

GOVERNMENT OF THE CO-OPERATIVE
REPUBLIC OF GUYANA

Ministry of Public Infrastructure

WORKS SERVICES GROUP



Project Summary

The Construction of a New Ferry Stelling at Parika

JULY 2019

1 Background

The Co-operative Republic of Guyana (Guyana) had a population of 746,955 (375,150 females and 371,805 males) in 2012. The latest poverty assessment in 2006 showed that 36.1% of the population was poor, with higher prevalence in the hinterland areas. The Human Development Report (2016) however reveals steady improvement in living conditions, especially life expectancy, mean years of schooling, and gross national income per capita. The country thus attained a Human Development Index value of 0.638 in 2015 (an improvement of 17.9% since 1990). Notwithstanding progress made, at-risk groups including women, Amerindians, persons with disabilities (PWDs), and youth, face vulnerabilities. For example, female labour force participation was 43.6% compared to 68.9% for males, and 56% for the total population in 2017 (Third Quarter). Comparatively, the female unemployment rate was 15.3%, as opposed to 9.9% for males, and 12% for the total population in 2017. Social exclusion and vulnerabilities faced, impact all aspects of socioeconomic life including accessible air, road and riverine transportation infrastructure, and particularly affects hinterland subpopulations. The socially inclusive *no one left behind* 2030 Sustainable Development Goal's agenda requires programming to address services disproportionately accessed by such groups. The hinterland population recorded a prevalence of 74%, the Amerindian population 78%, and urban population 19% (Guyana Measuring Poverty 2008). Unemployment rates are higher for youth age cohorts and more so for females and rural dwellers: males 17.3%, females 28.0%, both males and females 21.6%; rural 24.5%, and urban 20.5%). Further, some 15% of PWDs never attend school, 40% of unemployed suffer job losses due to disability, and 79% of families face financial difficulties (Bureau of Statistics 2006).

Guyana is currently in the process of drafting a new Green State Development Strategy (GSDS), which will guide the country's economic and social development over the next 15 years. The objective of the Strategy is to reorient and diversify Guyana's economy, and therefore reduce reliance on traditional sectors and opening up new sustainable income and investment opportunities in higher value adding sectors such as ecotourism and renewable energy. This also involves creating development opportunities in the hinterland, thereby reducing migration to coastal areas. One of the necessary conditions for achieving this is an efficient transportation system.

An effective transportation system connects people to the supply and distribution of goods and services in both social and economic sectors and is therefore essential to sustainable growth and development. Guyana's transportation sector consists of road, air, riverine and maritime modalities. The Government of the Co-operative Republic of Guyana (GOGY) therefore seeks to improve specifically identified services in three sub sectors, which all fall under the purview of the Ministry of Public Infrastructure (MPI). These improvements are: (a) road, through the construction of a new bridge at Wismar; (b) air, through the upgrade of the aerodrome at Lethem; and (c) riverine, through the construction of a new stelling at Parika.

2 Introduction

The Parika Stelling (a stelling is a riverine transport terminal catering to a range of watercraft) is located on the East Bank of the Essequibo River and is the main hub for riverine transportation services between Parika and the neighbouring communities separated by the Essequibo River. Government ferry services operated by the Transport and Harbours Department (T&HD) and privately-owned speedboat operators, presently service the routes between Parika and Leguan, Wakenaam, Supernaam and Bartica. Demand for riverine transport has increased steadily over the years. According to T&HD, the Essequibo ferry service carried 384,000 passengers and 81,000 vehicles from January to November 2017, which represents a significant increase when compared to 150,000 passengers and 13,000 vehicles transported in the year 2000. The stelling functions as a major social and economic site for personal and commercial transactions. Trade in agricultural produce is conducted on the stelling itself. Other micro and small-scale vending operations, including selling of fuel for the marine crafts and agricultural processing are conducted in the immediate/surrounding environs of the stelling.

The physical structure of the stelling, comprising primarily block wall, timber and galvanised steel cladding, has deteriorated significantly over the years, and as demand on the facility increased, numerous attempts at repairing through patching rotted timber members and changing rusted galvanised cladding have become uneconomical. In spite of the many efforts, the facility is quickly becoming a threat to public safety. The upgrading of the Parika stelling has been prioritised and has been highlighted in the MPI Infrastructure Plan (2017-2025) that was recently presented to Cabinet.

A Map indicating the location of the proposed project location is presented in Figure 1 below.



Figure 1 showing Proposed Project Location

3 Feasibility Study and Designs for the Construction of a New Ferry Stelling at Parika

The objective of this Technical Assistance is to conduct a feasibility study, and prepare detailed designs, drawings, cost estimates and bid documents for the construction of a new stelling at Parika. The new intervention will comprise both waterfront and landside works including a new terminal building, docking facilities and associated infrastructure works.

The scope of work for the consultancy is expected to cover all activities to accomplish the stated objective. The duties of the Consultant will include, but will not be limited to the following:

3.1 Phase I

- (a) Review of current operations and procedures.
- (b) Carry out an inventory of existing conditions on the landside (terminal building, access road), portside (mooring/berthing facilities) and other related economic activities conducted on the stelling towards completion of a conditions survey.
- (c) Conduct geomorphological, topographic and bathymetric surveys and collection of tide data.
- (d) Review and analyse ferry service operations to include forecast of passenger throughput for the next 20 years.
- (e) Carry out a demand/capacity analysis for passenger terminal and supporting facilities, including commercial establishments (vending booths, parking etc.).
- (f) Develop and present Master Plan with development alternatives (minimum of three) that are technically feasible, socially viable and climate resilient; and which are physically accessible for PWDs.
- (g) Prepare preliminary costing for the development of each alternative including, inter alia: terminal building; commercial/vending areas; sanitation facilities; mooring/docking facilities parking areas; etc., and necessary mitigation measures. Carry out 'Least Cost Analysis' to determine preferred option.
- (h) Hold consultations to present and discuss the findings with representatives of Government of Guyana (GOGY), the Caribbean Development Bank (CDB), the Private Sector and other relevant stakeholders with the view of obtaining their feedback.

- (i) Prepare a phased implementation plan for the development of all the physical facilities identified.
- (j) Include energy efficient materials and equipment in all aspects of the facility design including, but not limited to lighting, pumping, etc.
- (k) Evaluate the use of renewable energy to reduce cost of operations and include in the designs if found to be feasible.
- (l) Carry out a financial feasibility for the preferred alternative.
- (m) Prepare conceptual designs of the preferred alternative. The design must incorporate measures to mitigate the environmental and social impacts identified in the environmental and social impact assessment.

3.2 Phase II

- (i) Prepare project-specific environmental and social impact assessment for Phase 1 works. Provide specific mitigation measures for all significant negative environmental, social and gender impacts identified for both the construction and operational phases. Building design specifications and overall project design for the facilities and associated works should conform to acceptable national/ international building codes as well as Guyana's national planning and building regulatory requirements. Every effort should be made to include Renewable Energy and Energy Efficiency (RE/EE), environmental, social and gender enhancement features in the facility design where possible. These may include features such as, energy efficient lighting and fixtures, landscaping with native plant species, harvesting and storage of rainwater for non-potable uses, maximisation of natural/artificial lighting, ventilation and physically accessible sanitation facilities for men/boys and women/girls;
- (ii) Develop a Draft Environmental and Social Management Plan (ESMP) for inclusion in the tender documents. It should specifically address, but not necessarily be limited to the following: traffic management; building demolition and waste disposal; management of construction materials (transportation, storage and waste disposal); surface water drainage; mitigation of dust and noise nuisance; and social and gender safeguards to address risks identified, and enhance community relations and other social impacts identified in the Social Impact Assessment (SIA), etc.;
- (iii) Prepare detailed construction drawings, specifications, implementation schedule, and cost estimates, including costs of any measures to mitigate environmental and social impacts.

4 ENVIRONMENTAL IMPACT ASSESSMENT – THE CONSTRUCTION OF A NEW FERRY STELLING AT PARIKA

The full EIA will at minimum, include the following:

(a) **Methodology:**

- (i) Review of secondary data from reports, studies, hazard risk assessments, geotechnical surveys, hazard risk assessments, and relevant policy documents such as legislation, regulations, standards and policies in the related areas.
- (ii) Collection of primary data through participatory consultations with all categories of stakeholders in order to introduce the project, facilitate feedback, and gauge perception of the project. Information from the residents in the area on hazard history and impact, environmental impacts will guide in design and location.
- (iii) Field visits.
 - (i) Analysis and computation of data.

(b) **Description of the Environment:**

Baseline data will be assembled, evaluated and presented on the environmental, natural hazard, and climate change characteristics of the study area.

(c) **Determination of the Potential Impacts of the Proposed Project:**

Consultants will conduct a detailed analysis of potential environmental, natural hazard, and climate change impacts and recommend mitigation measures and prepare a draft environmental management plan for the project. Distinguish between significant positive and negative impacts, direct and indirect impacts, cumulative, immediate and long-term impacts. Identify impacts that are unavoidable or irreversible. Wherever possible, describe impacts quantitatively in terms of environmental costs and benefits. Assign economic values when feasible.

(d) **Analysis of Alternatives to the Proposed Project**

(e) Consultation with the social development and gender expert, and collectively develop an ESMP to mitigate negative impacts and maximise project benefits for the vulnerable.

(f) **Stakeholder Consultations**

Consultants will identify appropriate mechanisms for providing information on progress of project preparation and implementation to stakeholders. It is anticipated that there will be considerable public interest concerning issues of viability, affordability, and the economic benefits to be derived from the Project. Public consultation work will be carried out at an early stage of the ESIA field work and once again, when the draft ESIA report is available, before detailed designs commence. The results of the public consultation process will be reported in the ESIA.

(g) Climate Vulnerability Assessment

The consultants will prepare a CVA to identify and evaluate the effects of climate change on the project components and to identify resilience measures that should be included in the proposed project. The CVA methodology used will be consistent with recommendations from the Inter-governmental Panel on Climate Change.

4.1 SOCIAL IMPACT ASSESSMENT AND GENDER ANALYSIS

The Social Impact Assessment and Gender Analysis will investigate developmental opportunities and risks related to the execution of the project; and inform possible mitigating measures to safeguard against any risks identified, as well as other measures to support positive social impacts. It will be conducted in a highly participatory, gender-responsive and socially inclusive manner engaging the communities, particularly with representatives of women and men, vulnerable groups such as children, youth, elderly, indigenous peoples (Amerindians), and persons with disabilities (PWDs).