this recommendation and does not see it necessary to undertake a new environmental economic study.

Recommendation No. 8:

IT WAS RECOMMENDED THAT off-site impacts, such as the impact of removing and transporting extraordinarily large quantities of aggregate to be sourced from areas far removed from the Project Area, for example, quarries in the Northern Range, also need to be determined and measures designed to mitigate any negative impacts.

NIDCO ADVISES THAT –

- NIDCO has been working with the Contractor to minimise the impact of the mining and transportation of large quantities of aggregate on the communities along the Highway alignment. In this regard, the Contractor has been purchasing aggregate from established and licensed quarries. Such quarries are regulated by the Ministry of Energy and Energy Affairs and are operated in accordance with their respective CEC conditions.
- Aggregates used on the SHHE project will be taken from locations in Central and South Trinidad, the Northern Range and imported from overseas suppliers.
- In the event of damage to local/community transportation infrastructure caused by the Contractor, the contract provides for such repairs to be effected by the Contractor at its expense.

- It should be emphasized that the Highway route chosen presents the least impact on the wetlands, as well as on the built communities established in these areas over many years. The Contractor is required to protect and maintain existing watercourses and prevent mud, debris and other construction by-products from causing environmental damage and affecting residents.
- It is important to note that no mangroves are to be removed in the Debe to Mon Desir area. Where this has been necessary in other sections, a mandated Mangrove Rehabilitation Plan has been implemented by the Contractor and overseen by the EMA.
- NIDCO continues to be guided by the Certificates of Environmental Clearance for this and other sections and works in continuous collaboration with officers of the EMA who make regular visits to the work sites to provide feedback and guidance, as required.
- This is consistent with current industry best practices which call for an interactive and ongoing relationship between the design builders and the authority responsible for environmental management.

Recommendation No. 9:

IT WAS RECOMMENDED THAT the APDSL studies be continued and that consideration be given to staging highway improvement for the south western peninsula to allow the phased development of the transportation system and minimize the potential for “overbuilding” the road network at the expense of competing land uses and to the detriment of the communities within the direct or indirect range of the alignments.

NIDCO ADVISES THAT -

NIDCO engaged Transportation Consultant, APDSL, to continue its previous traffic management studies in the south-western peninsula. (see under Construction Schedule/Phasing below)

In their report submitted in January 2013, APDSL concluded and recommended the following:

- (1) **Optimum Route.** The conclusion of Dr. Bhesem Ramlal, GIS Specialist and Lecturer in the Department of Engineering at the University of the West Indies, is that, based on the best available spatial data sets obtained from government agencies and GIS consultants and criteria provided by professionals with

significant expertise in physical planning, transportation planning, engineering, the results of the spatial analysis suggest that the route proposed by LEA Trintoplan is valid (see Appendix 2 – *Traffic Feasibility Study and urban Traffic management plan for Debe to Siparia and Surrounding Areas: Least Cost Path Analysis Report*, pg. 12)

- (2) **Primary Arterial Road System is Needed.** An urban primary arterial system is urgently needed to connect the South-Western peninsula to improve accessibility to the major urban centres in the region including Debe, Penal, Siparia, Fyzabad, La Romaine, Oropouche, La Brea and Point Fortin. In order to facilitate the high traffic demand on both the Eastern and Western sides of the region, it is necessary to adjust the new arterial system to be closer to these urban centres from which the high traffic is generated.
- (3) **The Alignment of the Highway is Valid.** It is necessary to continue the new highway through Penal, Siparia, Fyzabad onto Point Fortin with the alignment as suggested.

Construction Schedule/Phasing

Further APDSL Studies (see report of March 2013) made recommendations on the order in which construction should take place in order to systematically address the traffic demands in the south-western region of the country:

- (1) **Completion by December 2013** - a new four lane divided highway from Debe Interchange to Penal Interchange, including Penal connector road, the upgrade of the Cross Crossing Interchange and road geometric improvements to M2 Ring Road between SS Erin Road and Southern Main Road near Paria Suites.
- (2) **Completion by December 2015** - a new four lane divided highway from Point Fortin (Dunlop) Roundabout to Mon Desir Interchange; a new connector road from the new four lane divided highway at Mon Desir to St. Mary's Junction, including interchanges; Southern Main Road with four lanes divided road between St. Mary's Junction and Paria Suites; new four lane divided highway from Penal interchange to Siparia interchange including Siparia connector road; two way two lane single carriageway roadway of the new highway between Siparia interchange and Mon Desir interchange, with a roundabout intersection at Fyzabad and including the Fyzabad connector road and the upgrade of the Connector road to a four lane divided carriageway.
- (3) **Completion by 2020** - the other two lanes of the four lane divided highway between the Siparia and Mon Desir interchanges should be available for public

use. This implies that a delay of three to four years may be considered for the upgrade to four-lane status. There is no significant benefit to be had from such a postponement of the two-lane to four-lane upgrade, considering that the procurement and construction time required for this may be two to three years and will have to be started immediately upon completion of the initial two-lane roadway. However, phased construction of the interchanges at Siparia and Fyzabad is currently being considered and incorporated into 'value engineering' decisions to be implemented.

NIDCO continues to engage the services of APDSL on an ongoing basis with respect to traffic planning within the communities to be serviced by the Highway.

Recommendation No. 10

IT WAS RECOMMENDED THAT all relevant state agencies (including the Commissioner of State Lands (COSL), MOWI, the Valuation Division (VD), and the Ministry of Food Production) together review their policy for the assessment of damage at Section 3 of the LA Act. It was further recommended that the Institute of Surveyors of Trinidad and Tobago (ISTT) be consulted and that consideration be given to including the Agricultural Society and the Law Association. It was also recommended that the Commissioner of Valuation (CoV) ensures proper compliance with the law and Land Economy principles.

NIDCO ADVISES THAT –

- The process of land acquisition is being conducted in accordance with the provisions of the Land Acquisition Act. In this regard the Commissioner of Valuations conducts negotiations for land acquisition on behalf of the MOWI which is the Client Ministry, for this project. In addition, NIDCO has been authorised by Cabinet to conduct the acquisition of lands by private treaty. NIDCO utilizes independent licensed Valuers to determine the market values of the lands. Title searches are performed and background information obtained on the lands and their occupants by independent Consulting Attorneys. Before any settlement can be arrived at, NIDCO undertakes the following procedures and steps:
 - a) Residents are invited to submit a Claim prepared for a professional valuer or such other person as they may choose. The cost of this service is met by NIDCO.
 - b) NIDCO obtains a valuation report on the property, done by an independent professional Valuer, licensed to practise.

- c) Negotiations are conducted with the Claimant or his/her representative. NIDCO is represented at these negotiations by an independent Legal Consultant and an independent Valuer. The Claimant is allowed his/her own professional Valuer and Legal Advisor.
- d) Monitoring of the process is undertaken by NIDCO's internal Consultant Valuer.
- e) Any proposed settlement is considered by a Cabinet-appointed Land Acquisition Oversight Committee, comprising professional representatives from several Government Ministries and Departments.
- f) Any settlement proposed is considered by NIDCO's Tenders Committee as well as Board of Directors, where necessary, before approval.
- g) Settlements are referred to consulting Attorneys-at-Law for title conveyancing and payment.