

GEORGE PRICE HIGHWAY REHABILITATION PROJECT (GPHRP) ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) ADDENDUM



INDEX / TABLE OF CONTENTS

EXECUTIVE SUMMARY

- 1. INTRODUCTION AND BACKGROUND**
- 2. LEGAL AND POLICY FRAMEWORK**
- 3. PROJECT ACTIVITIES**
- 4. IMPACTS AND RISKS**
- 5. MITIGATION MEASURES**
- 6. PUBLIC CONSULTATIONS**

ANNEX 1. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

ANNEX 2. CONSULTATION AND STAKEHOLDER ENGAGEMENT PLAN

ANNEX 3. COMMUNICATION PLAN

ANNEX 4. SOCIO CULTURAL ANALYSIS

ANNEX 5. GENDER STRATEGY AND ACTION PLAN

ANNEX 6. GRIEVANCE MECHANISM

ANNEX 7. RESETTLEMENT AND LIVELIHOOD RESTORATION PLAN

COVER PHOTOGRAPHS:

Mopan River near entrance to Benque Viejo del Carmen (top); Roaring Creek Bridge and Z-Curve construction (center, left to right); Carriage near Iguana Creek Road, schoolchildren crossing Santa Elena roundabout, natural spring near Ontario (bottom, left to right). (All photographs made during April 2018 field visit.)

EXECUTIVE SUMMARY

This Environmental and Social Impact Assessment (ESIA) Addendum has been prepared to support the Inter-American Development Bank's (IDB or Bank) financing and supplemental financing of the rehabilitation of about 40 miles of the George Price Highway (GPH) from Belmopan to the Guatemalan border at Benque Viejo. It is intended to serve as an Addendum to the original ESIA prepared for the project in 2014¹ but includes additional details on the bypass to the south of the town of Succotz (section 4), particularly as regards disaster risk from flooding of the existing highway in that area. This update also includes a new analysis of environmental and social impacts and risks following. A number of new social analyses and plans have also been developed and are integrated herein. Finally, this ESIA Addendum also provides a revised Environmental and Social Management Plan (ESMP) incorporating each of the above elements. This entire package was presented to stakeholders by the Ministry of Works (MOW) through the Project Execution Unit (PEU) in a new round of public consultations with the goal of engaging and informing the public, optimizing project design, and successfully launching the suite of projects for George Price Highway Rehabilitation Project (GPHRP).

Developments since the 2014 include the issuance of Environmental Clearance by the Department of Environment (DOE) along with an Environmental Compliance Plan (ECP). The Plan is being tracked for compliance by DOE and the MOW's Supervision Engineer since construction began late in 2017 (on sections 1 and 2) by weekly site visits and monthly reports. Thus far the construction contractors are largely in compliance with international standards for health and safety aspects, including traffic management and personal protective equipment (hard hats, reflective vests, and protective footwear) for workers. Improvements are needed in dust control, access restriction to work sites, temporary erosion control near streams and rivers, and monitoring for noise and dust. Implementation of social mitigation plans are needed to fully comply with the commitments of the MOW before DOE as well as to comply fully with IDBs safeguard policies. These include a resettlement and livelihoods restoration plan, a consultation plan, a socio-cultural analysis, a communications plan, a community health and safety plan, and a gender action plan. Cooperation with the Institute of Archaeology has resulted in clearing of proposed routing for all Road Sections, but written documentation is pending and additional field verification and/or an on-site archaeologist will be in place prior to clearing or other activities, particularly in the Section 4 bypass.

Options were evaluated to reduce disaster risk on the existing road between Succotz and Benque in Section 4, where the road lies on the floodplain of the Mopan River. The preferred option in the 2014 ESIA was the construction of a bypass road south of the town, along with taking other measures on the existing road to reduce its vulnerability to damage from periodic

¹ <https://www.iadb.org/Document.cfm?id=38969666> and <https://www.iadb.org/Document.cfm?id=38969802>

flooding (e.g., raising its elevation). An updated risk assessment concludes that the highest-risk activities would be the construction of a retaining wall or river defence because of the impacts to recreation, ecology, water quality, access to the archaeological site of Xunantunich and associated vendors and businesses, hydraulic complexities associated with major river defence works, and community impacts. Simple repaving and culvert repairs in this area would also reduce vulnerability to flood damage, but risks can be reduced by minimizing the footprint of the road. One alternate approach that could be explored for feasibility during detailed design is the dedication of a “green space” with a single-lane, one-way access road that would serve for transit but also for open space and recreation. (Should this prove feasible, it could cost less, avoid relocation and resettlement, provide community benefits and jobs for recreation and tourism, and enhance public image, as well as preserve the integrity of the riparian and aquatic ecosystems and address the need for disaster risk reduction in this area.) The opening of the Succotz bypass also presents high levels of risk, because of dust, noise, and vibration, archaeological impacts, road traffic and safety, loss of land or livelihood, and possible effects to community cohesion. Careful design, planning, consultation and coordination are necessary to ensure success of these elements of the works. Activities with substantial risk also include the construction, elevation and alignment of the Roaring Creek Bridge, largely due to erosion/sedimentation, community safety, road hazards, traffic delays and impeded access, as well as loss of land or livelihood; and, works at the Z-curve due to erosion, dust and noise, vibration from blasting, road and traffic safety, and traffic delays.

At this stage the works are just beginning, and adjustments in design can possibly be included as regards locations and configuration of public access points, pedestrian safety measures (guard rails, sidewalks, crossings, speed bumps and/or pedestrian ramps) and traffic control structures (roundabouts). Signage, striping and reflectors are to adhere to safety standards, and allow for safe passage of cyclists and horse-drawn carriages.

The area is not a major wildlife corridor in Belize, but the highway does create a barrier effect for animals passing from the Maya Mountains to the Belize River valley. Three wildlife crossings (one each in Road Sections 2, 3 and 4) will be installed using an oversized box culvert design. At all culverts, outfall protection (e.g. riprap or armouring) must be sufficient to prevent erosion and avoid risk of sedimentation of watercourses, including a number of springs along the highway that are valuable resources.

The ESMP was updated to follow the ECP but also to detail additional actions related to the specifics of the latest status of the GPHRP and the recently developed social plans and programs. Further, the IDB will finance the operation of the first two years of operations of the rehabilitated GPHRP, presenting an ideal window to develop or strengthen elements after construction; accordingly, the development of a MOW Road Safety Program is recommended in

the ESMP, to include monitoring of accidents, definition of critical zones, and prioritization of maintenance budgets accordingly.

The MOW conducted public consultations for the GPHRP as part of the Stakeholder Engagement Plan, which included this ESIA Addendum, in tandem with the finalization of project design and full mobilization for construction activities. The goals of the consultation were to engage and inform the public, to optimize project design, and to improve project performance. The results of the consultations are summarized and documented in this updated and Final version of the ESIA Addendum, which will be published on the MOW and IDB websites.

1. INTRODUCTION AND BACKGROUND

With the support of the IDB, the Government of Belize is undertaking a rehabilitation project for the George Price Highway (Figure 1). In 2016 the IDB approved a loan for US\$20 million to finance almost 20 miles of road works from the western side of Belmopan (Roaring Creek) to the eastern side of Santa Elena Town (Road Sections 1, 2 and 3)². Works began late in November 2017 on Road Sections 1 and 2. In 2018 a supplemental financing for US\$6 million is intended to provide additional finance for Road Sections 1, 2, and 3, and a new loan in 2019 will provide additional finance for about 8 miles of highway from San Ignacio to the Guatemala border at Benque Viejo del Carmen, as well as a 1-½ mile bypass around the town of San Jose Succotz (Road Section 4; see Figure 2 and 3). In addition, the new loan is intended to provide supplemental financing for the rehabilitation of the initial 20 miles of highway and the new Roaring Creek Bridge, as well as a component for Project Management and Institutional Strengthening.

In 2014 an ESIA and ESMP were prepared³. At the time of preparation, however, the final route had not been selected, in particular a short by pass of Succotz. As such, the ESMP lacked a number of social plans, and additional detail in some areas. To that end, in 2018 the IDB engaged a social consultant to prepare a resettlement and livelihoods restoration plan, a consultation plan, a socio-cultural analysis, a communications plan, a community health and safety plan, and a gender action plan; and an environmental consultant to complement specific sections of the existing ESIA, prepare an executive summary of the existing ESIA, and to update the existing ESMP (in form and substance). The two consultants worked closely and collaborated on this ESIA Addendum.

This Addendum to the ESIA/ESMP addresses the following aspects:

- An executive summary of the existing ESIA, summarizing the key environmental and social impacts and risks relevant to section 4 of the GPHRP, using updated matrices following a four-level classification: low, moderate, substantial and high.
- Complements to the analysis of potential adverse impacts and risks, particularly in the analysis of the risk of disasters (particularly in the flood-prone area of the existing segment of the road in Succotz).

² <https://www.iadb.org/en/project/BL-L1019>

³ <https://www.iadb.org/Document.cfm?id=38969666> and <https://www.iadb.org/Document.cfm?id=38969802>

- A revised ESMP updated in both form and substance, providing detail and clarity on the specific measures to be implemented and the responsibilities for undertaking them and monitoring their effectiveness, as well as an updated schedule and budget for Road Section 4, and information on the allocation of personnel, budget and time to facilitate its execution. The following areas in particular were strengthened:
 - Occupational health and safety measures.
 - Disaster risk management mitigation measures, including analysis of the most recent data and project design.
 - Grievance Redress Mechanism including guidance and procedures for the contractors and the executing agency, typology of grievances and channels to receive them, and a review of operational details such as budget allocation, personnel and timeline, monitoring and reporting.
 - Procedures for assessing and protecting physical cultural heritage resources with the Institute of Archaeology, chance find procedures, and monitoring measures, particularly in Section 4 near the Succotz bypass.
 - Incorporation of the measures recommended by the sociocultural analysis, the community health and safety program, the gender plan, and the communications plan.

The Ministry of Works conducted public consultations for the GPHRP as part of the Stakeholder Engagement Plan. This ESIA Addendum was published on the IDBs website, as well as on the MOW website and served as the basis for a round of consultations in June 2018 in tandem with the beginning of project construction activities and the processing of the supplemental financing. The goal of the public consultations was to engage and inform the public, to optimize project design, and to improve project performance. The results of these consultations are documented in this updated and Final ESIA Addendum and will be published on the IDB and MOW websites.

2. LEGAL AND POLICY FRAMEWORK

The 2014 ESIA provided a comprehensive discussion of Belizean legislation and regulations as it applies to environmental and socio-economic matters. National advisory policies, multilateral agreements, and IDB safeguards policies were also discussed in some detail. The interested reader is referred to the previous document for such details, whereas the discussion that follows is specific to the updated project status and this ESIA Addendum.

Environmental Clearance

The DOE reviewed the original ESIA and granted Environmental Clearance for the GPHRP to proceed in November 2016. The authorization included rehabilitation from the capital city Belmopan to the Guatemala border, including the Roaring Creek Bridge, the Z-curve, two roundabouts, widening, resurfacing, drainage, and safety improvements. The Environmental Clearance includes an ECP as a set of conditions for mitigation actions based on the original ESIA and ESMP, adding some additional requirements and modifying others. Works were authorized to commence within a year of issuance of the Environmental Clearance.

The document notes that the MOW and their Contractors are responsible for compliance with the conditions of the ECP, and that compliance will be verified by periodic DOE inspections. It is also noted that the ECP may be modified from time to time as necessary in conjunction with the MOW to ensure that the GPHRP meets the objectives of the Plan. Thus, the ECP is a “living document” which may be adjusted and aligned as specifics become refined “at the detailed engineering stage”. If any substantive design changes are proposed, then DOE advised that an Amendment to the ECP could be an acceptable and expeditious means to update the Environmental Clearance.

The Environmental Clearance further notes that the MOW is charged with communication duties to the public and to its Contractors, and to act as the principal agent in logging and resolving grievances. The MOW is also required to obtain and maintain any required local licenses and permits.

Finally, a post-development review is called for with the continued monitoring of the highway and its improvements, with “a system being put into place for reporting negative impacts as well as a means of continually implementing corrective mitigation measures where the need arises”. This would include additional monitoring by MOW to ensure that the mitigation measures installed during the GPHRP are functioning properly.

The Environmental Clearance included only general requirements for the Succotz bypass, as three different bypass routes were evaluated, as well as raising the existing roadway along the river. The preferred solution is a combination of both, but the details were not known with certainty in 2014 and are still being evaluated as part of final design. As mentioned previously, an Amendment to the ECP and/or Environmental Clearance must be processed with MOW and DOE to incorporate any substantive changes in the proposed solution, especially if any new mitigation measures in the ESMP or ECP are required.

Archaeological Clearance

The National Institute of Culture (NICH) and History Act Chapter 331 established the NICH and vests the state with the ownership of all antiquities and monuments, and provides for legal recourse and penalties for obtaining or destroying same without a Permit which may be granted by the Director of NICH. Section 63-(1) prohibits contractors and workers from disturbing, damaging or destroying ancient monuments, antiquities, etc. and states that:

“The Director may direct any land owner, lessee, concessionaire, contractor or any other person who is about to engage in any operation which in the opinion of the Director is liable to destroy, damage, interfere with or otherwise be to the detriment of any ancient monument or antiquity:- (a) not to proceed with any operation until the Director shall have had an archaeological exploration and survey carried out; and (b) to take or to refrain or desist from taking any such action as part of the operation as the Director may decide to be fair and reasonable for the proper protection of the ancient monument or antiquity.”

In accordance with the Belize Environmental Compliance Protocols and the NICH Act, a complete archaeological assessment was conducted within the Study Area and included in the original ESIA. The extent of archaeological remains within the project area

were identified, all structures were located and recorded, as well as sites and cultural features within the area that could be impacted by the GPHRP (see Figure 2).

The ECP requires that the MOW “consult with and fulfil all necessary requirements of the Institute of Archaeology (IoA) prior to conducting any activity that could negatively impact identified sites” on the highway and at quarries if expanded (particularly Nohoch Ek in Section 4, which is being considered for utilization according to the 2014 ESIA). It is emphasized that careful route selection is paramount to avoid sensitive areas.

The 2014 archaeological assessment was conducted by Dr. Jaime Awe and Mr. Rafael Guerra. The former is a renowned researcher and the latter is a staff member at the IoA (on study leave). The IoA was consulted during the process of preparing the 2014 ESIA through coordination with Mr. Josue Ramos, an Archaeologist in the IoA’s Research and Education division, according to an interview with the Associate Director, Dr. Allan Moore. No permit has been issued because there has been no collection or destruction of resources, and with the proper mitigation measures in place (e.g. optimum routing) there should be no such damage or destruction. In Section 4 along the Succotz bypass, the IoA joined the MOWs Project Execution Unit (PEU) in the field to visit two possible archaeological sites that could be affected by clearing and agreed on route adjustments to minimize the potential for damage.

Additional coordination with IoA will include marking of sensitive areas and establishment of chance-find procedures, as per the ESMP in this ESIA Addendum). During the clearing associated with the Succotz bypass, an Archaeologist approved by IoA will be on-site to examine unearthed materials and provide guidance and direction as to chance find procedures and coordination with IoA.

Any expansion of quarries, particularly near Nohoch Ek in Section 4, will also require inspection by and coordination with IoA representatives.

3. PROJECT ACTIVITIES

The 2014 ESIA provided a comprehensive description of the environmental and social setting of the project, including areas which would be affected by the works in Section 4. This ESIA Addendum does not repeat that information, but rather provides an update of the project status and describes changes in the design and implementation that have occurred since that time. In addition, this ESIA Addendum highlights specific environmental and social aspects that have become important in light of recent project construction advances, adjustments to the design, performance strengths and gaps as observed in field observations, and the introduction of Additional Financing by the IDB.

3.1 Project Description

The project areas (see Figure 1) have been reclassified into four Road Sections⁴, as follows from east to west:

- Section 1. A short section (485 meters, or about ¼-mile) from the Belmopan roundabout to just past the Roaring Creek Bridge.
- Section 2. About 9.4 miles (15.384 km) from Roaring Creek to Iguana Creek Road junction, passing through the towns of Camalote, Teakettle, Ontario, and Blackman Eddy, ending at the Iguana Creek Road junction that leads to Spanish Lookout.
- Section 3: About 10.1 miles (16.629 km) from Iguana Creek Road junction to Santa Elena, passing through the towns of Unitedville, Georgeville, Central Farm, and Esperanza, ending at the east end of Santa Elena at the junction with the new bypass road at that leads to San Ignacio.
- Section 4: About 8.3 miles (13.628 km) from the west side of San Ignacio to the Guatemala Border at Benque Viejo del Carmen, as well as a bypass around San Jose Succotz that spans about 1.5 miles (2.4 km), depending on final routing.

3.2 Project Status

⁴ The original ESIA shows the project split into only three sections, whereas the project's Road Sections have now been reclassified into four sections as shown in Figure 1.

Works are underway at the Roaring Creek Bridge (Section 1), and at the Z-curve in Road Section 2 on the roadway between Belmopan and Spanish Lookout Junction, where surveying is also underway (see Figure 2) and at a quarry near Ontario Village (off the road in Road Section 2). No works are in progress in Road Section 3 (between Spanish Lookout Junction and Santa Elena) or in Road Section 4 (between San Ignacio and Benque) as of the date of this draft ESIA Addendum (May 2018).

Adjustments to the final design are in progress for Road Sections 1, 2, and 3, due to discrepancies in cadastral coordinates vs. survey control points, the need to readjust curve alignments due to changes in design speed from 100 kph to 40 kph in towns and near populated areas, and the need to provide access for affected persons in Section 1 and elsewhere. In addition, the locations and configuration of public access points, pedestrian safety measures (guard rails, sidewalks, crossings, speed bumps and/or pedestrian ramps) and traffic control structures (roundabouts) are not yet established. Culverts were planned to be installed with 36-inch diameter as standard, but three wildlife crossings have been specified (one in each Road Section) using a box culvert design (see Figure 2). Outfall protection (e.g. riprap or armouring) is included in general designs for culverts, but details are not yet specified. Signage, striping and reflectors are to adhere to safety standards but are yet to be detailed. Vertical alignment is also subject to change as the type of base course may also be modified to maximize material reuse and minimize excavation needs. All of these design changes have cost implications, as well as safety and environmental aspects.

The final routing for the Succotz bypass in Section 4 is not yet established, and must be adjusted to avoid an archaeological site and several new houses. In particular, a deep gulley near Mopan Technical School would require a large box culvert, so rerouting could have cost advantages. The existing road is heavily used for recreation for several miles along the river, and could be converted to a single-lane access road and emergency escape route, dually purposed for park or recreation uses; such an approach could have cost savings compared to river defence or flood control works, community benefits in terms of job creation, conservation value, and would play a role in disaster vulnerability reduction by providing green space to mitigate flooding.

3.3 Environmental Aspects

Observations relative to Road Sections 1-3 and Section 4 are provided below, to supplement the 2014 ESIA.

Road Sections 1, 2 and 3

At all culverts, outfall protection (e.g. riprap or armouring) is included in general design drawings, but must be constructed to be sufficiently protective against erosion and avoid risk of sedimentation of watercourses, particularly near a number of springs along the highway that are valuable resources (see photo on cover page). Monitoring for turbidity must be conducted up- and down-stream of these sensitive crossings as needed, to provide evidence that water quality has not been affected by construction works near the springs.

Two wildlife crossings (one in Road Section 2 and another in Road Section 3) will be placed where box culverts are being installed at the locations specified in Figure 2. Locations may be adjusted to ensure that the crossings are placed along corridors of riparian vegetation that connect habitat on either side of the road. The box culverts can be modified or retrofitted to provide passageways beneath the highway for animals; in addition, signs warning of wildlife crossing are also to be installed.

At the Z-curve construction site, slopes are being benched and terraced. Topsoil has been removed, but has not been stockpiled for later re-use. Revegetation and slope stabilization in this area will be difficult, and will require careful planning and consultations with local experts and agronomists. Native plants in the area may be particularly well-adapted to soil and drainage conditions specific to the site, and will be investigated for use in revegetation. If feasible, the old road or un-aligned road area may be left intact to develop a Nature Walk area to complement the nearby wildlife crossing.

At the Roaring Creek stream banks and at the Z-curve, erosion control measures are not in place on the de-vegetated slopes or at the perimeter of work sites. At the Z-curve, silt traps, berms, bunds, and check dams must be built to trap soil and water, which will enhance the success of revegetation efforts. At all locations, vegetation bundles or wattles must be placed parallel to slopes to provide organic material and slow down runoff, decrease erosion, and encourage seed or plantings to flourish. Local community labor or micro-enterprises can be contracted for these efforts.

Road Section 4

The area is not a major wildlife corridor in Belize⁵, but the highway does create a barrier effect for animals passing from the Maya Mountains to the Belize River valley. An additional wildlife crossing is specified in Road Section 4 (along with two others in Road Sections 2 and 3) where a box culvert is to be included in the design.

It was also noted that the floodplain areas on the Mopan River between Succotz and Benque Viejo represent zones of natural habitat. Water quality is sufficiently good to support abundant bird and fish life, as was evident during the site visit (see photo on cover page), as well as recreational use. This area represents significant natural habitat that could be affected by the project, and offers an excellent opportunity for conservation.

The archeological resources of the Succotz bypass have been examined in the field by IoA and the PEU. Final adjustments to the route will be made in the detailed design phase. Cooperation with the Institute of Archaeology has resulted in clearing of proposed routing for all Road Sections, but written documentation is pending and additional field verification and/or an on-site archaeologist will be in place prior to clearing or other activities, particularly in the Section 4 bypass.

3.4 Health and Safety Aspects

At this stage the works are just beginning, and adjustments in design must be evaluated for inclusion in the project as regards locations and configuration of public access points, pedestrian safety measures (guard rails, sidewalks, crossings, speed bumps and/or pedestrian ramps) and traffic control structures (roundabouts). Signage, striping and reflectors are to adhere to safety standards, and allow for safe passage of cyclists and horse-drawn carriages (see photos on cover page).

During construction, traffic management must have an emphasis on public safety for road users, as well as for the nearby communities. Temporary or provisional access and crossings must be provided to ensure safe crossings for pedestrians in the area. Occupational health and safety must have a separate emphasis to protect workers. Accordingly, separate sections for each have been developed in the revised ESMP (see Chapter 5 of this ESIA Addendum).

⁵ Egis, 2017: Preparation of a Comprehensive National Transportation Master Plan for Belize – Baseline Analysis Report.

Relative to the operations phase, the highway has very high accident rates which the GPHRP is meant to improve. There is little safety signage, crosswalks are inadequate, there are no guard rails or pavement markings, and the narrowness and roughness of the road are all conducive to accidents. There is concern that increasing speed will cause increasing accidents.

The GPHRP will fund operations over the first two years of the project, and must include elements to further the development of a formal Road Safety Program including monitoring of accidents, annual evaluations and prioritization of “hot spots” for safety improvements, public outreach and education, and enforcement. The Road Safety Program may consider links with the CDB-funded “Road Safety Project” which included capacity building and infrastructure improvements east of Belmopan, and the World Bank’s Global Road Safety Facility (GRSF). The program is also required to fulfill the ECP’s mandate for a post-development review with “a system being put into place for reporting negative impacts as well as a means of continually implementing corrective mitigation measures where the need arises”. This would include additional monitoring by MOW to ensure that the mitigation measures installed during the GPHRP are functioning properly.

3.5 Social Aspects

Baseline social, demographic, and cultural information was presented and summarized in the 2014 ESIA. Additional social analysis has been undertaken by the Social Safeguards Specialist as part of the effort to prepare this ESIA Addendum. Annexes 2 through 7 contain the results of these efforts.

A Stakeholder Engagement Plan (SEP) was prepared to guide the flow of communication to and from communities, stakeholders, the contractors, and the PEU, and is included in Annex 2. The Stakeholder Engagement Plan maps out the stakeholders, their interests in the GPHRP, and provides strategies and guidelines for outreach actions. A Grievance Mechanism is also integral to stakeholder engagement, and is discussed in the SEP. The 2014 ESIA included elements for a Grievance Mechanism, and has been included in Annex 6 to this ESIA Addendum.

The Communications Plan (Annex 3) sets out the stakeholder communication requirements for the GPHRP and serves as a guide for communicating with community stakeholders throughout the life cycle of the project. The plan outlines, in brief, the social nature of each community, the environmental and social issues to be addressed in each road section, it discusses an appropriate strategy for

communication and sets out the logistics of carrying out the strategy, including identifying and defining the roles of the persons involved in the communication.

An update to the Sociocultural Analysis was prepared and is included in Annex 4 of this ESIA Addendum. The Sociocultural Analysis seeks to illuminate the situation of Indigenous Peoples (IPs), particularly Garifuna and Maya, within the project zone. The project zone includes all communities along the George Price Highway from Roaring Creek Village to the western border with Guatemala. Indigenous peoples live in most of these communities; however, they have mostly integrated into the mainstream and as such have no separate traditional organizational or governance structures. While, it is difficult to make a sociocultural assessment of the indigenous peoples of the project area due to their integration and lack of data, it is possible to make an assessment from the perspective of general vulnerabilities. The assessment concludes that no part of the project is located or will pass in close proximity to any recognized indigenous lands, although the road will pass near to some Maya archaeological features. Safeguards for protecting these cultural heritage sites have been provided for in the project's ESMP. Thus, it is not expected that the project will lead to any direct, indirect or cumulative impacts to indigenous peoples living in the project area.

A Gender Strategy and Action Plan has been developed to ensure that women and girls are not victimized or excluded from the benefits of the project. The strategy and action plan are provided in Annex 5. It forms the basis to understanding how gender equality and women's empowerment will be specifically approached in the GPHRP. In addition, it outlines specific actions to be undertaken and monitoring tools to be applied to ensure that the above-mentioned approach or strategy taken becomes operational and achieves the objectives that have been set out.

Finally, a Resettlement and Livelihoods Restoration Plan has been prepared, and is provided in Annex 7.

4. IMPACTS AND RISKS

Risk can be thought of as the probability of occurrence of an event/incident, and the severity of that impact. Good practice in environmental and social risk management is to weigh potential severity of impact higher than the likelihood of the impact occurring, hence even low probability events that might have severe impacts are considered higher risk. An overall or aggregate risk level for a project as a whole is considered as a useful indicator to guide management of environmental, social, health and safety (ESHS) risks during design and implementation. A terminology of Low, Moderate, Substantial and High (L-M-S-H) is emerging as an accepted standard for the analysis of ESHS risks, as shown below.

- **High (H):** A 'High' risk rating signals that the nature and magnitude of the potential and/or actual ESHS risks and impacts of a project or activity, considered along with the significance of the operational issues and implementation challenges, are such that the delivery of ESHS mitigation measures and overall ESHS management outcomes are at risk or compromised, sometimes with unintended direct and indirect consequences.
- **Substantial (S):** A 'Substantial' risk rating signals that the nature and magnitude of the potential and/or actual ESHS risks and impacts of a project considered along with the significance of the operational issues and implementation challenges are significant and challenging in the context of the executing agency's capacity and track record. While the overall ESHS management outcomes are not yet at risk, the complex implementation situation is a source of performance risk with consequent risks for non-compliance with IDB requirements and the ESMP.
- **Moderate (M):** A 'Moderate' risk rating signals that the nature and magnitude of the potential ESHS risks and impacts of a project are not significant but nevertheless might result in operational issues or challenges that must be managed in accordance with the requirements of IDB and the ESMP.
- **Low (L):** A 'Low' risk rating signals that the nature and magnitude of the potential ESHS risks and impacts of a project are minor and that there are no significant operational issues or challenges that have the potential to undermine ESHS outcomes.

The determination of a risk rating is necessarily somewhat subjective, and relies on experience of different sectors and in different countries, and experiences from similar projects. In order to more clearly define risk factors, the following are considered useful criteria: **cause**; **contribution**; **context**; and **performance**. The scope of these risk factors and definitions are presented below.

- **Cause:** Largely related to direct impacts of project footprint, and inherent sector risks, including contribution to cumulative risks.
- **Contribution:** Largely related to indirect and induced impacts, third party actions, associated facilities, supply chain aspects, and indirect contribution to cumulative impacts.
- **Context:** Largely related to influence and impacts from external operating environment on project setting, including legal framework and practice, vulnerability risks, political and social conflict, cultural context, legacy issues, etc.
- **Performance:** Directly related to borrower capacity and organization, commitment, resources and overall performance during project implementation.

These risk factors are meant to capture the most relevant dimensions of the operational context of the project, including direct, indirect, contextual and performance dimensions.

The GPHRP is considered to have an overall or aggregate risk of Moderate (M). This is based on the limited potential impacts from the footprint of the project itself as most works will take place on the existing roadway in areas which are not highly sensitive, technically challenging or highly complex (M for “cause”); the limited associated and indirect impacts from related activities such as quarrying, materials supply and transport, or changes in traffic and safety patterns (M for “contribution”); the minor possibility of challenges from external sources such as conflicts, pollution, or legal changes (M for “context”); and, the limited size and capacity of the agencies and resources assigned to the project by the Government (S for “performance”). These ratings can and are usually modified periodically throughout the life of the project to better reflect changing situations, events and priorities.

4.1 Environmental and Social Risk factors

In addition to an overall risk rating for an entire project, individual contributors to risk within a single project can also be classified and thus prioritized for attention and management effort. This exercise is described in the following Section of this ESIA Addendum, building on the analysis presented in the 2014 ESIA and updated to reflect the specifics of the project as it has evolved over time.

The matrix below provides the updated assessment of the various risk factors from the environmental, health and safety, and social perspectives. The types of activities (left column) are organized by Road Section, and are cross-reference against the types of potential impacts (top row) organized as environmental, health and safety, or social impacts. Each is assigned an aggregate value of L, M, S, or H based on a subjective discernment of the probability and severity of a negative outcome considering cause, contribution, context, and performance. The column to farthest right gives an overall risk for each of the activities, and the row to farthest bottom gives an overall risk for the types of impacts.

George Price Highway Rehabilitation Project, Belize
ESIA Addendum – July 2018

<div><div>IMPACTS</div><div>ACTIVITIES</div></div>		Environmental Impacts					Safety Impacts			Social Impacts							Overall Risk
		Ecosystems	Archaeology, Cultural Resources	Erosion, Sedimentation	Drainage, Damming,	Vibration, Fumes	Contamination, Pollution	Worker Health & Safety	Road & Traffic Safety	Community Safety	Loss of land, assets, or livelihood	Interruption of Utilities	Social Cohesion	Traffic delays, impeded access	Sexual harassment,	Exploitation of Vulnerable Persons	
Road Section 1	Construction of new Roaring Creek Bridge	L	L	H	S	S	S	S	H	H	M	M	M	H	S	M	S
	Road elevation & alignment at Roaring Creek Bridge	L	L	L	M	M	M	M	H	H	H	M	M	H	L	M	S
	Work Camp at Roaring Creek Bridge	S	L	L	L	M	H	H	S	M	L	L	S	L	S	S	M
Road Section 2	Section 2 road construction	M	M	M	S	M	M	S	H	S	M	M	M	H	M	M	M
	Z-curve bypass & realignment	S	L	H	M	H	M	S	H	S	M	L	L	H	L	M	S
	Drainage, culverts, bridges in section 2	L	M	S	H	L	M	M	M	L	L	L	L	M	L	L	M
	Quarry activity near Section 1, 2	M	M	S	M	H	M	S	S	S	L	L	L	L	L	M	M
	Work Camp in Section 2	M	L	L	L	M	S	S	M	L	L	L	S	L	S	S	M
Road Section 3	Section 3 road construction	L	M	M	S	M	M	S	H	S	M	M	M	H	M	M	M
	Roundabout at Iguana Creek Road junction	L	L	M	L	M	M	M	S	S	S	M	M	H	L	L	M
	Drainage, culverts, bridges in section 3	H	M	S	H	L	M	M	M	L	L	L	L	M	L	L	M
	Work Camp in Section 3	M	L	L	L	M	S	S	M	L	L	L	S	L	S	S	M
Road Section 4	Section 4 road construction	M	S	M	H	M	M	S	H	S	M	M	M	H	M	M	M
	Quarry activity near Section 3, 4	M	S	S	M	H	M	S	S	S	L	L	L	L	L	M	M
	Roundabout at entrance to Benque	L	S	M	L	M	M	M	S	S	M	M	M	H	L	L	M
	Opening of Succotz Detour & Bypass	L	H	S	M	H	M	M	H	S	H	S	H	S	L	H	H
	Retaining Wall at Succotz-Benque section of existing road	L	H	H	H	S	M	M	S	S	M	L	H	S	L	S	H
	Repaving at Succotz-Benque section of existing road	L	M	S	S	S	M	M	S	S	M	M	M	S	L	M	S
	Drainage, culverts, bridges in section 4	H	M	S	H	L	M	M	M	L	L	L	L	M	L	L	M
	Work Camp in Section 4	M	L	L	L	M	S	S	M	L	L	L	S	L	S	S	M
Overall Risk		M	M	S	S	S	M	S	H	S	M	M	M	S	M	M	M

Although individual ESHS risk factors vary from L to H, the average of all the risks and impacts results in an overall risk rating of M for the project as a whole, as shown on the lowermost right-hand box. Most of the risks and impacts rated L and M will be addressed using standard mitigation measures, but the risks and impacts rated S and H bear special attention and focus. These include the following with respect to the major activities to be undertaken:

- One of the H-risk activities would be the construction of a retaining wall at the Succotz-Benque section of the road, because of the impacts to the recreation area along the river, the access to the archaeological site of Xunantunich, hydraulic complexities, possible erosion or sedimentation damage to the river, possible effects to community cohesion, and ecological impacts.
- The opening of the Succotz bypass is also considered as an H-risk activity, because of dust, noise, and vibration, archaeological impacts, road traffic and safety, loss of land or livelihood, and possible effects to community cohesion.
- Repaving of the existing road along the river presents S risks due to road traffic and safety, community safety and traffic delays.
- Activities with S risk also include the construction, elevation and alignment of the Roaring Creek Bridge, largely due to erosion/sedimentation, community safety, road hazards, traffic delays and impeded access, as well as loss of land or livelihood.
- Works at the Z-curve present S risks in terms of erosion, dust and noise, vibration from blasting, road and traffic safety, and traffic delays.

In terms of the types of impacts that could occur, the following can be gleaned:

- The main environmental impacts of the project would be due to erosion/sedimentation, hydraulic effects such as damming or altering drainage, and those from dust, noise, vibration and fumes.
- The main safety concerns are from road and traffic issues, followed by impacts to workers and the community.
- The main social impacts would be due to traffic delays and impeded access.

The revised risk assessment can be used to prioritize efforts to address and minimize the identified risks and impacts.

4.2 Disaster Risk

The IDBs Disaster Risk Management Policy (OP704) has as one of its objectives to provide effective and efficient support to borrowing members in reducing disaster risks. The policy is applicable to the GPHRP because of the recurring flood events which impact the communities' safety, health, access, and livelihoods.

The new designs for the Roaring Creek Bridge (Section 1) and the four other bridges and almost 100 culverts along Road Sections 2, 3, and 4 will reduce the vulnerability of the highway to flooding. The Roaring Creek Bridge was designed to withstand a 100-year storm event, and the other bridges and culverts at least a 20-year storm event. Details can be found in the 2014 ESIA and in the hydrologic analyses in the Feasibility Report (Appendix 3).

Frequent flooding occurs in Section 4 over about one mile of highway where the road is very close to the Mopan River. One critical point is the entrance to Benque Viejo, and another is the east side of the town of Succotz near the ferry to the archaeological site of Xunantunich. The river is picturesque and easily accessible in this area and is heavily used by the community and visitors for recreation, bathing, fishing, floating on inner tubes ("tubing"), as well as tourists to cross the ferry to Xunantunich. Vendor kiosks, restaurants, and small businesses provide services to visitors who enjoy this scenic section of the road, park and spend time. The platform of the highway is only a few meters above river low stage, and seasonal floods inundate these areas effectively halting flow of traffic to and from the Guatemala border at Benque Viejo.

One option considered in the 2014 ESIA was raising the platform of the road up to 3.8 m (12.4 feet) to accommodate a 20-year flood, and constructing a river defence system with gabions, concrete walls, dikes, or other hard infrastructure; however, considering the length of the flood-prone area and the height to which it would need to be raised, it would present serious technical challenges and result in very high costs, as well as displace numerous vendors and businesses, impede community access to the river, and potentially affect aquatic and riparian flora and fauna (see photo on cover page of this ESIA Addendum). It was deemed more feasible to construct a 1-km bypass leading away from the river at the entrance to Benque Viejo and returning to the river at Succotz, thereby avoiding the flood-prone areas and reducing the impacts of floods to the traffic and community at large. Nevertheless, the existing road would remain operational and it is recognized that many vehicles would continue to use the existing

roadway (when not flooded), so some type of disaster vulnerability reduction is desired there, for example repaving and culvert replacement, or possibly other measures to mitigate risk.

It is known that land use change in watersheds causes faster accumulation of runoff, larger peak flows, and consequently larger flood events downstream. In addition, climate change is expected to produce extreme precipitation events more frequently. These factors combine to create a higher disaster risk from flooding on the existing road between Benque and Succotz, which essentially lies in the floodplain of the Mopan River. One innovative solution to flood risk reduction that could be explored during the detailed design phase is the use of open space as a buffer zone. Normal floodplain function is preserved by allowing periodic flooding to occur, thereby continuing to use the ecosystem services that floodplains provide by mitigating floods where development or infrastructure is not damaged. Community support is brought in by planning measures to dedicate the at-risk areas as “green space” for recreation areas, trails, enhancing quality of life by prohibiting development in these areas. The road section between Succotz and Benque is already heavily used by residents and tourists for these purposes, with concomitant socioeconomic benefits from small businesses and vendors. In this scenario, the existing road where it is bypassed could be converted to a single-lane, one-way access road and emergency escape route, dually purposed for open space and recreation. Such an approach would have cost savings compared to river defence or flood control works, and could also be less expensive than repaving of both lanes, especially considering that relocation or resettlement could be avoided in some cases by maintaining narrow road widths while adding pedestrian zones and parking. This would also offer community benefits in terms of continued access to the river, jobs for recreation and tourism, and enhancement of public image. Conservation value is also added by preserving the integrity of the riparian habitat and allowing periodic floods to continue to shape its ecosystems and geomorphology, without altering the flow regime or bank characteristics of the river. Finally, this “green space” approach addresses the need for disaster risk reduction by repurposing the road’s uses, integrating community disaster planning, and keeping infrastructure and human development out of harm’s way. This idea is not under formal consideration at this time, but bears mention and could be explored during the feasibility and/or detailed design phase for this part of Road Section 4, if desired.

5. MITIGATION MEASURES

The set of mitigation measures applicable to the GPHRP are expressed in the Environmental and Social Management Plan (ESMP), and in a set of additional related plans and programs with emphasis on social safeguards.

The original 2014 ESIA included an ESMP and subsequently in November 2016 the DOE issued an Environmental Compliance Plan (ECP) for the GPHRP, which set the conditions for mitigation actions based on the original ESIA and ESMP and added some new requirements. Since construction began in late 2017 and financing for the new IDB operation has progressed, additional details have emerged and the ESMP has been updated to integrate and provide clarity for the comprehensive suite of mitigation measures for the GPHRP.

The project began construction in 2017. The Supervision Consultant for MOW has performed weekly site visits and monthly reports to gauge the level of compliance with the ECP. Results show that the contractors are largely in compliance with international standards for health and safety aspects, including traffic management. Hard hats, reflective vests, and protective footwear are available and in use routinely. Survey crews deploy traffic cones, signage is visible, and flagmen are active. Detours at the Z-curve and Roaring Creek are in place, and night lighting has been deployed. Access at Roaring Creek is restricted but must be improved as the river is a popular swimming spot near the Fair Grounds and Guanacaste National Park. Dust control is poor and must be improved with water trucks at the Z-curve and at the quarry near Ontario. Monitoring for dust, noise and water quality has not been performed; hand-held devices for all three are recommended to make the task more simplified and directly useful. Temporary erosion control measures are lacking and must include vegetation wattles, soil bunds or berms, and diversion ditches or check dams. Archaeological clearance for Road Sections 1, 2 and 3 was provided by IoA but written documentation is pending. Four to six sites have been identified and must be marked by the Supervision Consultant prior to clearing or other activities, particularly utility works. Earth-moving activities in the Succotz bypass will require additional field verification with IoA and will employ an on-site archaeologist to coordinate with IoA and directly observe earth-moving activities.

The DOE noted that the ECP is intended to be a “living document” that can be revised from time to time based on specifics of each project. As construction began in late 2017, the PEU’s Supervision Consultant and teams from the IDB have visited the work sites,

reviewed the ECP, and considered the adjustments in final design that are still possible at this stage. In addition, the Supervision Consultant has been visiting the work sites in Road Sections 1 and 2 weekly, either independently or jointly with DOE or IDB, and has generated monthly compliance reports based on the ECP. Accordingly, the ESMP has been updated to include additional measures to strengthen performance based on observations to date, as well as the social mitigation measures from the newly prepared plans. The updated ESMP seeks to reinforce, clarify, and integrate the necessary mitigation measures and compliance requirements for the project.

Annex 1 presents the updated ESMP, which applies to all the road sections and activities associated with the GPHRP. It is organized by 14 major sets of activities to parallel the structure of the ECP, but provides additional actions related to the specifics of the latest project and compliance status of the GPHRP and 4 additional plan elements for the recently developed social plans and programs. Further, the IDB will finance the operation of the first two years of operations of the rehabilitated GPHRP, presenting an ideal window to develop or strengthen these elements as well. Accordingly, the development of a MOW Road Safety Program is recommended, to include monitoring of accidents, definition of critical zones, and prioritization of maintenance budgets accordingly.

Each of the 18 ESMP sections in Annex 1 references the applicable requirements and standards, which in most cases is similar or identical to the 2014 ESMP and the 2016 ECAP. In cases where there has been a change or adjustment to the condition or mitigation measure, it is indicated in the corresponding ESMP and is subject to approval or clearance by the DOE, keeping in mind that the ECAP is a “living document” to be adjusted as project conditions evolve. In other cases there are mitigation actions that provide additional detail on what is considered “best practice” for the industry, and which may be adjusted or improved upon by the MOW or contractors to achieve the desired result of minimizing, avoiding, or mitigating environmental and social impacts.

Annexes 2 through 7 contain copies of the following plans with social safeguards emphasis:

- Stakeholder Engagement Plan
- Communications Plan
- Socio-cultural Analysis
- Gender Strategy and Action Plan
- Grievance Mechanism

- Livelihood Restoration and Resettlement Plan

These social mitigation plans are cross-referenced with ESMP sections 15, 16, and 17 to quick summaries and distillations of action items. Social Safeguards are also provided within the context of the other ESMP sections.

6. PUBLIC CONSULTATIONS

Initial public outreach activities were conducted in 2014 during the preparation of the original ESIA for the GPHRP. Principal among the methods and techniques used were individual interviews, focus group discussions, probability and purposeful surveys, community meetings, and the required public consultation as per the EIA regulations. Details can be found in the original ESIA (chapter 8 and Annexes XIV, XV and XVI). One of the main concerns identified in the 2014 focus group discussions with village chairpersons was the risk from flooding. Another chief concern was for the safety of pedestrians and cyclists. All agreed that upgrades in drainage and safety would help address these concerns. Many ideas were put forth regarding lighting, crossings, speed bumps, widening and resurfacing of the road, traffic signs, sidewalks, and bus stops and shoulders. In addition, dust and noise were cited as a continuing problem during operations, which could be aggravated during the rehabilitation works. Local jobs were mentioned as a strongly desired benefit of the construction works. The idea of a bypass near Benque Viejo was strongly endorsed by the community in light of the recurring flood issues in that area.

In 2018 the MOW conducted a new round of public consultations for the GPHRP as part of the Stakeholder Engagement Plan in tandem with the beginning of project construction activities, with the goal of engaging and informing the public, optimizing project design, and improving project performance. The draft ESIA Addendum was published on the IDB and MOW websites, made available at the MOW PEU office, and sent to key stakeholders with request for input.

Three public consultations were held in Camalote, Georgeville, and Roaring Creek on June 16-18, 2018. Attendance rosters and photos of the events appear in Appendix 8 of this ESIA Addendum. The consultations were done with the goals of informing the public and stakeholders, obtaining input and ideas for improving the project, and incorporating the results into the final version of the ESIA Addendum, which was subsequently published on the MOW and IDB websites.

The public meetings in Camalote (along Road Section 2) and Georgeville (along Road Section 3) were attended by about one dozen persons. The chief concerns expressed were related to the following:

- Adequacy of road crossings, especially during the construction period. Some footpaths near Camalote have been removed due to installation of the water line there, and at present there is only mud on freshly graded surfaces, so access to the highway is difficult. It was noted that no speed bumps or formal crossings have been removed. It was responded that signs would be provided to improve safety at the informal crossings, and that all crossings would be restored or improved upon the finish of construction and final clean-up. It was clarified that the water line installation is under the purview of the MOW and that all strictures of the ESMP apply to the contractor, so that subsequent inspections should address the issue.
- Signage. Questions were also raised about posting of signs on the highway reserve or right-of-way (the response being that MOW standards would apply to signage for safety reasons).
- School safety. It was noted that temporary measures to improve safety would be needed because school is starting in September. It was suggested that school outreach and education for students would be included in the Road Safety Program during the first two years of operations, but that temporary measures would also be recommended within the ESMP.
- Culvert at Ontario. One comment from a landowner near the Ontario Spring was that the existing culvert is located perhaps fifty yards away from the spring, so that during floods the drainage where the spring is located tends to overflow across the road and wash out the hillside downstream, flooding the owner's house. It was responded that the MOW is open to the idea of relocating the drainage closer to the spring, and protecting against erosion downhill of the road. This will be examined and included in the corresponding ESMP.
- Jobs. Questions about jobs were also asked with the response being that this information is to be provided by the MOW Social Specialist who is to be on-board by September 2018.

In Georgeville many of the same questions and concerns were raised, as well as the following:

- Local water systems. In Section 3 most of the communities rely on local water systems, and there is concern that damage may occur during construction. The MOW responded that in some cases the main pipeline is directly within the right-of-way (or highway reserve) so there will be outages and disruptions that will occur. The water lines are often leaking and in poor

condition, and they will be replaced using new standards that should improve the level of service. It was also noted that access to the road may be blocked for a few days at a time when construction works are underway, but that the contractors and MOW will work to keep this to a minimum.

- Spring at Ontario. The importance of the Ontario Spring (or “waterfall”) was noted as a resource for the community and passers-by, and the idea of a pull-out or safety shoulder was mentioned for inclusion in the appropriate ESMP.
- Speed bumps. One attendee suggested that an alternative should be found for speed bumps, and it was suggested that better enforcement of speed limits would be helpful. In response to queries on the locations of speed bumps, crossings, and bus stops, it was stated that the locations are now being finalized and prioritized, and that input from the community would be helpful in this regard. It was noted that any additional input or suggestions could be provided to the Village Chairperson, to the engineers at MOW, or via the IDB or MOW websites.

At the community meeting in Roaring Creek, almost 40 attendees offered insightful observations and questions for discussion, as follows:

- Road Maintenance. The availability of funds for road maintenance was a recurring question, since local communities must currently raise their own funds for such purpose. A toll was suggested but MOW noted that funds for maintenance are part of a national budget and are allocated according to need. The ESMP recommends maintenance by local micro-enterprises to create job opportunities, and notes that funding for the first two years of operations is included in the IDB loan. Another participant suggested that government funding for SME development could be used to assist micro-enterprises for this purpose, and this will be included in the ESMP as a possible outreach concept.
- Local jobs. Questions were raised about quotas for local jobs. It was noted that the Gender Action Plan has set a goal of 30% women on local jobs, but that no local job quota exists; and it was acknowledged that most jobs would be taken by specialized contractors on the bridge works at Roaring Creek, and not local workers. It was also noted that details on mentorship programs for women, local jobs, and other community outreach efforts were pending the staffing of a local Social Specialist by MOW, anticipated in August, who would design the programs and provide details. The interim contact

person for queries is the Village Chairperson; and, the phone and email of the PEU were also provided (which should also be posted on signs announcing the works as part of the Grievance Mechanism). It was suggested that these programs also be built into the budgets for the first two years of operations.

- **Truck loads and noise.** Overloaded, unsafe trucks were identified as a road hazard and source of noise when “jake brakes” are used near communities. Again, stronger enforcement of laws for safety inspections and noise emissions was suggested as a solution, which could be recommended within the relevant ESMP for the Road Safety Program during operations.
- **Cemetery.** One attendee stated that the entrance road to the Cemetery had been graded over and there was concern about the gravesite of a family member (uncle) which could not be found. MOW replied that they would look into it.
- **Water Quality.** A concern was expressed that improved drainage from the 80+ culverts could result in runoff of nutrients and pollutants into the Belize River. The response was that this was not considered a critical issue since the streams would continue to function as filters and that the most extensive agriculture is north of the river.

Finally, one participant suggested that a Belmopan by-pass would help reduce traffic congestion passing through the city. The MOW stated that they would take this under advisement for future works.

Further discussions on the ESIA/ESMP were held with project managers and the Supervision Firm, with the goal of fine-tuning the recommendations and ensuring that the new documents provide clear, consistent and realistic guidance for implementation of the project. The following comments were noted:

- **Wildlife crossings.** The box culvert at Warrie Head (identified as a wildlife crossing in Section 2) is already under construction and as no specific design modifications were proposed the culvert is as per the 2016 design, but after-construction adjustments should be provided as soon as possible. At Floral Park (the identified crossing in Section 3) no box culvert was included in the design, but there is one nearby at Little Barton Creek; accordingly, any design modification should be

provided as soon as possible. Finally, the ESIA and ECP suggested that a howler monkey canopy rope crossing could be installed above the Z-curve, but this would only have applied if the existing road would have been cut deeper; instead, a new route is being constructed. It is not clear if a canopy crossing is warranted but it could be investigated at the Z-curve, at Warrie Head, at Little Barton Creek, and/or at Roaring Creek, as populations of howler monkeys along the Belize River would continue to be separated from any south of the highway.

- Water quality monitoring. The list of parameters in the ESIA was considered too extensive given the potential impacts. It was explained that the use of turbidity meters would likely suffice unless spills or other factors merited the additional parameter analyses.
- Air quality monitoring. Visual monitoring for dust was proposed since the list of parameters in the ESIA was considered too extensive. It was explained that the ESMP will state that visual monitoring is sufficient unless complaints or other factors merited the additional analyses.
- It was noted that the 2014 ESMP was annexed to the contracting documents for sections 1 and 2, and, that any addendum or additions to the ESMP would not necessarily be required by the contract. In response it was explained that the revised ESMP is intended to clarify, not add to, the project requirements. It was agreed that the revised ESMPs would be carefully compared with the original 2014 ESMP to identify if there are any additional items that would affect cost.
- It was clarified that a batch plant will not be constructed for the site, rather a temporary storage area for imported asphalt, and agreed that the language in the ESMP will be adjusted accordingly.
- It was clarified that, unless otherwise instructed, the crossings and other safety features in the 2016 design would be adhered to. It was agreed that flexibility in their final placement is desired to allow input by the local communities. There currently is no roundabout in the design plans at the Iguana Creek Road junction.

- Adjustments to the final plans are being undertaken by the contractors to correct deficiencies in vertical and horizontal alignment from the 2016 plans, which were considered to be at the conceptual level. The revised designs are at the 60% level and should be complete by year's end.
- A Road Safety Audit could be conducted on the 100% design plans to improve and optimize road safety. This could also be done upon completion of construction as part of the Road Safety Program in the first two years of operation, but could yield greater benefits if done before construction is complete.

Additional comments from contractors and other stakeholders were requested by the end of the month of June, 2018 for consideration in the final ESIA/ESMP Addendum. In lieu of formal comments, outreach and training is planned for contractors and stakeholders to raise awareness and improve compliance with the ESMP requirements.

ANNEX 1
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)



ANNEX 1. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

- 1. General Construction Practices**
- 2. Drains and Culverts**
- 3. Excavations and Quarries**
- 4. Materials Storage and Handling**
- 5. Workers Camps**
- 6. Ecological & Biological Resources**
- 7. Vegetation Removal and Re-vegetation**
- 8. Traffic Management**
- 9. Archaeological Resources**
- 10. Utilities Management**
- 11. Community and Worker Welfare, Safety and Health**
- 12. Roaring Creek Bridge**
- 13. Z-Curve**
- 14. Succotz By-pass**
- 15. Grievance Redress Mechanism**
- 16. Gender Safeguards**
- 17. Community Health and Safety**
- 18. Resettlement and Livelihood Restoration**



GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 1. General Construction Practices		version 2: July 2018
Risk / Impact to be addressed:	Impacts from improper design criteria; typical impacts from civil works, such as dust, noise, solid waste, sanitation, occupational health, community and traffic safety, erosion, pollution, and impacts to sensitive areas.	
Summary of Current Situation:		
<p>Works have begun in Section 1 (the Roaring Creek Bridge) and along Section 2 (Belmopan to Iguana Creek Road); surveying is soon to be underway along Section 3. Road design is currently being revised and finalized for all Sections, and is pending for Section 4. One quarry is in use near Ontario and several others are being evaluated for possible use; major earth works (benching and terracing) are underway at the Z-curve.</p> <p>The Supervision Consultant and DOE have begun conducting site visits and inspections to verify compliance with the Environmental Compliance Plan (ECP) and are finding that 73% of conditions are in full compliance, 21% are in partial compliance, and 6% are in non-compliance, as of the latest evaluation (March 2018).</p> <p>Many of the themes in this Section 1 of the ESMP are expanded upon in other Sections where additional details are provided.</p>		
Description of Measures to be implemented:		
<ul style="list-style-type: none">• In areas where lifting/vertical alignment of road is impractical, use concrete road surfacing to avoid erosion and undermining of the road.• Establish and adhere to the proposed activity implementation schedule and the monitoring plan/strategy to ensure feedback of monitoring information to the Project and DOE to optimize impact management and if necessary adapt to unforeseen circumstances.• Ensure that noise levels from machinery, vehicles, and construction activity are kept at a minimum for the safety, health and protection of workers and the public, especially within villages and near schools, using noise barriers if necessary.• Keep noise levels below 3 dB(A) higher than ambient conditions (per WBG General EHS Guidelines).*• Restrict within demarcated work areas the movement of heavy machinery, so as to minimize soil compaction, traffic disruption and dust.• Install adequate signage in conspicuous areas to alert on-coming vehicles of on-going works so as to reduce speed, increase safety, and control dust.• Develop and implement appropriate human health and worker safety measures during construction (at minimum use of hard hats, construction footwear, gloves, protective eye wear, etc.).• Where significant environmental impacts may occur, document and photograph pre-construction and post-construction conditions.• Set protocols for vehicle maintenance to control contamination by grease, oil and fuels.• Install temporary erosion control and sediment retention measures (check dams and silt curtains) when permanent ones either are not feasible or are delayed.• Cover stockpiled construction materials, as practicable, to avoid erosion and sedimentation of waterways.• Place solvents, lubricants, oils, and other semi-hazardous and hazardous liquids over a lined area with appropriate secondary containment in order to contain spillage at 110% of the tank volume. Test the integrity of bulk storage tanks and drums, and secure valves on oil and fuel supplies.• Build appropriate containment structures around bulk storage tanks and materials stores to prevent spillage entering watercourses and construct oil-water separators at outlets.• Handle, store, use and process branded materials in accordance with manufacturer’s instructions and recommendations.• Prohibit burning of waste materials.• Employ techniques to minimize dust and vapor emissions as practicable (e.g., road speed limits, air extraction equipment, scaffolding covers, spraying of road with water as needed (particularly in dry		

season).				
<ul style="list-style-type: none">• Build sedimentation ponds or other separators for silt-laden material prior to allowing significant outflow into watercourses.• Build collection channels leading to oil and/or silt traps, particularly around areas used for vehicle washing or fuelling.• Seal or remove abandoned drains to minimize water contamination.• Introduce measures to control and minimize the volume of waste on site. Keep work areas free of litter. All domestic and solid waste must be collected and disposed of at an approved site.• Employ sensitive strategies with regard to trees, watercourses, plant or animal species or habitats, and important historical and archaeological features.• As practicable, landscape construction sites in a way that is appropriate to local conditions.• Do not build structures in sensitive areas such as wetlands and in floodplains.				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Some of these measures are relevant to the design phase and may have cost implications. Most of these mitigation measures are typical good practice and are already required through the construction contracts. Cost for supervision, monitoring and reporting is within current scope of Supervision Consultant at one day per week, but time/cost will likely increase as activities ramp up. Requirements ongoing in the operations phase will require resources to be dedicated by MOW and the PEU.
	Construction	X		
	Operation	X		
	Closure	X		
Applicable Requirements and Standards: <ul style="list-style-type: none">• Engineering design criteria and specifications• Best Management Practices (BMPs)• DOE Environmental Compliance Plan (ECP) section 3.1• (2014) ESMP section 1.6.1• * WBG General EHS Guidelines				
Indicators to measure success: <ul style="list-style-type: none">• Compliance level with DOE ECP• Work stoppage, fines or fees from DOE or IoA			Performance goals for Indicators: <ul style="list-style-type: none">• Greater than 95% of conditions in compliance• No work stoppages, fines or fees	
Responsibility for implementation of measure:		Supervision Consultant and PEU to verify that re-design meets ECP requirements. Contractor to abide by ESIA and ESMP requirements. PEU and Supervision Consultant to verify compliance with requirements and report to DOE. MOW and PEU to verify performance during operation phase and report to DOE.		
Frequency of inspection/ compliance verification:		Contractors to inspect daily; Supervision Consultant to inspect weekly; PEU to inspect monthly; DOE, IoA to inspect periodically at will.		
Additional Information / Guidance:		Many of the themes in this Section 1 of the ESMP are expanded upon in other Sections where additional details are provided.		

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 2. Drains and Culverts				version 2: July 2018
Risk / Impact to be addressed:		Changes in runoff patterns, damming or diversion of waterways, aggravation of flooding problems, erosion of stream channels.		
Summary of Current Situation:				
<p>The highway project includes 5 bridges and at least 86 culverts, (26 in Road Section 2, 14 in Road Section 3, and 25 in Road Section 4) as well as miles of drains across the 32-mile length of Sections 1, 2, 3 and 4. Most of the smaller culverts are to be cleaned and replaced by 36-inch (900 mm) concrete tubes. Eight of the culverts are in areas known for flooding and must be enlarged, and the inflow and outflow points must be protected against erosion from high flows by riprap or other energy dissipation structures. The final configuration is currently being redesigned and verified; the culvert at Warrie Head is under construction.</p> <p>One culvert near Ontario drains the discharge from a natural spring where travelers and locals often stop to enjoy and utilize, and another area near Blackman Eddy has a shallow water table where landslides, slumps and subsidence occur. Typical culvert design calls for concrete tubes, but wildlife crossings will be accommodated at 3 key locations (one in each of Road Sections 2, 3 and 4 as shown in ESIA Addendum Figure 2).</p>				
Description of Measures to be implemented:				
<ul style="list-style-type: none">• Design, construct, and maintain drains to minimize ponding and overflow onto highway or inundate private property.• Construct drainage along all realigned sections to avoid damming or obstruction of surface runoff on either side of road.• Replace all culverts that are either undersize or compromised according to the recommendations resulting from the culvert assessment.• Ensure culvert dimensions are based on assessment of projected water flows and that they meet at the very least the minimum standard.• Ensure that the drainage improvement recommendations are implemented for the flood prone areas and that proper drainage form part of the overall road design.• Ensure that where there are sections proposed for vertical and horizontal alignments, that these provide proper drainage designs for adjacent properties and landowners.• Install or retrofit three oversize box culverts to accommodate wildlife crossings as per ESIA section 6.7.2 and (2014) ESMP Table 1.12 (17°11'59.60" N 88°57'59.04"W, 17°13'29.82" N 88°52'29.56"W, and 17°07'03.59" N 89°6'17.58"W) or at other agreed-upon locations at culverts or bridges.**• Ensure that outfalls are fitted with riprap, gabions, check dams, or other erosion control measures adequate to prevent erosion and sedimentation, especially where drainage is towards springs.*• Monitor turbidity up- and down-stream of culverts if there is any indication of sedimentation or erosion. <p>**</p>				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Drains and culvert costs totaled USD\$1.1M in the 2014 feasibility study, but the total cost will change according to the final design.
	Construction	X		Mitigation measures are standard practice and should be included in Contractor's costs.
	Operation	X		Initial cleaning of USD\$12,000 for Red, Garbutt and Barton bridges, USD\$54,000 for wildlife crossings (2014 ESMP Table 1.12).
	Closure			Maintenance for clearing and cleaning three times per year was estimated for a total of 60

				times at USD\$375,000 in the Feasibility Study.
Applicable Requirements and Standards: <ul style="list-style-type: none">• Engineering Design documents and hydrologic calculations• * Best Management Practices (BMPs) for erosion control• DOE Environmental Compliance Plan (ECP) section 3.2 (** proposed modifications to ECP to be approved by DOE)• (2014) ESMP section 1.6.2 and Table 1.12				
Indicators to measure success: <ul style="list-style-type: none">• Overtopping of culverts in flood events• Number of culvert failures from erosion or undercutting.• Cases of flooding of neighbors’ properties caused by damming or diversion of waterways			Performance goals for Indicators: <ul style="list-style-type: none">• No roadway flooding in up to 20-year storm events• No reconstruction or repairs required in first two years• No grievances from flooding reportedly caused by highway construction	
Responsibility for implementation of measure:		Supervision Consultant and PEU to determine final configuration of crossings including retrofit or relocation of 3 oversize box culverts or bridges at key wildlife crossings. Contractor to build to specifications and implement all BMPs in field. PEU to monitor culvert performance and clear/clean during first two years of operation.		
Frequency of inspection/ compliance verification:		During construction, Contractor to inspect BMPs daily; Supervision Consultant to inspect weekly; DOE, IoA, PEU to inspect periodically at will. During operation, PEU to inspect, clean and maintain three times per year.		
Additional Information / Guidance:		Dec. 2014 Feasibility Study (A. Thurnton & Associates, vol. 5)		

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 3. Excavations and Quarries				version 2: July 2018
Risk / Impact to be addressed:		Environmental degradation and/or community safety impacts from blasting; waste, water, traffic safety; noise, dust; loss of biodiversity; potential impacts on archeological resources.		
Summary of Current Situation:				
One quarry has been re-opened near Ontario along Section 2, Considerable dust is generated by the operation at Ontario, and there is no air quality monitoring in place in this existing quarry operated by the MOW. Several others are being evaluated for possible use as listed in the (2014) ESIA, and additional environmental and/or archeological assessments are needed if they are expanded.				
Earth works are also underway at the Z-curve, but are addressed separately in section 13 of this ESMP.				
Description of Measures to be implemented:				
<ul style="list-style-type: none">Obtain appropriate licenses/permits from the Ministry of Natural Resources and Agriculture to operate quarries or borrow pits.***Clearly mark the extraction site boundaries to minimize vegetation clearing. In the case of any expansion, obtain clearance from IoA (see ESMP #9), particularly at the Western Sanitary Pit near Nohoch Ek (see ESIA Addendum Figure 2).*Ensure that the original ESIA siting criteria are met (as listed in 2014 ESIA section 6.3.3), with quarry locations being away from settlement areas, cultural sites, wetlands, or sensitive zones; and, where practical, extract material volumes from different sites to distribute the environmental impact footprint.Remove topsoil under dry (not moist) conditions to reduce compaction, and store topsoil in mounds no higher than 1 to 2 meters in areas protected from erosion by air or water, for later use in phased closure and restoration of the pit when extraction has been completed, as logistically feasible.**Control runoff into and out of quarry pits by providing perimeter drains and internal drains as needed, and ensure that measures are put in place to trap sediments before discharging into the receiving environment (e.g. sediment traps, berms, etc.).Upon completion of extraction, areas should be restored as close to their original states as possible and suitable for sustainable use, leaving sites level and avoiding ponding or pits.Stockpile waste material stripped from the surface of existing roads for use by local communities' street and road works upon request and as available and feasible.**Develop specific procedures for storing topsoil, and for phased closure and reshaping and restoration of the pit when extraction has been completed. Include plans for segregating gravel and quarry materials by quality and grade for possible future uses. Where appropriate, include reseeded or re-vegetation to reduce soil erosion, prevent gullying and minimize visual impacts.Backfill and/or restore borrow areas and quarries before abandonment, if alternative uses for those sites are not planned. Areas should be restored by creating landforms that are suitable for sustainable use after extraction, minimize the long-term visual impact, and compatible with the adjacent landscape. To the extent practicable natural drainage patterns shall be reinstated where they have been altered or impaired.If there is reason to suspect release of wastewater, fuels, or chemicals to the environment, then conduct water quality monitoring as specified in the (2014) ESMP (Table 1.2).**Conduct air quality monitoring at nearby receptors as warranted for dust (PM2.5, PM5, PM10 or SPM) and ensure results meet Belize Pollution Regulations.**				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	These mitigation measures are typical good practice and are required through the construction contracts. Re-vegetation and
	Construction	X		

	Operation	X		monitoring first two years is typical BMP.
	Closure	X		
Applicable Requirements and Standards: <ul style="list-style-type: none">• Compliance with Quarry permits from Ministry of Natural Resources ***• Best Management Practices (BMPs)• DOE Environmental Compliance Plan (ECP) section 3.3 (** proposed modifications to ECP to be approved by DOE)• Belize Pollution Regulations for air quality (Chapter 328, First Schedule)• (2014) ESMP section 1.6.3• (2014) ESIA*				
Indicators to measure success: <ul style="list-style-type: none">• Number of grievances about dust, noise, vibration, damage from blasts• Work stoppage, fines or fees from DOE or IoA			Performance goals for Indicators: <ul style="list-style-type: none">• No unresolved grievances about dust, noise, vibration, or damage• No work stoppages, fines or fees	
Responsibility for implementation of measure:		MOW and PEU to enforce requirements. Supervision Consultant to verify correct siting and operation of quarries.		
Frequency of inspection/ compliance verification:		MOW and PEU to inspect quarries weekly; Supervision Consultant to inspect weekly; DOE, IoA to inspect periodically at will.		
Additional Information / Guidance:		Measures for blasting, as well as other mitigation measures for works at the Z-curve, are addressed separately in section 13 of the ESMP.		

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 4. Materials Storage and Handling				version 2: July 2018
Risk / Impact to be addressed:		Spills and runoff of fuels, soils, and/or contaminants; improper solid waste and debris disposal.		
Summary of Current Situation:				
Solid waste, debris, and other materials are stored at the two work camps, and a fuel tank is present at one of the camps. Earth and excavated materials are stored at work sites near the Z-curve and Roaring Creek, and cleared vegetation is stored along the highway at various locations.				
Description of Measures to be implemented:				
<ul style="list-style-type: none">Identify sites for temporary/permanent storage of excavated material and construction materials, and implement soil erosion control measures to avoid surface runoff and prevent siltation of waterways and drains.Maintain proper storage facilities in all construction camps.Set protocols for vehicle maintenance to control contamination by grease, oil and fuels (e.g. no refueling or oil changes within 100 feet of waterways).Store fuel in appropriate containment structures with impermeable berms with capacity of 110% tank volume to prevent spillage from leaving the site, and install oil and/or silt traps around areas used for vehicle washing or fueling.Maintain spill clean-up kits, prevent any spills from entering waterways, and report spills to DOE immediately.Handle, store, use and process branded materials in accordance with manufacturer’s instructions and recommendations.Construction waste materials shall be transported to appropriate, local disposal areas designated and approved by the relevant authorities.The burning of waste materials is prohibited.**If there is reason to suspect release of wastewater, fuels, or chemicals to the environment, then conduct water quality monitoring as specified in the ESIA (section 7.1.4.1).**				
Stage of Project to which measure applies	Preconstruction		Estimated cost(s):	These mitigation measures are typical good practice and are required through the construction contracts.
	Construction	X		
	Operation			
	Closure			
Applicable Requirements and Standards:				
<ul style="list-style-type: none">Best Management Practices (BMPs)(2014) ESMP section 1.6.4DOE Environmental Compliance Plan (ECP) section 3.4(** proposed modifications to ECP to be approved by DOE)				
Indicators to measure success:			Performance goals for Indicators:	
<ul style="list-style-type: none">Collection of waste oil and hydrocarbon-contaminated soilUse of designated disposal areas for solid waste			<ul style="list-style-type: none">Manifests or tracking as evidence of proper handlingReceipts, haul tickets or manifests from	

and debris		landfills or approved dump sites.
Responsibility for implementation of measure:	Contractor to properly manage fuels, wastes, and materials; Supervision Consultant to verify.	
Frequency of inspection/ compliance verification:	Contractor to inspect materials storage areas daily; Supervision Consultant to inspect weekly; DOE, IoA, PEU to inspect periodically at will.	
Additional Information / Guidance:		

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 5. Workers Camps				version 2: July 2018
Risk / Impact to be addressed:		Social disruption from labor influx and in-migration; environmental degradation and/or community safety impacts from waste, water, traffic.		
Summary of Current Situation: Two worker camps have been constructed thus far: one near Roaring Creek Bridge to house ~20 workers and support ~50 local workers for the bridge construction; and, another on Section 2 without dorms that serves as an equipment, storage and work yard. Both are recently constructed and ready to begin works soon.				
Description of Measures to be implemented: <ul style="list-style-type: none">• Ensure that workers’ camps are located away from schools, churches and areas frequented by community members.• Locate camp sites away from waterways and provide amenities and proper sanitation facilities.• Ensure workers’ camps are secure and prevent access to members of general public.• Ensure campground is maintained free of debris and pollution.• Provide acceptable, sanitation facilities for workers including separate facilities for male and female.• Properly containerize and dispose of domestic waste at workers’ camps.• Locate bulk storage of fuel and other hazardous substance away from workers structure and place appropriate signs (no smoking, cell-phones etc. around these areas).• Designate work areas and campsites as “no hunting zones” and educate workers that hunting, collection, capture, or destruction of wildlife or plants is prohibited.• Vegetate and seed disturbed areas of campsites after decommissioning sites.• Monitor the re-vegetation of all affected areas and include results in periodic reports with photographic evidence and estimates of percentage ground cover.*• If there is reason to suspect release of wastewater, fuels, or chemicals to the environment, then conduct water quality monitoring as specified in the (2014) ESMP (Table 1.2).**• Educate workers on HIV/aids, harassment and gender issues (see Gender Strategy and Action Plan).***				
Stage of Project to which measure applies	Preconstruction		Estimated cost(s):	These mitigation measures are typical good practice and are required through the construction contracts. Additional cost of BZ\$1500 for training fees for workers and communities on the mandatory child abuse reporting law. Re-vegetation and monitoring first two years is typical BMP.
	Construction	X		
	Operation	X		
	Closure			
Applicable Requirements and Standards: <ul style="list-style-type: none">• Compliance with labor law and child welfare law• *Best Management Practices (BMPs)• DOE Environmental Compliance Plan (ECP) section 3.5 (** proposed changes to ECP to be approved by DOE)• (2014) ESMP section 1.6.5, Table 1.1(a)• *** (2014) ESMP Table 1.9 and Social Management Plan (section 1.4)• Gender Strategy and Action Plan				
Indicators to measure success: <ul style="list-style-type: none">• Percentage of workers hired from local			Performance goals for Indicators: <ul style="list-style-type: none">• Up to 30% local workers	

<p>communities</p> <ul style="list-style-type: none"> • Number of grievances about worker conduct • Number of sexual exploitation/harassment cases investigated and substantiated • Monitoring of re-vegetation / ground cover of work camps after they are closed 	<ul style="list-style-type: none"> • No unresolved grievances about worker conduct • 100% of sexual exploitation/harassment cases investigated in line with Zero Tolerance Policy • Restoration of ground cover to 100%
<p>Responsibility for implementation of measure:</p>	<p>Contractor to develop and abide by Code of Conduct.</p> <p>PEU's Community Liaison Officer to ensure compliance and manage Grievance Mechanism.</p> <p>Contractor to implement all BMPs in field, and Supervision Consultant to verify correct siting and operation of work camps.</p> <p>PEU to monitor re-vegetation during first two years of operation.</p>
<p>Frequency of inspection/ compliance verification:</p>	<p>Contractor to inspect work camps weekly; Supervision Consultant to inspect weekly; DOE, IoA, PEU to inspect periodically at will.</p> <p>PEU to monitor and update Grievance Mechanism weekly, and report monthly.</p> <p>During operation, PEU to inspect ground cover percentage quarterly.</p>
<p>Additional Information / Guidance:</p>	<p>Workers' Accommodations: processes and standards, a Guidance Note by IFC and the EBRD (September 2009).</p>

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 6. Ecological& Biological Resources		version 2: July 2018
Risk / Impact to be addressed:	Pollution, sedimentation, or alteration of watercourses; erosion of hillsides or culverts; loss or destruction of wildlife or plants.	
Summary of Current Situation:		
<p>Clearing of vegetation can create the conditions for erosion of stream banks or hillsides, with movement of silt and sediment that can choke rivers and waterways. Erosion control measures, water quality monitoring, and re-vegetation are necessary but have not been properly implemented in the field at bridges and culverts, and at areas where benching and terracing are underway (e.g. the Z-curve and/or quarries).</p> <p>The GPHRP is not located in a major wildlife corridor as much of the Belize River Valley is dedicated to agriculture, but the existing highway does create a barrier to migration to and from the Maya Mountains. The original ESIA (section 3.10) noted presence of wildlife (howler monkeys, tapirs, and gibnuts) at Guanacaste National Park, the Z-curve, and near Galen University, likely due to their use of riparian habitat as movement corridors. In addition, there is potential for hunting, collection, or destruction of wildlife, either by construction crews during works, or due to increased speeds of travel once the highway is rehabilitated.</p>		
Description of Measures to be implemented:		
<ul style="list-style-type: none">• Prevent siltation of creeks and streams by using Best Management Practices (BMPs) for erosion control such as silt control wattles, silt curtains, bunds, intercepting ditches, check dams, wing dams, by-pass channels, barriers, or settling ponds on unprotected bare slopes and on the perimeters of non-vegetated areas.*• No vehicles or machinery will be washed in rivers or creeks, and any excavated or stored materials, fuels or chemicals near rivers or creeks must be properly contained with berms, bunds, walls or pads.• The natural flow of streams or creeks shall not be prevented or constrained. Any waterway diversion must be restored with adequate hydraulic flow.**• Culverts or drainage works shall be fitted with outfall protection by rip-rap or energy dissipation structures.*• Where culverts or drainage works have been made, the areas shall be re-seeded and re-vegetated.• De-watering activities near streams or watercourses must use intercepting ditches, by-pass channels, barriers, temporary settling ponds, and/or other measures as needed to prevent silt runoff into watercourses.*• Monitor turbidity up- and down-stream of areas where siltation or sedimentation is suspected based on visual observations.**• Install or retrofit three oversize box culverts to accommodate wildlife crossings as per (2014) ESIA section 6.7.2 and (2014) ESMP Table 1.12 (17°11'59.60" N 88°57'59.04"W, 17°13'29.82" N 88°52'29.56"W, and 17°07'03.59" N 89°6'17.58"W) or at other agreed-upon locations at culverts or bridges, and post safety signs for wildlife crossings.**• When clearing, preserve all roadside trees and shrubbery not required to be cleared.• At campsites, re-seed and re-vegetate any disturbed areas once the project is complete.• At the Z-curve and other hillsides cleared during construction, provide erosion control works using BMPs listed above, and upon completion of works perform re-seeding, planting, and re-vegetation.*• Designate work areas and campsites as “no hunting zones” and educate workers that hunting, collection, capture, or destruction of wildlife or plants is prohibited.• Monitor the re-vegetation of all affected areas and include results in periodic reports with photographic evidence and estimates of percentage ground cover.*• During operations, monitor animal road kills as part of Road Safety Program.***• At the Z-curve, leave intact the old road or un-aligned road area to develop a Nature Walk area around this area, if feasible, in concert with the nearby wildlife crossing at 17°13'29.82" N 88°52'29.56"W		

(Warrie Head).**				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	USD\$54,000 for wildlife crossings (2014 ESMP Table 1.12); BZ\$20,000 for water quality monitoring. Other actions are typical BMPs required of Construction Contractors; Re-vegetation at Z-curve may require purchase of plants, topsoil, and labor; Monitoring first two years is typical BMP required of PEU.
	Construction	X		
	Operation	X		
	Closure	X		
Applicable Requirements and Standards: <ul style="list-style-type: none">• * Best Management Practices (BMPs) for erosion control and re-vegetation• Quarry requirements• DOE Environmental Compliance Plan (ECP) section 3.6 (** proposed modifications to ECP to be approved by DOE)• (2014) ESMP section 1.6.6 and Table 1.12• *** (2014) ESIA				
Indicators to measure success: <ul style="list-style-type: none">• Monitoring of turbidity up- and down-stream of works near rivers and streams• Number of slope failures at Z-curve, culvert outfalls, or river banks.• Monitoring of ground cover percentage during operations• Roadkill frequency during operations			Performance goals for Indicators: <ul style="list-style-type: none">• No increase in turbidity• No slope failures• Restoration of ground cover up to 100%• Infrequent road kills at designated crossings as opposed to other areas	
Responsibility for implementation of measure:		Supervision Consultant and PEU to determine final configuration of crossings, additional retrofit or relocation of 3 oversize box culverts or bridges and signage at key wildlife crossings. Contractor to implement all BMPs in field. PEU to monitor revegetation during first two years of operation.		
Frequency of inspection/ compliance verification:		During construction, Contractor to inspect BMPs daily; Supervision Consultant to inspect weekly; DOE, IoA, PEU to inspect periodically at will. During operation, PEU to inspect ground cover percentage quarterly and monitor roadkill as part of Road Safety Program.		
Additional Information / Guidance:		Wildlife information is provided in the Baseline Analysis Report (Egis, April 2017, chapter 11); see ESMP section 13 for additional information on Z-curve.		

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 7. Vegetation Removal and Re-vegetation				version 2: July 2018
Risk / Impact to be addressed:		Pollution, sedimentation, or alteration of watercourses; erosion of hillsides or culverts; visual and aesthetic impacts; clogging of drains with silt.		
Summary of Current Situation:				
Clearing of vegetation can create the conditions for erosion of stream banks or hillsides, with movement of silt and sediment that can choke rivers and waterways. Erosion control measures, soil stockpiling and re-vegetation are necessary but have not been properly implemented in the field at bridges and at areas where benching and terracing are underway (e.g. the Z-curve and/or quarries). Re-vegetation efforts have not yet begun as works are just beginning, but proper planning will facilitate these efforts and reduce costs. Specific types of plants and erosion control measures may also be required to effectively re-vegetate near culverts, along floodplains (e.g. the Mopan River near Succotz and Benque), or in riparian zones.				
Description of Measures to be implemented:				
<ul style="list-style-type: none">Where significant environmental impacts may occur, document and photograph pre-construction and post-construction conditions.If vegetation must be removed during wet periods, it shall be conducted on an as-needed basis (just before actual construction begins) to minimize exposed areas and prevent excessive erosion.Stockpile and store topsoil with adequate measures in place to prevent erosion, and where possible preserve removed plants for later use in re-vegetation (e.g. begonias at the Z-curve).*Re-vegetate on a continuous basis. As soon as works are completed on respective road sections and immediately after equipment is removed, re-vegetate with recovered plants and other appropriate local flora.Stabilize hillsides to avoid slippage or landslide during torrential rain events. Work with agronomists to identify native species with the best erosion control properties, root strength, site adaptability, and other socially useful properties. Do not use non-native plants. Use soil stabilizing chemicals or geo-textiles (fabrics) where feasible and appropriate.All danger trees along the roadway and right-of-way that have the potential to affect road traffic in the event of a natural caused fall (i.e. high vegetation) must be cleared.Support the provision of information from agronomists to promote sustainable land use practices among farmers to reduce siltation and damming of stream channels, to minimize potential of flash floods.**Minimize potential for die back of vegetation areas by not altering the placement of culverts and drainage system, by clearing where necessary at bridges and culverts.**After construction is complete, monitor the re-vegetation of affected areas and include results in periodic reports with photographic evidence and estimates of percentage ground cover.*During operations, periodically clean vegetation and debris from culverts as need to prevent flooding.*				
Stage of Project to which measure applies	Preconstruction		Estimated cost(s):	These actions are typical BMPs required of Construction Contractors.
	Construction	X		Re-vegetation at Z-curve may require purchase of plants, topsoil, and labor unless locally available materials have been stockpiled.
	Operation	X		Initial cleaning of USD\$12,000 for Red, Garbutt and Barton bridges; maintenance for clearing and cleaning three times per year was estimated for a total of 60 times at USD\$375,000 in the Feasibility Study.
	Closure			Monitoring first two years is typical BMP

				required of PEU.
Applicable Requirements and Standards: <ul style="list-style-type: none">• * Best Management Practices (BMPs) for erosion control and re-vegetation• DOE Environmental Compliance Plan (ECP) section 3.7 (** proposed changes to ECP to be cleared by DOE)• (2014) ESMP section 1.6.7 and Table 1.12				
Indicators to measure success: <ul style="list-style-type: none">• Number of slope failures at Z-curve, culvert outfalls, or river banks.• Sediment removal from drains.• Monitoring of ground cover percentage during operations			Performance goals for Indicators: <ul style="list-style-type: none">• No slope failures• Maintenance records show minimal amounts of sediment removal• Restoration of ground cover to 100% as evidenced by photographic records	
Responsibility for implementation of measure:		Contractor to implement all BMPs in field. PEU Community Liaison to provide information from agronomists about soil conservation to farmers near right-of-way. PEU/MOW to monitor re-vegetation and drain maintenance during first two years of operation.		
Frequency of inspection/ compliance verification:		During construction, Contractor to inspect BMPs daily; Supervision Consultant to inspect weekly; DOE, PEU to inspect periodically at will. During operation, PEU to inspect ground cover percentage quarterly, report on drain maintenance		
Additional Information / Guidance:		Agronomists at Galen University or the University of Belize; Dec. 2014 Feasibility Study (A. Thurnton & Associates, vol. 5)		

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 8. Traffic Management		version 2: July 2018
Risk / Impact to be addressed:	During construction, traffic patterns change and can become dangerous due to sudden stops, detours, and congestion. Pedestrian crossings and access can be dangerous or blocked. Improper design can lead to permanent obstruction of access or loss of connectivity, or the creation of unsafe zones or conditions. During the operations phase, repeated accidents occur in “hot spots” where design, signage, or other factors present ongoing hazards.	
Summary of Current Situation:		
<p>Design of the highway is undergoing final adjustments, so the placement of signage, crossings, sidewalks, guard rails, roundabouts, traffic calming features, and other road safety measures can be optimized with community input for greater protection for all road users, including motorists, carriages, bicyclists, and pedestrians.</p> <p>For traffic safety during construction, detours are already in place for bridge works at Roaring Creek and the Z-curve. Survey crews in Section 2 are using flagmen, cones, and signage to warn drivers of road hazards. Works for water pipeline replacement in Section 2 are changing access and traffic patterns for pedestrians and businesses, with some informal highway crossings being removed or affected.</p> <p>Relative to the operations phase, the highway has very high accident rates which the GPHRP is meant to improve. There is little safety signage, crosswalks are inadequate, there are no guard rails or pavement markings, and the narrowness and roughness of the road are all conducive to accidents. There is concern that increasing speed will cause increasing accidents. The GPHRP will fund operations over the first two years of the project, and should include elements to further the development of a formal Road Safety Program including monitoring of accidents, annual evaluations and prioritization of “hot spots” for safety improvements, public outreach and education, and enforcement.</p>		
Description of Measures to be incorporated in the design phase:		
<ul style="list-style-type: none">• Reduce congestion on roads through communities and villages, improving pedestrian safety (with reduced impact through traffic conflict) and other adverse social impacts associated with congestion, including traffic noise.• Improve connectivity between residential development and the social infrastructure and services available.• Improve vehicular movement across the road network and vehicular efficiency and provide greater access to alternative routes.• Provide pedestrian and cycle carriageways across communities to enable better traffic safety.• Define the locations of crosswalks, guard rails, sidewalks and other safety measures considering input from the communities.		
Description of Measures to be implemented during the construction phase:		
<ul style="list-style-type: none">• Maintain a minimum road width open for through traffic at all times.• Install signage to direct traffic during construction stating speed, curves, crossings and junctions.• Use proper signage, traffic safety equipment/warning devices and speed indicators when diverting traffic either to an alternate route or reducing to one lane.• Employ traffic wardens at schools and other sensitive areas to control the movement of both the deviated traffic and construction traffic.• Place fencing and safety barriers to separate the construction site from the trafficable areas.• Use adequate night illumination and warning signs and decals to alert and warn motorist and pedestrians.• Reduce pedestrian/vehicle conflict to ensure safety, especially through the communities.• Install pedestrian crossings at key areas including busy trafficking areas, schools and clinics.• Require the contractors to manage construction activities to ensure that traffic can flow in both directions on the highway, especially at night thereby minimizing risks.		

- Maintain access to all properties, including those that are somehow linked. Where access restrictions are required, the land owner should be notified as early as possible and such restrictions should be limited to daylight hours.

Description of Measures to be implemented during the first two years of operations:

- * Develop a formal Road Safety Program including monitoring of accidents, annual evaluations and prioritization of “hot spots” for safety improvements, public outreach and education, and enforcement.
- * Consider links with the CDB-funded “Road Safety Project” which included capacity building and infrastructure improvements east of Belmopan, and the World Bank’s Global Road Safety Facility (GRSF).

Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Some of these measures are relevant to the design phase and may have cost implications. The construction-phase mitigation measures are typical good practice and are already required through the construction contracts. Cost for supervision, monitoring and reporting is within current scope of Supervision Consultant at one day per week, but time/cost will likely increase as activities ramp up. Requirements in the operations phase will require resources to be dedicated by MOW and the PEU.
	Construction	X		
	Operation	X		
	Closure			

Applicable Requirements and Standards:

- MOW Design Criteria
- Engineering design criteria and specifications
- DOE Environmental Compliance Plan (ECP) section 3.3
- (2014) ESMP section 1.6.8, Table 1.1a, and Table 1.9
- * ESIA Addendum (2018)

Indicators to measure success:

- Number of accidents during construction
- Complaints or grievances during construction related to traffic, access, safety
- Accident rates during operations

Performance goals for Indicators:

- No fatalities during construction
- No unresolved complaints regarding traffic, access, safety
- Decreasing accident rates at “hot spots” over first two years

Responsibility for implementation of measure:	Supervision Consultant and PEU to verify that re-design meets road safety requirements. Contractor to abide by ESMP requirements during construction. PEU and Supervision Consultant to verify compliance with requirements and report to DOE. MOW and PEU to develop Road Safety Program during operations phase.
Frequency of inspection/ compliance verification:	During construction, Contractors to inspect daily; Supervision Consultant to inspect weekly; PEU to inspect monthly; DOE to inspect periodically at will. During operations, accident monitoring continuously, analysis in quarterly reporting.
Additional Information / Guidance:	CDB Road Safety Project, WBG Global Road Safety Facility (GRSF).

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 9. Archaeological Resources		version 2: July 2018
Risk / Impact to be addressed:	Damage, unearthing, or looting of archaeological structures and artifacts during construction, earth-moving activities or utility works	
Summary of Current Situation:		
<p>The ESIA has identified the following areas where important archaeological or historic physical cultural resources (mounds, plazuelas, patios, or other features) are present near or within the areas that may be affected by project works (GPS coordinates provided where available, and maps are provided in Figures 2 and 3):</p> <ul style="list-style-type: none">• Near the National Agricultural Fairgrounds in Road Section 1, the Rivera Site (E308780, N1908287).• Along Road Section 2 near Camalote, Teakettle, Warrie Head (E300583, N1905461), Ontario (E299385, N1905622; E298502, N1905452; E298190, N1905301), and Blackman Eddy (E296830, N1905387), within the existing carriageway buffer zone or road corridor.• Along Road Section 3 near Lower Dover, Floral Park (E291633, N1903038), Baking Pot and Esperanza, located within the road corridor or study area.• Along Road Section 4 near CahalPech, Buenavista, NohochEk, Actuncan and Xunantunich, which are partially within the road buffer zone or the proposed bypass route, and several mounds near the bypass route (E274592, N1890593; E274542, N17890012; E273947, N1890197; E274096, N1890174; and, E273915, N188968; see Figure 3).• Near the Western Sanitary Pit quarry close to NohochEk. <p>Thus far the site locations have been verified in the field in the ESIA through literature research or LIDAR surveys. Contractors have not yet been fully mobilized, but some clearing and surveying is underway. The routing for the roadway should mostly follow within the existing 42-foot-wide right-of-way, such that clearing of new areas would only be required near curves, re-routes, or bypasses, and excavation would only be required at culverts, near bridges, and for utilities (water lines, power or telephone poles) on the highway right-of-way, and near any expansion of areas quarried.</p>		
Description of Measures to be implemented:		
<ul style="list-style-type: none">• Identify and avoid areas in the project impact zone that may contain important ecological, archeological, historic, religious, or cultural resources (including those listed above from the Archaeological Assessment contained in the 2014 ESIA section 4.16).• The Contractor will provide training and sensitization to ensure that construction crews and supervisors be alert for buried historic, religious, and cultural objects, and provide them with procedures to follow if such objects are discovered.• Develop procedures in case of chance-finds, consistent with the following guidance: *<ul style="list-style-type: none">✓ All construction activity in the vicinity of the find/feature/site will cease immediately and notify the Construction Foreman, Supervision Consultant and PEU.✓ Supervision Consultant and PEU will visit the site immediately, delineate the discovered find/feature/ site with physical markers and GPS recordings, and secure the area to prevent further damage or loss of removable objects.✓ Supervision Consultant and PEU will engage an Archaeologist to assess, record and photograph the find/feature/ site, determining if and where work may proceed, identify alternatives to minimize any impacts, using engineering and archaeological criteria, to arrive at a proposed course of action.✓ The PEU and Archaeologist will contact the IoA and provide find information, proposed course of action, and request clearance to proceed with works.• The Contractor will provide incentives for recovery of objects and disincentives for their destruction.• For all Road Sections, the Supervision Consultant will coordinate with IoA to erect safety barriers to		

protect the existing mounds, plazuelas and patios that are within the buffer zone or areas potentially affected by project works.						
<ul style="list-style-type: none">During the detailed design phase of Road Section 4 and any other route changes, the PEU will use alternate routes to avoid direct impact to archaeological mounds and plazuelas as indicated in the 2014 ESIA Archaeological Assessment, and will verify in the field with IoA to ensure that potential sites of interest have been adequately identified and avoided in the final routing.**If impact to sensitive areas (e.g. Succotz by-pass) cannot be avoided during road construction, involve ecologists, archeologist sand engineers to evaluate alternatives and minimize impacts, using guidelines from the Archaeological Watching Brief.**Document and photograph any sensitive archaeological areas before, during and after any earth-moving or clearing works, to provide a record of pre- and post-construction condition.Considering the archeological richness of the area, coordinate with IoA and obtain clearance for the re-opening or expansion of any quarry sites, especially the Western Sanitary Pit and any others near Nohoch Ek.**						
Stage of Project to which measure applies	Preconstruction	X	Total estimated cost:	If resources are found, then any additional costs TBD by Construction Contractor	Expected efficacy or effectiveness:	High
	Construction	X				
	Operation					
	Closure					
Applicable Requirements and Standards: <ul style="list-style-type: none">* Best Management PracticeDOE Environmental Compliance Plan (ECP) section 3.9 (** proposed revisions to ECP to be cleared by DOE)(2014) ESMP section 1.6.9 and Table 1.9						
Indicators to measure success: <ul style="list-style-type: none">Number of grievances about destruction of cultural heritageNumber of enforcement actions or halt-work orders by authorities			Performance goals for Indicators: <ul style="list-style-type: none">No unresolved grievancesNo enforcement action or halt-work orders by DOE or IoA			
Responsibility for implementation of measure:		Contractor to implement all protective measures in field; Supervision Consultant & PEU to clear locations with IoA.				
Frequency of inspection/ compliance verification:		Contractor to inspect daily; Supervision Consultant to inspect weekly; DOE, IoA, PEU to inspect periodically at will.				
Additional Information / Guidance:		Archeological Assessment within the (2014) ESIA section 4.16; Standard and Guidance for an archaeological watching brief (CIFA, Chartered Institute for Archaeologists, University of Reading, December 2014).				

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 10. Utilities Management				version 2: July 2018
Risk / Impact to be addressed:		Disruption of electricity, telephone, water and/or sewer services; damage to utilities infrastructure; safety issues within work zones; coordination among various utility subcontractors and awareness of environmental and social requirements.		
Summary of Current Situation: Relocation of poles for electricity and telephone service, replacement or relocation of water lines, and/or sewerage lines, will soon begin as works commence. At this time efforts to coordinate works of various utility companies and subcontractors are in early stages.				
Description of Measures to be implemented: <ul style="list-style-type: none">• Liaise with BEL prior and during construction to ensure that necessary power poles are relocated prior to road construction commencement.• Identify water mains, both rural and governmental pipes, on the road shoulder to ensure that works do not impact these supply pipes.• The potential impacts on water supply were considered in determining the preferred widening alternative in order to avoid potential impacts to existing water mains.• The location/relocation of the electric poles/lines and water lines will be duly considered and coordinated in a proactive manner with the service providers, including the installation of poles, digging of trenches, and other works related to utilities.• During these works, all relevant and applicable requirements of this ESMP shall be adhered to.*• In the case of any interruption to services, communicate with local stakeholders, the PEU, the construction contractors and the Supervision Consultant.				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Cost of protection/shifting of water lines borne by GOB and village councils; cost of protection/relocation of electric poles and lines borne by BEL. Awareness training and coordination with utilities and village councils is within role of PEU.
	Construction	X		
	Operation	X		
	Closure			
Applicable Requirements and Standards: <ul style="list-style-type: none">• Access agreements between utilities and MOW• DOE Environmental Compliance Plan (ECP) section 3.10• (2014) ESMP section 1.6.10, Table 1.9, and Social Management Plan (section 1.4)• * Best Management Practices (BMPs)				
Indicators to measure success: <ul style="list-style-type: none">• Number of households reporting water and electrical interruptions• Average length of time of interrupted service• Grievances reported for loss of service			Performance goals for Indicators: <ul style="list-style-type: none">• Uninterrupted water and electric service, or minimal outage times• No unresolved grievances for loss of service	

Responsibility for implementation of measure:	<p>PEU to coordinate with utilities</p> <p>Supervision Consultant to provide technical and logistic support</p> <p>Utilities to understand and comply with ESMP and advise of any interruptions to service</p>
Frequency of inspection/ compliance verification:	<p>Utilities to inspect daily for compliance; Supervision Consultant to inspect weekly; PEU to inspect monthly; DOE, IoA to inspect periodically at will. Communities and village councils to provide input through coordination meetings.</p>
Additional Information / Guidance:	

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 11. Worker Welfare, Safety and Health		version 2: July 2018
Risk / Impact to be addressed:	Construction dust, noise, and traffic can impact the health and safety of the residents and community, especially near schools; landowners or residents fear that they could suffer damage or lose access or lands without fair process or recompense; risk of poor or unsafe worker safety practices, work camp conditions, no hiring of locals or women, and/or accidents and injuries.	
Summary of Current Situation: The project has begun construction and the use of hard hats, boots, and reflective vests is commonly seen, and detours are well marked at the Roaring Creek Bridge and Z-curve; however, dust suppression is lacking, access problems are occurring, and lands are being acquired without established protocols. As construction activities ramp up, concerns exist over community relations, public safety, local hiring practice, and worker safety.		
Description of Measures to be implemented during the construction phase: <ul style="list-style-type: none">• Work during daylight not exceeding 12 hrs.• Ensure workers from local communities are hired with up to 30% quota for women.*• Improve road safety, especially around schools where the movement of heavy equipment and increase in vehicular movement is inevitable.• Maintain and regularly check tools fitted with mufflers where appropriate.• Maintain construction vehicles fitted with mufflers where appropriate; turn off when not in use; avoid reversing.• Provide and ensure workers wear Personnel Protective Equipment.• Have workers use vibration isolation and suspension systems.• Alternate vibration work among workers.• Use vibration isolation and suspension systems.• Assess vibration impacts to property and discontinue where damage/injury imminent.• Use dust suppressant measures.• Shut off equipment when not in use and maintain in good operating condition.• Ensure equipment has emission control devices.• Provide proper sanitation facilities at workers camps.• Ensure fire and medical response for the campsites.• Develop an Emergency Response Plan (or Preparedness Plan) for accidents and injuries.• Develop a Contingency Plan for emergencies and natural disasters, considering the information provided in the (2014) ESMP Table 1.1a.		
Additional occupational health and safety measures should be spelled out in the Workers Code of Conduct to include the following:*		
<ul style="list-style-type: none">• Limit project traffic during peak local highway use, especially around schools, grocery stores and markets• Conduct community traffic safety awareness programs• Ensure that the necessary traffic signs are installed• Maintain all vehicles regularly• Implement speed control measures for project vehicles• Avoid overloading trucks• Prevent the transportation of unauthorized passengers in project vehicles• Provide driver safety training for project vehicle drivers• Ban the consumption of alcohol and drugs and prohibit the use of cell phones while driving• Integrate training on communicable diseases and STDs into worker programs• Encourage the use of condoms and provide access to them		

- Provide for enforcement of rules
- Establish ways to provide basic health services to workers that do not drain the resources from local health service centers

During the first two years of operations, the following measures to be implemented:

- Develop contracts for road maintenance with local small businesses or “micro-companies” including appropriate safety measures for work on and near highway.**
- Perform drills and simulations for the Emergency Response Plan and the Contingency Plan.**

Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Most of the measures specified are standard practice and are already included in Contractor’s requirements. Costs for road maintenance, the Emergency Response Plan, and the Contingency Plan should be included in the budget for the first two years of operations.
	Construction	X		
	Operation	X		
	Closure			

Applicable Requirements and Standards:

- * Workers Code of Conduct, Best Management Practice, and Contract requirements
- Belizean Labor Law
- DOE Environmental Compliance Plan (ECP) sections 3.11 and 3.17
- (2014) ESMP section 1.6.11 and Table 1.1a
- (2014) ESMP section 1.4 (Social Management Plan) and Table 1.9
- * GPHRP Gender Strategy and Gender Action Plan
- ** ESIA Addendum (2018)

Indicators to measure success:

- Worker accidents, incidents, and near-misses
- Worker training and awareness in community and occupational health and safety

Performance goals for Indicators:

- Tracking and reporting in accordance with the Belizean OSH Bill and SSB Administrative Reports
- Number of workers trained

Responsibility for implementation of measure:

Contractors to carry out most measures as part of standard practice and contract requirements, including Emergency Response Plan during construction.

Supervision Consultant and PEU to verify adequate implementation of measures by Contractors.

Frequency of inspection/ compliance verification:

For items related to construction practices, Contractor to inspect daily; Supervision Consultant to inspect weekly; DOE, PEU to inspect periodically at will.

PEU, Supervision Contractor to verify land acquisition process is being conducted according to plan.

Additional Information / Guidance:

WBG General EHS Guidelines; ESIA (2014) Section 6.8

GPHRP Environmental and Social Management Plan (ESMP)	
Mitigation Measure 12. Roaring Creek Bridge	
version 2: July 2018	
Risk / Impact to be addressed:	Social disruption from labor influx and in-migration; loss of access to properties and businesses; environmental degradation from runoff of sediments and stored materials; community safety impacts from traffic, noise, dust and vibration.
<p>Summary of Current Situation:</p> <p>Construction of the new bridge is underway. Traffic is being detoured around work zones, and slopes leading to the river have been cleared of vegetation as installation of pilings is in progress. Access to work zones is partly restricted, although visitors to the Fairgrounds were observed bypassing barriers to reach the river for bathing or recreation. Erosion control measures are not in place on the de-vegetated bare soil slope. Residents on the southwest side of the bridge have complained that their access to the road would be blocked by the increased elevation of the abutment, and the same situation may occur for the police station on the northwest side. The final design is being adjusted to allow for these access points, and should include pedestrian use of the old bridge and provisions for the entrance to the Fairgrounds and to Guanacaste National Park.</p>	
<p>Description of Measures to be implemented:</p> <ul style="list-style-type: none"> • Establish and adhere to construction timetables during dry season. • Work during daylight not exceeding 12 hrs. • Construct abutments sequentially to allow unimpeded flow of creek. • Employ best management practices working near waterways. • Divert storm water from construction areas. • Use wing dams made of sand bags or silt curtains. • Store all stripped pavement and excavated soil away from riverbanks and streams. • Construct approaches to bridge and the deck of bridge above the maximum flood stage. • Avoid haulage of materials through village streets and ensure loads are covered. • Ensure no motor vehicle washed in river or stream. • Limit and enforce speed around construction zone. • Shut off equipment when not in use and maintain in good operating condition. • Ensure equipment has emission control devices. • Fit equipment with mufflers and turn off when not in use. • Service and maintain construction heavy-duty equipment. • Make provisions for attaching utility services to the proposed bridge crossing. • Reduce traffic congestion within this zone by the aforementioned construction • Place bollards and barriers to ward off vehicles and others from accessing the old bridge after construction of new bridge is complete • If there is reason to suspect release of wastewater, fuels, or chemicals to the environment, then conduct water quality monitoring as specified in the ESIA.** • Ensure access to/from highway for residents and businesses where the raising of the road elevation could affect them.*** • Install temporary erosion control measures to prevent soil runoff and siltation of the river on the slopes cleared of vegetation.* • Install temporary access control measures to prevent unauthorized entry to work sites near the river.* • Include pedestrian access across the old bridge and at the entry to the Guanacaste National Park and the Fairgrounds in the final design adjustments.**** 	

Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Most of these mitigation measures are already included in other ESMP sections, and are typical good practice as required through the construction contracts. Land acquisition and design changes may have additional cost implications which would be borne by the project through the PEU. Pedestrian use of old bridge during operation could have maintenance costs for MOW.
	Construction	X		
	Operation	X		
	Closure			
Applicable Requirements and Standards: <ul style="list-style-type: none">• Engineering design drawings• * Best Management Practices (BMPs)• DOE Environmental Compliance Plan (ECP) section 3.12 (** modifications to ECP to be approved by DOE)• *** Resettlement and Livelihood Restoration Plan• **** (2014) ESIA• (2014) ESMP section 1.6.12				
Indicators to measure success: <ul style="list-style-type: none">• Same as other ESMP items			Performance goals for Indicators: <ul style="list-style-type: none">• Same as other ESMP items	
Responsibility for implementation of measure:		Construction contractor to implement most requirements, Supervision Contractor and PEU to ensure compliance. Supervision Consultant and PEU to confirm final design addresses requirements. PEU to acquire lands.		
Frequency of inspection/ compliance verification:		MOW and PEU to inspect weekly; Supervision Consultant to inspect weekly; DOE to inspect periodically at will.		
Additional Information / Guidance:				

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 13. Z-Curve				version 2: July 2018
Risk / Impact to be addressed:		Public safety from blasting, traffic detours, and hillside collapse; dust, noise, erosion; visual and aesthetic impacts.		
Summary of Current Situation:				
Construction of the Z-curve is underway. Traffic is being detoured around work zones, and slopes are being benched and terraced to meet the design requirements. Soils have been removed but stockpiles are not in evidence. Dust control is not evident, and erosion control measures are not in place on the de-vegetated bare rock slopes or at the perimeter of work sites.				
Description of Measures to be implemented:				
<ul style="list-style-type: none">• Road side slopes and cuts should have slopes of 1.5:1 ratio.• Use of erosion control blankets or fiber-web geo-synthetics for stabilization of cut slopes; as well as to promote the growth of grass, plants and shrubbery.• Install barriers/curtains to prevent contaminants, debris, and other pollutants entering water bodies.• Stabilize hillsides to avoid slippage or landslide during torrential rain events.• Halt and divert to alternate route all associated traffic and movement of residents within this area.• Put in place with the assistance of the Police Department, all safety measures to ensure no one is in the area except for those authorized.• Warn the general public via radio and television advertisement (see Communications Plan) of such planned activities.• Upgrade alternate roadway to temporarily accommodate traffic within this area.• Put in place all respective dust suppression measures and signage.• Construct drainage along the roadway to divert any water runoff away from the hillside.• Place silt traps and silt curtains at the end of this drainage to prevent siltation and other hydrological impacts.• Leave intact the old road or un-aligned road area to develop a Nature Walk area around this area, if feasible, in concert with the nearby wildlife crossing at 17°13'29.82" N 88°52'29.56"W (Warrie Head).**.• Consider native plants for re-vegetation, and re-use of locally cleared soil as a seed bank.*• Stockpile and store topsoil with adequate measures in place to prevent erosion, and where possible preserve removed plants for later use in re-vegetation (e.g. begonias at the Z-curve).*• After construction is complete, monitor the re-vegetation of affected areas and include results in periodic reports with photographic evidence and estimates of percentage ground cover.*				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Most of these mitigation measures are already included in other ESMP sections, and are typical good practice as required through the construction contracts. Geotextile cost estimated at USD\$4,800 in (2014) ESMP Table 1.12. During operations, re-vegetation and monitoring may have additional cost implications which would be borne by the PEU and MOW, but careful oversight of initial slope stabilization and re-vegetation should minimize problems developing in the future.
	Construction	X		
	Operation	X		
	Closure			

Applicable Requirements and Standards: <ul style="list-style-type: none"> • Engineering design drawings • * Best Management Practices (BMPs) for erosion and re-vegetation • DOE Environmental Compliance Plan (ECP) section 3.13 (** proposed revisions to ECP to be approved by DOE) • (2014) ESMP section 1.6.13 and Table 1.12 	
Indicators to measure success: <ul style="list-style-type: none"> • Same as other ESMP items 	Performance goals for Indicators: <ul style="list-style-type: none"> • Same as other ESMP items
Responsibility for implementation of measure:	Construction contractor to implement most requirements, Supervision Contractor and PEU to ensure compliance. MOW and PEU to monitor re-vegetation for first two years of operations.
Frequency of inspection/ compliance verification:	MOW and PEU to inspect weekly; Supervision Consultant to inspect weekly; DOE to inspect periodically at will.
Additional Information / Guidance:	Agronomists at Galen University or the University of Belize

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 14. Succotz Bypass				version 2: July 2018
Risk / Impact to be addressed:		Public safety from blasting, traffic detours, and hillside collapse; dust, noise, erosion; visual and aesthetic impacts, impacts to archeological mounds; erosion and sedimentation on stream banks; damage to riparian areas along Mopan River floodplain.		
<p>Summary of Current Situation:</p> <p>Preliminary designs for Section 4 (from San Ignacio to Succotz) and the Succotz Bypass are in progress. In the bypass area, archeological mounds are present in the area which could be damaged by the construction works, and there are numerous plots of private land which require careful routing of the bypass. Technical challenges include a large drainage that must be crossed, and the periodic flooding that occurs at the entrance and exit of the bypass where the road is on the floodplain of the Mopan River.</p> <p>The existing road to be bypassed spans about one mile and is located very close to the river, so it is flooded periodically. The area is heavily visited by tourists to cross the hand-crank ferry to the archeological site of Xunantunich, and all along the river for recreation, fishing, floating (or “tubing”). This reach is being considered for repaving and culvert repairs. Additional works to mitigate disaster risk include construction of river training defenses such as gabions or riprap, to make it safer during floods and to serve as an emergency escape route. During the detailed design phase, use of the area as a “green space” could be considered if feasible to preserve riparian habitat and enhance recreation and tourism.</p>				
<p>Description of Measures to be implemented in the design phase:</p> <ul style="list-style-type: none">• Pave the road to prevent dust formation which would impact the residents.• Construct proper drainage to drain water away from the roadway and residents.• Place traffic signs and speed bumps to control traffic within this alternate route.• Adjust route to avoid archaeological sites identified near the proposed bypass route (E274592, N1890593; E274542, N17890012; E273947, N1890197; E274096, N1890174; and, E273915, N188968; see ESIA Addendum Figure 3).* <p>The design may also consider the following if feasible:</p> <ul style="list-style-type: none">• Consider repaving of the existing road with concrete or other flood-resistant materials.*• Consider designs that include a single-lane access road and emergency escape route, with dual use for parks and recreation, to provide cost savings, community benefits, conservation value, and green space to mitigate flooding effects.** <p>During construction of section 4 and the Succotz bypass, mitigation measures in the other sections of this ESMP would also apply.</p>				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	There are numerous cost implications in the various designs, which must be weighed in the context of cost vs. benefit. Construction costs for the mitigation measures would be included in contract documents.
	Construction	X		
	Operation	X		
	Closure			

Applicable Requirements and Standards: <ul style="list-style-type: none"> • Engineering design drawings • Best Management Practices (BMPs) • DOE Environmental Compliance Plan (ECP) section 3.14 • (2014) ESMP section 1.6.14 • * (2014) ESIA • ** ESIA Addendum (2018) 		
Indicators to measure success: <ul style="list-style-type: none"> • Same as other ESMP items 		Performance goals for Indicators: <ul style="list-style-type: none"> • Same as other ESMP items
Responsibility for implementation of measure:	PEU to advance design. During construction, Contractor to implement most requirements, Supervision Contractor and PEU to ensure compliance.	
Frequency of inspection/ compliance verification:	During construction, Supervision Consultant to inspect weekly; PEU to inspect monthly; DOE and IoA to inspect periodically at will.	
Additional Information / Guidance:	ESMP section 9 (Archaeological Requirements); consultations with local stakeholders and Village Councils.	

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 15. Grievance Redress Mechanism				version 2: July 2018
Risk / Impact to be addressed:		The road project has the potential to positively impact community governance and contribute to public confidence in the project. Conversely, if legitimate grievances are ignored, unattended, or unresolved, then frustration and distrust can grow, and problems can balloon to unmanageable levels that otherwise could be resolved to the satisfaction of all.		
<p>Summary of Current Situation:</p> <p>There is no Grievance Redress Mechanism (GRM) in place for the project, although construction has begun, rights-of-way are being cleared, and lands are already being acquired. At present, community members have no voice to address the project in a productive and reasonable way to address problems that inevitably crop up regardless of the best intentions. Negative media coverage may occur due to perceived access issues at Roaring Creek Bridge and at water pipeline works in Section 2, and without a GRM in place there is no way to address these sorts of issues effectively or proactively. A GRM was developed in the (2014) ESIA and now needs to be initiated.</p>				
<p>Description of Measures to be implemented during construction and the first two years of operation:</p> <ul style="list-style-type: none"> Establish toll-free number to receive calls Create website to receive complaints PEU to staff a Social Specialist to develop, roll out, and manage GRM Specific issues to be addressed during testing and subsequent roll out of the mechanism are: <ul style="list-style-type: none"> The Grievance Mechanism is accessible to potentially affected parties (PAPs) with low levels of formal education; The Grievance Mechanism is publicized using culturally relevant and inclusive media; The Grievance Mechanism is accessible for local, national and international stakeholders; Community members are aware that they can use the Grievance Mechanism without retribution; and Grievances can be lodged without danger of retribution in practice, given that some Project affected stakeholders are reliant on informal livelihoods, and that some grievances may be lodged by workers against contractors who are their employers. Revise Grievance Forms in the ESIA to allow for anonymous lodging of complaints or otherwise remove fear of reprisal. Create database with following criteria: <ul style="list-style-type: none"> Ability to track individual grievances with unique ID number (UIDN) Trigger deadlines for progress on communications and resolution Identify where grievances have been resolved or remain pending Imagery of a statement of satisfaction signed by the complainant. Support third-party monitoring of GRM Summarize monthly, report quarterly and annually 				
Stage of Project to which measure applies	Preconstruction		Estimated cost(s):	<p>The GRM will be operated by PEU and will result in cost for staffing a full-time Social Specialist, a toll-free telephone, a database, and signs to advertise contact information.</p> <p>The (2014) ESIA estimated a cost of BZ\$7000 for GRM design, development and deployment, and BZ\$5000 for GRM training of staff and communities.</p>
	Construction	X		
	Operation	X		
	Closure			

<p>Applicable Requirements and Standards:</p> <ul style="list-style-type: none"> • DOE Environmental Compliance Plan (ECP) section 4.1.3 • (2014) ESMP section 1.5 (Grievance Mechanism) • (2014) ESMP section 1.4 (Social Management Plan) and Table 1.9 • (2014) ESIA section 7.5 (MOWT's Grievance Mechanism) • GPHRP Consultation Plan (2018), "Grievance Mechanism" 	
<p>Indicators to measure success:</p> <ul style="list-style-type: none"> • Number of grievances measured and reported • Community awareness of grievance mechanism • Percentage of grievances resolved within established time frame • Complainants' satisfaction with resolution 	<p>Performance goals for Indicators:</p> <ul style="list-style-type: none"> • Grievance database in operation and reports provided monthly by the PEU Social Specialist • Majority of community members aware of how to lodge a grievance • All grievances resolved within specified time frame • Performance monitoring survey reveals substantial satisfaction with resolution
<p>Responsibility for implementation of measure:</p>	<p>Contractor and Supervision Consultant to be aware of GRM, refer complaints to appropriate contacts, and report such referrals and complaints.</p> <p>PEU to staff and operate Grievance Mechanism.</p>
<p>Frequency of inspection/ compliance verification:</p>	<p>Contractor to inspect daily; Supervision Consultant to inspect weekly; DOE, PEU to inspect periodically at will.</p> <p>PEU Social Specialist to summarize grievances monthly and report quarterly and annually</p>
<p>Additional Information / Guidance:</p>	<p>IDB Involuntary Resettlement Policy (OP-710) and Environmental Policy (OP-703).</p>

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 16. Gender Safeguards		version 2: July 2018
Risk / Impact to be addressed:	Women are usually underrepresented in the construction, engineering and transportation fields. Further, women and girls are the primary victims of sexual harassment, exploitation and domestic violence, which can occur with the influx of construction workers into a community. Females also tend to be more vulnerable to STDs due the nature of their bodies and the circumstances of their gender role within the society. Finally, as a vulnerable group, project impacts may disproportionately fall on them. In addition, grievance mechanisms might lack the gender sensitivity required to address some of these impacts.	
Summary of Current Situation:		
<p>The project has begun construction with two contracting firms hired to construct Sections 1 and 2 of the GPHRP. In addition, the Project Execution Unit (PEU) and a Supervision Firm along with an Engineering firm, acting as its agent, are also operational. Seven women were observed on staff including an Indigenous Woman. All occupy traditional female roles except for the female co-owner of the Engineering firm.</p> <p>Two female cooks on one of the camp-sites were appropriately housed separately in their own dorm with bath and wash facilities. The building was secure and the women indicated that they felt safe. The contracting firm for Section 1 indicated that they will be hiring workers from the local community, however these are mainly for what could be termed menial jobs and the applicants need to apply by email and provide the necessary supporting documentation for employment. These will be barriers for vulnerable groups, which will need to be mitigated.</p> <p>Finally, no grievance mechanism has been operational although the project has started and there have been some concerns from the local community.</p>		
Description of Measures to be implemented during the construction phase:		
<ul style="list-style-type: none">• Conduct consultations in a gender sensitive way, that is, through women’s groups, focus groups, face-to-face, etc.• Develop a mentorship program in which local women from the community can gain employment and learn to work in different aspects of the construction field from a mentor.• Engage female engineering students from the University of Belize to conduct a stipended internship with the various design, engineering and construction aspects of the project.• Through the Cooperative Department of the Ministry of Agriculture, organize for local men and women to develop cooperatives to help with and take ownership of the re-vegetation of the Z-curve, work camps during decommissioning, etc. Associated with this is to help with erosion prevention by building catchments of rock or vegetation – like check dams, berms, bunds, etc. with the idea to catch soil and water, thereby promoting re-vegetation.• A worker code of conduct should be developed.• Workers should be given a training session on sexual harassment and exploitation and safe practices as it relates to the transmission of sexually transmitted diseases.• There should be a zero-tolerance policy for sexual harassment and exploitation. In addition, workers should be apprised of the Protection Against Sexual Harassment Act, CAP. 107, Rev. ed. 1980 – 1990, of the Laws of Belize.• The public should be apprised of the above mentioned sexual harassment legislation.• A gender sensitive grievance mechanism will be developed for use by project workers, communities within the project and stakeholders.• Project workers, local communities and stakeholders will be sensitized to using the grievance mechanism.• Job application forms, recommendation templates, and other job readiness services shall be provided to local communities at public consultations and through Village Councils.		
During the first two years of operations, the following measures to be implemented:		
<ul style="list-style-type: none">• Through the Cooperative Department, Belize Trade and Investment Development Service (Beltraide) and the local Village Councils, encourage the development of micro-companies for road maintenance. These		

crews of 5-6 persons would be contracted by the project and would be in charge of cutting weeds, removing rocks and dirt from drains, culverts, etc. and potentially for other maintenance tasks as well.				
<ul style="list-style-type: none">Engage several local community safety representatives to monitor and report vandalism, unsafe actions, dumping, fires, accidents, breakdowns, abandoned vehicles, etc. along a particular stretch of the road.Operate the Grievance Mechanism execute the Stakeholder Engagement Plan				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	Costs of building rental, printing of handouts, etc. will be associated with public consultations. Smaller, specialized consultations will also incur travel costs.
	Construction	X		Small costs will be associated with training workers and organizing the logistics of the mentorship program and micro-companies. These should be organized through the PEU.
	Operation	X		While women will access the field through the mentorship program, their labor should be considered part of the regular community labor pool and therefore no additional financing will be required.
	Closure			Stipends for female college interns should be budgeted for within the construction phase. Costs for hiring road maintenance crews and community patrolling representatives should be included in the budget for the first two years of operations.
Applicable Requirements and Standards: <ul style="list-style-type: none">Protection Against Sexual Harassment Act, and Labor Laws of BelizeContractor’s Worker Code of ConductStakeholder Engagement Plan and Grievance Mechanism(2014) ESMP section 1.4 (Social Management Plan) and Table 1.9GPHRP Gender Strategy and Gender Action Plan				
Indicators to measure success: <ul style="list-style-type: none">Number of consultation meetings conducted with women.Distribution and participation rate of consultation meetings with womenNumber of workers trained on sexual harassment, sexual exploitation, domestic violence and safe practices to prevent STDs.Number of grievances about workers’ conduct			Performance goals for Indicators: <ul style="list-style-type: none">Consultation with women done periodically and in a gender sensitive way.All workers trainedNo unresolved grievances	
Responsibility for implementation of measure:		The Contractors and the Supervision Firm will be responsible for preparing and adhering to Codes of Conduct. The PEU will operate the Grievance Mechanism and Stakeholder Engagement Plan and provide training on Gender Safeguards. The PEU and MOW will be responsible for contracting micro-companies during operations.		
Frequency of inspection/ compliance verification:		PEU to verify and report on all activities.		
Additional Information / Guidance:		IDB Gender Policy (OP-761) and Access to Information Policy (OP-102)		

GPHRP Environmental and Social Management Plan (ESMP)		
Mitigation Measure 17. Community Health and Safety		version 2: July 2018
Risk / Impact to be addressed:	The GPHRP project can result in physical injury caused by traffic accidents, and respiratory, hearing and other problems associated with excessive dust and noise. Physical injury can also result from general quarry works in addition to the use of explosives. The project can also indirectly lead to the spread of communicable diseases and STDs as a result of the influx of new workers and service support people in the area. Consequently, these physical injuries as well as the increase in diseases can result in a drain on local health services.	
Summary of Current Situation:		
<p>Project works are still in the preliminary phase and therefore risks of traffic accidents are still low albeit possible, especially in villages like Roaring Creek where the nature of community traffic is varied. So far, several test piles have been driven for the bridge in Roaring Creek, however there were no complaints of noise. Excessive dust however, is a problem especially in the area of the quarry where there are several residences and also through the Z-curve bypass road. A higher level of dust is also associated with the scraping of roadsides in some villages to accommodate the relocation of water pipes as well as survey works.</p> <p>Since full construction works have not yet begun the labor force is minimal and does not pose a serious threat to the spread of diseases or a drain on local health services. Worker camps are relatively small, built away from the project site, and rely on water and electricity from the City of Belmopan rather than the reserves of the smaller project area communities. The worker camps have also implemented waste control mechanisms on site.</p>		
Description of Measures to be incorporated in the design phase:		
<ul style="list-style-type: none">• Reduce congestion on roads through communities and villages, improving pedestrian safety (with reduced impact through traffic conflict) and other adverse social impacts associated with congestion, including traffic noise.• Improve connectivity between residential development and the social infrastructure and services available.• Improve vehicular movement across the road network and vehicular efficiency and provide greater access to alternative routes.• Provide pedestrian and cycle carriageways across communities to enable better traffic safety.• Define the locations of crosswalks, guard rails, sidewalks and other safety measures considering input from the communities.		
Description of Measures to be implemented during the construction phase:		
<ul style="list-style-type: none">• Work during daylight not exceeding 12 hrs.• Ensure workers from local communities are hired with up to 30% quota for women.*• Inform communities of construction activities.• Ensure that the contractor responds appropriately to complaints from communities.• Ensure early discussion and negotiation between land-owners and the Ministry of Works regarding any property acquisition for the alternative routes and road alignment, including acquiring land for the alignment of the Z Curve, new Roaring Creek Bridge and alternate route for the Succotz carriageway.• Improve road safety, especially around schools where the movement of heavy equipment and increase in vehicular movement is inevitable.• Maintain and regularly check tools fitted with mufflers where appropriate.• Construct noise barriers between work sites and communities.• Maintain construction vehicles fitted with mufflers where appropriate; turn off when not in use; avoid reversing.• Use dust suppressant measures.• Shut off equipment when not in use and maintain in good operating condition.		

- Ensure equipment has emission control devices.
- Provide proper sanitation facilities at workers camps.

Other requirements during construction include the following:

- During construction all of the Traffic Management mitigation measures (ESMP section 8) also apply to the aspect of community health and safety, and so are referenced herein.**
- The establishment of a Worker Code of Conduct in accordance with ESMP section 11 requires respect for local communities, appropriate behavior during and outside working hours, prohibitions on carrying firearms, knives, or other weapons, prohibitions on the possession or consumption of alcohol and drugs, prohibitions on the collection of plants or the hunting and collection of animals, and finally the enforcement of penalties in the event of worker-community conflicts, petty crime, etc.**
- Execute the Grievance Mechanism, Stakeholder Engagement and Consultation Plan.**

Description of Measures to be implemented during the first two years of operations:

- Develop a formal Road Safety Program including monitoring of accidents, annual evaluations and prioritization of “hot spots” for safety improvements, public outreach and education, and enforcement.**
- Consider links with the CDB-funded “Road Safety Project” which included capacity building and infrastructure improvements east of Belmopan, and the World Bank’s Global Road Safety Facility (GRSF).**

Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	<p>Most of the mitigation requirements are already part of environmental, health and safety best practices and therefore will simply require enforcement.</p> <p>Small costs will be associated with public awareness campaigns, to be organized through the PEU Social Specialist.</p> <p>Small costs will also be associated with induction program, including training on health awareness and code of ethics, for workers, through contractors and the PEU.</p> <p>Enforcement of rules to be carried out by the Environmental and Social Specialists located in the PEU and the Supervision Engineer.</p> <p>The Communications Plan and Grievance Mechanism should be operated by PEU, and will result in cost for staff, a toll-free telephone, and signs to advertise contact information.</p>
	Construction	X		
	Operation	X		
	Closure			

Applicable Requirements and Standards:

- Protection Against Sexual Harassment Act
- Worker Code of Conduct
- DOE Environmental Compliance Plan (ECP) sections 3.8 and 3.11
- (2014) ESMP section 1.6.11 and Table 1.1a
- (2014) ESMP section 1.4 (Social Management Plan) and Table 1.9
- * GPHRP Gender Strategy and Gender Action Plan
- GPHRP Resettlement and Livelihood Restoration Plan
- GPHRP Consultation and Stakeholder Engagement Plan (including Grievance Mechanism)
- GPHRP Communications Plan
- ** ESIA Addendum (2018)
- ESMP (2018) section 8 (Traffic Safety) and section 11 (Worker Welfare, Safety and Health)

<p>Indicators to measure success:</p> <ul style="list-style-type: none"> • Number of worker compliance rules maintained • Number of injuries over time • Number of workers trained in induction program • Number of drivers trained in driver safety • Number of vehicles serviced at regular intervals • Number of grievances about workers' conduct • Number of local residents hired 		<p>Performance goals for Indicators:</p> <ul style="list-style-type: none"> • Increase in rules complied with over time • Number of injuries reduced over time • All workers trained • All drivers trained in driver safety • All vehicles serviced at the required time • A decrease in number of grievances and type of grievances about workers' conduct • Up to 30% local residents hired
<p>Responsibility for implementation of measure:</p>	<p>Contractors to implement measures for road safety, dust and noise control and safety during use of explosives. Contractors to also manage worker compliance.</p> <p>PEU and Supervision Consultant to verify compliance with requirements and report to DOE.</p>	
<p>Frequency of inspection/ compliance verification:</p>	<p>During construction, Contractors to inspect daily; Supervision Consultant to inspect weekly; PEU to inspect monthly; DOE to inspect periodically at will. During operations, accident monitoring continuously, analysis in quarterly reporting.</p>	
<p>Additional Information / Guidance:</p>	<p>CDB Road Safety Project, WBG Global Road Safety Facility (GRSF).</p>	

GPHRP Environmental and Social Management Plan (ESMP)				
Mitigation Measure 18. Resettlement and Livelihood Restoration Plan				version 2: July 2018
Risk / Impact to be addressed:		Physical and/or economic displacement due to components or impacts of the project.		
Summary of Current Situation:				
In Road Sections 1 and 2, resettlement and livelihood restoration for Project Affected Peoples (PAPs) are in various stages including not yet initiated, in process or completed. In Road Section 3, all resettlement and livelihood restoration activities have been completed. In Road Section 4, resettlement and livelihood restoration activities have not yet begun.				
Description of Measures to be implemented:				
Road Section 1				
<ul style="list-style-type: none">Joy Flowers – Acquire land and houseNigel Flowers and family – Relocate and rehabilitate family to a new rental propertyYolanda Scott – Install guardrail between house and access road.Food Vendor (Scott) –Relocate stall to a permanent and sustainable locationOK Bar – Acquire property and compensate or compensate for economic loss and provide a new parking location for customersPolice Station – Acquire property and replace police station at new agreed upon locationAnthony Carcamo – Relocate to small house on land provided by village councilLyle Hulse and family – Compensate for depreciation of value of commercial property due to retaining wall; remove portion of northwest fence to allow for parking; ensure that sufficient space is available for trucks to access and turn in front of property; and ensure that design and signage is available on narrow access road so as to deter vehicles from blocking it.Johanna Salazar – Relocate to new house in St. Matthew’s villageLucky Entertainment – Provide parking area at west side of property. Install proper lighting in parking area. Design access road and install signage in front of Lucky Entertainment to deter the continued parking of vehicles there.				
Road Section 2				
<ul style="list-style-type: none">Fruit Vendor (Matute, Middleton, del Carmen/Franco and Recinos) – Relocate stall to a permanent and sustainable locationCanton – Acquire and compensate for additional acre of landZion Outreach Ministry – Finalize acquisition of exchange property and compensate for church building				
Monitoring and Evaluation				
<ul style="list-style-type: none">Submit monthly progress reports to the Project Steering Committee/IDB Project TeamSubmit ex-post evaluation at the end of the RLRP process and at the end of first two years of operation.				
Stage of Project to which measure applies	Preconstruction	X	Estimated cost(s):	IDB Policy requires that <i>all</i> resettlement and livelihood restoration plans, i.e. compensation and/or resettlement, be completed <i>before</i> any construction in the area of project affected peoples(PAPs) commences. IDB policy and international best practice also requires that an ex-post evaluation is conducted to ensure that the livelihood of PAPs has remained at pre-project level or has improved.
	Construction			
	Operation			
	Closure	X		

				Costs for land acquisition were estimated in the Feasibility Study and the (2014) ESMP and have been updated since that time.
Applicable Requirements and Standards: <ul style="list-style-type: none">• Belize Constitution, CAP 4 (2012)• Land Acquisition (Public Purposes) Act, CAP 184 (Rev. Ed. 2011)• Environmental Protection Act, CAP 328 (Rev. Ed. 2011)• GPHRP Resettlement and Livelihood Restoration Plan (2018)• (2014) ESMP Section 1.4 (Social Management Plan) and Table 1.9				
Indicators to measure success: <ul style="list-style-type: none">• Number of resettlement and livelihood restorations completed before commencement of construction• Number of PAPs satisfied with RLR intervention• Number of grievances about resettlement and livelihood restoration• Number of livelihoods restored at or above pre-project level			Performance goals for Indicators: <ul style="list-style-type: none">• All resettlement and livelihood restorations completed before commencement of construction• At least 75% of PAPs satisfied with RLR intervention• No unresolved grievances about resettlement and livelihood restoration• All livelihoods restored at or above pre-project level	
Responsibility for implementation of measure:			PEU project manager along with Social Specialist will finalize negotiation of all outstanding processes within the RLRP. PEU’s Social Specialist will manage process of RLRP as well as the Grievance Mechanism. PEU’s Social Specialist will conduct ongoing monitoring and submit monthly evaluations as well as ex-post evaluation reports.	
Frequency of inspection/ compliance verification:			PEU to monitor weekly and submit a monthly report to the project steering committee. PEU to monitor and update Grievance Mechanism weekly, and report monthly. PEU to submit an ex-post evaluation report after completion of process and at the end of first two years of operation.	
Additional Information / Guidance:			IDB Involuntary Resettlement and Livelihood Restoration Policy (OP-710); Feasibility Study (A. Thurnton and Associates, 2014).	

ANNEX 2
CONSULTATION AND STAKEHOLDER ENGAGEMENT PLAN

This annex is available as a separate document.

Government of Belize

Ministry of Works



George Price Highway Rehabilitation II Project

Annex 3

Communications Plan

This document was prepared by Christa Hulse, Social Consultant
for the Government of Belize, Ministry of Works.
Belmopan, Belize.

2018

Table of Contents

Introduction.....	3
Project Overview.....	3
Current Situation	3
General Objectives	4
Specific Objectives.....	4
Target Audience	5
Primary Target Audience	5
Secondary Target Audience	8
Communications Action Plan.....	8
Communication Matrix	10

Annexes

Annex A: Directory to Accompany Communications Matrix.....	16
---	-----------

Introduction

This Communications Plan sets out the stakeholder communication requirements for the George Price Highway Rehabilitation II Project. It will serve as a guide for communicating with community stakeholders throughout the life cycle of the project and will be updated as communication needs change. This plan outlines, in brief, the social nature of each community, the environmental and social issues to be addressed in each road section, it discusses an appropriate strategy for communication and sets out the logistics of carrying out the strategy, including identifying and defining the roles of the persons involved in the communication.

Project Overview

The George Price Highway Rehabilitation Project covers a distance of some 32 miles, which includes a short by-pass around the village of San Jose Succotz. The rehabilitation project begins at the junction of the George Price Highway with the Hummingbird Highway and ends at the western border of Belize in the town of Benque Viejo del Carmen. The highway passes through several communities including Roaring Creek Village, Camalote Village, Teakettle Village, Ontario Village, Blackman Eddy Village, Unitedville, Georgeville, Central Farm, Esperanza Village, Santa Elena Town, San Ignacio Town, San Jose Succotz and Benque Viejo del Carmen. Rehabilitation of the highway in the towns of Santa Elena and San Ignacio has been provided for by another project and thus the treatment of stakeholders in these communities will be limited to essential service providers and interested persons only, within the framework of this plan.

For technical purposes the project has been divided into four sections:

- Section 1 – A short section (485 meters, or about ¼-mile) from the Belmopan roundabout to just past the Roaring Creek Bridge.
- Section 2 – About 9.4 miles (15.384 km) from Roaring Creek to Iguana Creek Road junction, passing through the villages of Camalote, Teakettle, Ontario, and Blackman Eddy, ending at the Iguana Creek Road junction that leads to Spanish Lookout.
- Section 3 – About 10.1 miles (16.629 km) from Iguana Creek Road junction to Santa Elena, passing through the villages of Unitedville, Georgeville, Central Farm, and Esperanza, ending at the east end of Santa Elena at the junction with the new bypass road that leads to San Ignacio.
- Section 4 – About 8.3 miles (13.628 km) from the west side of San Ignacio to the Guatemala Border at Benque Viejo del Carmen, as well as a bypass around San Jose Succotz village that spans about 1.5 miles (2.4 km), depending on the final routing.

Current Situation

Road works contracts were signed in late 2017 and preliminary works began in January 2018. So far there has been borehole tests and analysis done at the location of the new Roaring Creek bridge. Test piles have also been driven at this location. The z-curve in Teakettle village has been closed and a temporary diversion created for the traffic on the highway. Excavation works to install culverts, in the area of Warrie Head, are ongoing. Quarry operations in Unitedville are also underway. Finally, all required land in road sections 1-3 have been acquired and surveys for road alignment are in process as well.

There has been very limited communication with the public so far. The Project Execution Unit has issued several press releases through the Government Press Office to inform the general public of the above works. The Chief Executive Office of the Ministry of Works has also given an interview on the particulars of the Roaring Creek bridge.

General Objectives

The goal of communicating is to ensure that all stakeholders are informed of the project in a transparent and timely manner, that they have sufficient time to provide feedback and that the feedback can be managed appropriately. Stakeholder feedback is vital to informing the project design, the day-to-day execution of the project and to providing the necessary safeguards for stakeholders. It is also important that the project fosters mutual trust, respect and understanding among its proponents, the workers and communities. As beneficiaries, community members must take ownership of the project rather than feel that the project has been imposed on them. Effective and timely communication is key in developing this atmosphere.

Specific Objectives

- Provide stakeholders with a comprehensive overview of the project, including an explanation of the potential impacts and plans for mitigation, an elaboration of the grievance mechanism and how to use it, and a discussion on opportunities for stakeholders to engage and take ownership of the project.
- Identify additional stakeholders and verify the status of existing stakeholders, to strengthen guidelines and procedures aimed at promoting timely and relevant communication between project proponents and communities.
- Address project related issues in the area of influence, in accordance with the procedures and indicators assigned for that purpose. Listen and respond to requests from the communities.
- Incorporate the authorities and organizations of the community in the activities of coordinating, monitoring and surveillance.
- Provide community education and public awareness on road safety practices.
- Provide training to personnel of contracting firms on the worker code of conduct.
- Coordinate with local public health officials to develop an HIV/AIDS and STD prevention and education strategy that includes the workforce as well as local communities.

Target Audience

Primary Target Audience

The following section describes direct stakeholders and the economic and social issues affecting those stakeholders, which will need to be addressed via this communication plan:

Communities of Road Section 1 – This section includes the village of Roaring Creek only. Roaring Creek has approximately 2,000 residents, half of who identify as Belizean Kriol, while only 6% identify as Maya and 2% as Garifuna. It is one of the more dynamic villages in the project area with a very active street life, particularly on the weekends, beginning on Friday nights. Food vendors occupy the roadsides and residents can be seen traversing the highway on foot, motorcycle and even horses. Several gaming shops, located right off the highway, are focal points for community socializing.

Because of the construction of a new Roaring Creek bridge within this section, this community will experience a higher level of physical and economic displacement albeit concentrated near the bridge. Some of the residents living in the bridge area are not pleased with the height of the new bridge and the associated approach, which will result in a wall, ten feet at its highest point, in front of their properties. The bridge approach will directly result in access issues for these residents, in addition to other indirect impacts, particularly due to the extent and nature of the use of the highway in this village. The negotiation to mitigate these impacts and issues are on going and form part of this communication plan. Particularly, the alignment of the access road on the northern side of the bridge approach has not been finalized and as such, negotiations with the residents have not been finalized.

In regard to project activities in general that will affect this community, the residents have been described as reasonable however, becoming hostile when they are left in the dark with the perception that they are being taken advantage of. Nonetheless, the community is looking forward to the upgrade of the highway, as it is a central area for commerce and socialization.

Communities of Road Section 2 – This section comprises the villages of Camalote, Teakettle, Ontario and Blackman Eddy. Camalote and Teakettle are the larger villages in this section with approximately 2,500 and 1,750 residents respectively. One third of the residents in both villages identify as Belizean Kriol, while the remainder identify as Mestizo. The Maya and Garifuna populations are very small, not exceeding that of Roaring Creek. The residents of Camalote and Teakettle are less active users of the highway as compared to Roaring Creek village, however there are still some activities concentrated around the community center in Camalote and a larger grocery store in Teakettle. Camalote has a short pedestrian footpath running parallel to the highway, which serves as a safe space for residents and children in particular, to move back and forth.

The communities of Ontario and Blackman Eddy are relatively small with approximately 800 and 500 residents respectively and with a similar ethnic composition to the other villages in this section. Residents in these two villages appear not to use the highway for socialization. While businesses in Ontario are sparse and fairly evenly distributed along the highway, there

is a small concentration of vendors located near the junction of the George Price Highway with the Iguana Creek Road in Blackman Eddy. Here, the traditional Mennonites of Barton Creek, also have a storage facility and depot from which they organize their transactions outside of their community. This intersection is fairly busy as it leads to the Spanish Lookout community, which has the largest concentration of agricultural enterprises and agricultural services providers in the country.

A number of land acquisitions were necessary in Teakettle, however these were uninhabited lands and so the procedure to reacquire was straightforward. Land acquisition in the small business area of Blackman Eddy was also necessary however these were seamlessly negotiated. Two fruit vendor businesses have been identified for temporary relocation in the Blackman Eddy area once construction begins. One vendor is located opposite a small but very famous waterfall, which will require preservation, while the other vendor is located in the area of the intersection.

Consultations with community leaders and vendors indicate that there are no real concerns with the highway project in this section and that the residents are looking forward to the upgrading of the highway.

Communities of Road Section 3—This section comprises the villages of Unitedville, Georgeville, Central Farm and Esperanza. Unitedville and Georgeville both have a little under 1,000 residents, while Central Farm has 200 residents and Esperanza, a little over 1,200 residents. Unitedville, Georgeville and Esperanza have an ethnic composition of almost 50% Belizean Kriol and 50% Mestizo. The Indigenous Maya and Garifuna make up less than 1% of these communities. Central Farm is an agricultural research area comprising various departments of the Ministry of Agriculture, the Caribbean Agriculture Research and Development Institute (CARDI), the University of Belize Agriculture Campus, Galen University main campus, a small primary school and several residences for staff of these various institutions. Residents of Central Farm are predominantly Mestizo.

The residents of both Unitedville and Georgeville also frequently use small sections of the highway to move back and forth to various grocery stores and for socialization. Both villages however, have small and interspersed footpaths running parallel to the highway, which assist in providing safer access to key points located just off the highway. The villagers of Georgeville are also known to socialize at a few business establishments, the community center and a ball field located at or near the intersection of the George Price Highway with the Caracol Road. It must be noted here that the paving of the Caracol Road will also begin in 2018 and so this intersection is flagged as a hotspot for the consideration of community health and safety issues.

In Esperanza village particularly, the highway is currently experiencing significant erosion along the edges. This has led to a situation of narrower roads and sharp and steep embankments which make it difficult for vehicles to exit the highway onto the shoulders. The shoulders themselves are very rugged, thus pedestrians and bicyclists tend to squeeze on the narrow highway with the vehicles. It is an untenable situation, which needs to be carefully monitored during the construction phase especially, to avoid any accidents. Finally, a sliver of

land was acquired in Unitedville, around a curve at Little Barton Creek, and this was negotiated without any delays or issues.

Communities of Road Section 4 – This section comprises a small area of the western portion of San Ignacio, the village of San Jose Succotz, and the town of Benque Viejo del Carmen. San Ignacio Town has approximately 10,500 residents, of which the majority identify as Mestizo. Here, the Belizean Kriol population make up 10%, while the Maya and Garifuna populations make up 2.5% and less than 1% respectively. San Jose Succotz has approximately 2,300 residents. This village is less diverse with most of the residents identifying as Mestizo, while only 6% identifying as Maya. The town of Benque Viejo del Carmen also has a majority Mestizo population with only 1.5% identifying as Belizean Kriol. The other ethnic groups make up less than 2% combined.

The proposal for road section 4 will see the rehabilitation of the main highway as well as a new bypass around the village of San Jose Succotz to provide for access when the main highway is inundated with floodwaters. This section is currently considered to have the highest risks because of the intended construction of a retaining wall or river defense on the Mopan River floodplain directly in the village of Succotz, the number of properties identified for acquisition, and the upgrade of the entrance to Benque Viejo del Carmen. From a social perspective, the retaining wall will potentially impact recreation, traditional use of the river, community events, and access to the archaeological site of Xunantunich and to associated vendors and businesses. From an environmental perspective the retaining wall would affect ecology and water quality, and may also lead to additional hydraulic complexities.¹

The Succotz bypass will effectively mitigate disaster risk by diverting traffic away from danger zones during flood events; in addition, as the existing road would still be in use when not flooded, it would also be repaved and culverts repaired. An alternative approach in which the area is designated "...a "green space" with a single-lane, one-way access road and emergency escape route, dually purposed for open space and recreation, which would cost less, avoid relocation and resettlement, provide community benefits and jobs for recreation and tourism, and enhance public image, as well as preserve the integrity of the riparian and aquatic ecosystems and address the need for disaster risk reduction in this area. Repaving works in this area also present substantial risks, which can be reduced by minimizing the footprint of the road."² This approach would require extensive consultation with stakeholders, if considered feasible.

Additionally, as mentioned above, this section of the road will require a larger number of land acquisitions than the other sections. Currently, 24 properties on the main highway before the village of San Jose Succotz and 13 on the proposed bypass have been identified for partial land acquisition. Continued on-going design modifications however, have already resulted in a drastic reduction of acquisition needs from the originally identified 123 properties required for land acquisition. Negotiations to acquire portions of the 37 properties will commence shortly and form part of this consultation plan.

¹Darr, M. (2018). *George Price Highway rehabilitation II project, ESIA addendum*. Inter-American Development Bank.

²Darr, M. (2018) p 3

Finally, the narrow entrance to the town of Benque Viejo del Carmen will also see considerable impact with the current design proposal as it will require several land acquisitions, including that of a historical abattoir used as a community center. In addition, the upgrading of a small bridge to the entrance is a consideration. Because this area is heavily trafficked, especially by large freight trucks, a decision on the final design plan must be made early and construction works must be coordinated carefully so as not to hinder the flow of traffic to and from the border.

Secondary Target Audience

The following organizations and community groups form stakeholders who will facilitate the project, those who are users of the highway, however not necessarily resident in the zone of influence and also other interested persons.

Government authorities – these are departments and bodies that facilitate certain activities in order to support the project. For example, the Lands Department facilitates the acquisition of land, the Ministry of Transport and NEMO assist in coordinating traffic during construction and they also advise on the protocol for responding to accidents.

Civil Society and Development Agencies – these include associations that represent Indigenous People such as the National Garifuna Council, cycling associations, women's associations, the churches, the Belize Tourism Industry Association and various media houses.

Commercial Organizations – this includes public transportation companies, freight companies, tour companies and businesses within the project area.

Communications Action Plan

In order to achieve the proposed objectives, the following programs are considered:

- A. General Project Communication Program–the purpose of this program is to provide stakeholders with an initial overview of the project, including impacts and mitigation, to keep them apprised of the progress of the project, and to open the line of communication between the project team and stakeholders. The project seeks to continue the negotiations with project affected people, to develop a mentorship and internship program for women, and to develop and work with micro-companies to provide highway maintenance services. These entrepreneurship and working projects will be directed through various civil society groups and will necessitate the assistance of a number of government authorities. Several different forums are envisaged to accomplish the tasks of this program, including public meetings, participatory workshops, face-to-face meetings and radio talk-show presentations.
- B. Safety Awareness Programs –the purpose of these programs are to advise the community of environmental and social safe practices as it relates to potential impacts of the project. This includes such areas as road traffic safety, safety during the use of explosives, and safe

practices as it relates to communicable diseases and STDs. All the campaigns within this program will be directed to the general community. Additionally, school children will be specifically targeted for road traffic safety awareness campaigns and women's groups will be targeted for discussions on safety as it relates to their gender. The campaigns will be led by the PEU with the assistance of various relevant government authorities.

- C. Worker Induction Program – the purpose is to train or inform workers on the elements that make up the worker code of conduct including respect for local communities, appropriate behaviour during and outside working hours, prohibitions on carrying firearms, knives or other weapons, prohibitions on the possession or consumption of alcohol and drugs, prohibitions on the collection of plants or the hunting and collection of animals, and the enforcement of penalties in the event of worker-community conflicts, petty crime, etc. Driver safety training will also be implemented through this program. Finally, this program will also provide for training on safe practices in regard to HIV/AIDS, STDs and other health issues and will address the zero-tolerance policy on sexual harassment, exploitation and domestic violence. The various elements of this program will be provided by the contracting firms, through the guidance of the relevant government authorities and overseen by the PEU. This program will take the form of workshops.

Communication Matrix

Project Communication Action Plan (Matrix)						
Stakeholder	Message	Communicator	Schedule	Delivery Method	Budget	Logistics
<ul style="list-style-type: none"> Communities in Project Area 	Overview of the project	<ul style="list-style-type: none"> PEU Engineers/Contractors E&S Consultants 	<ul style="list-style-type: none"> June 2018 	<ul style="list-style-type: none"> Public meeting (village community centers – Roaring Creek, Camalote, Georgeville, Succotz/Benque) 	<ul style="list-style-type: none"> Sum required for Spanish translator, design and printing of brochures and projector rental (\$1000.00) 	<ul style="list-style-type: none"> Powerpoint presentation to be used English/Spanish brochure of project required as handouts Spanish translator required for Section 4 Pictures of meeting to be taken by PEU and E&S Consultants Consultation report to be completed by E&S Consultants
<ul style="list-style-type: none"> Communities in Project Area 	Project updates	<ul style="list-style-type: none"> PEU Engineers/Contractors 	<ul style="list-style-type: none"> Every 6 months 	<ul style="list-style-type: none"> Public meeting (village community centers – Roaring Creek, Camalote, Georgeville, Succotz/Benque) 	<ul style="list-style-type: none"> Sum required for Spanish translator and projector rental (\$700.00 x 3 times = \$2100.00) 	<ul style="list-style-type: none"> Powerpoint presentation to be used Spanish translator required for Section 4 Pictures of meeting to be taken by PEU Consultation report to be completed by PEU
<ul style="list-style-type: none"> Communities in Project Area General Public 	Notifications (of impending road and quarry works which will result in noise and dust, traffic diversions, etc.)	<ul style="list-style-type: none"> PEU 	<ul style="list-style-type: none"> When necessary 	<ul style="list-style-type: none"> On radio Through Government Press Office On Ministry of Works website On Project's Facebook page 	<ul style="list-style-type: none"> (\$2000.00) 	<ul style="list-style-type: none"> Timely submission of notification/announcement to various radio stations (Love FM, Wave Radio Station, Plus TV) Timely submission of notification/announcement to Government Press Office Copy of notifications to be archived at the PEU
<ul style="list-style-type: none"> Communities in Project Area Schools in Project Area General Public 	Road safety	<ul style="list-style-type: none"> PEU Transport Department Belize Road Safety Project 	<ul style="list-style-type: none"> At the start of construction 	<ul style="list-style-type: none"> During Public meetings School visits Through Government Press Office On radio talk-show On Ministry of Works website On Project's Facebook page 	<ul style="list-style-type: none"> Sum required for promotional items, infographic, travel to schools, etc, and for talk-show space (\$7,000.00) 	<ul style="list-style-type: none"> PEU works with the Transport Department and Belize Road Safety Project to develop road safety strategy to introduce to a) school children and b) adults Purchase promotional items that advocate the project's policy on road safety for handout at schools and public meetings. Items can include stickers, pens/pencil, water bottles, etc.

						<ul style="list-style-type: none"> • PEU develops an infographic, which can be printed in poster form and attached to walls in strategic locations such as high trafficked grocery stores and schools. • PEU posts infographic on MOW website and Project's Facebook page • Report of stakeholder consultation in regard to this project to be completed by PEU
<ul style="list-style-type: none"> • Contractors and their employees 	Personnel training	<ul style="list-style-type: none"> • Contracting Firms • PEU • Women's Department • Belize Family Life Association • Ministry of Health 	<ul style="list-style-type: none"> • June 2018 	<ul style="list-style-type: none"> • Informational Workshops 	<ul style="list-style-type: none"> • Sums required for workshop materials and driver training (\$30,000.00) 	<ul style="list-style-type: none"> • ESMP training requirements for PEU/contractors • Contracting Firms in consultation with PEU to develop worker code of conduct. • Driver training to be provided by Contracting Firms • Health Safety Practices workshop to be provided by the Contracting Firms but delivered by the Belize Family Life Association and the Ministry of Health • Gender Safety (including issues of sexual harassment, exploitation and domestic violence) workshop to be provided by the Contracting Firms but delivered by the Women's Department. • Report of status of personnel training to be completed by PEU
<ul style="list-style-type: none"> • Interested Women in Communities of Project Area • Women's Groups in Project Area • Village & Town Councils of Project Area 	Mentorship program for women	<ul style="list-style-type: none"> • PEU • Women's Department • Engineers/Contractors 	<ul style="list-style-type: none"> • Prior to the start of construction 	<ul style="list-style-type: none"> • Participatory workshop 	<ul style="list-style-type: none"> • Since the policy is for this project to be considered as part of the project proper and not as a separate add-on, the salaries of these women will be provided for by the contractors' budget for employees. • Sums required for the administration of this project (\$3000.00) 	<ul style="list-style-type: none"> • PEU, Engineers/Contractors, Women's Department and interested stakeholders discuss possible non-stereotypical female roles that women from the community can occupy as mentees within the project. • Interested women are assisted to apply for and fulfil these roles. • PEU, Engineers/Contractors, Women's Department and Village/Town Councils provide a supporting role to mentees throughout the course of their mentorship. • The Grievance Mechanism and use of such is introduced to mentees. • Report of gender program which includes this mentorship program to be completed by PEU

<ul style="list-style-type: none"> Female engineering students for the University of Belize 	<p>Internship program for female engineering students</p>	<ul style="list-style-type: none"> PEU Women's Department Engineers/Contractors University of Belize (Engineering Department) 	<ul style="list-style-type: none"> Prior to the start of construction 	<ul style="list-style-type: none"> Participatory workshop 	<ul style="list-style-type: none"> Sums required for stipend to interns (\$2000.00) Sums required for the administration of this project (\$500.00) 	<ul style="list-style-type: none"> PEU, Engineers/Contractors, Women's Department, University of Belize and female engineering students discuss engineering internship positions within the project that students can occupy. Interested women are assisted to apply for and fulfil these roles. PEU, Engineers/Contractors, Women's Department and University of Belize provide a supporting role to interns throughout the course of their internship. The Grievance Mechanism and use of such is introduced to interns. Report of gender program, which includes this internship program to be completed by PEU.
<ul style="list-style-type: none"> Interested Women in Communities of Project Area Women's Groups in Project Area Village & Town Councils of Project Area 	<p>Development of women's cooperative</p>	<ul style="list-style-type: none"> PEU Engineers/Contractors Women's Department Cooperative Department Ministry of Agriculture Beltraide 	<ul style="list-style-type: none"> 3 months prior to the start of these works 	<ul style="list-style-type: none"> Participatory workshop 	<ul style="list-style-type: none"> Sums required for the payment to cooperatives for the work completed will be provided for in the maintenance budget for the highway. Sums required for the administration of this project, including field trips, hosting workshops, and maintaining records (\$5000.00) 	<ul style="list-style-type: none"> PEU, Engineers/Contractors, Women's Department, Cooperative Department, Ministry of Agriculture, Beltraide and interested stakeholders discuss possibilities for the development of women's cooperatives to support the project. Possibilities include the growing of plants and replanting of embankments, beautification of medians, building of water catchments to aid revegetation, etc. Interested women are assisted to form cooperatives with the assistance of the Cooperatives Department. The PEU organizes for women to receive technical training and support from the Ministry of Agriculture, and business organizational and financial training from Beltraide. The PEU organizes for women to meet with other cooperatives to gain a better understanding of this type of organization and how to best manage it. PEU, Engineers/Contractors, Women's Department, Cooperative Department, Ministry of Agriculture and Beltraide provide

						<p>a supporting role to women throughout their tenure with the project.</p> <ul style="list-style-type: none"> Report of gender program, which includes this women's cooperative program to be completed by PEU.
<ul style="list-style-type: none"> Interested Persons in Communities of Project Area Village & Town Councils of Project Area 	Development of micro-companies	<ul style="list-style-type: none"> PEU Engineers/Contractors Cooperative Department Beltraide Ministry of Works 	<ul style="list-style-type: none"> 3 months prior to the start of these works 	<ul style="list-style-type: none"> Participatory workshop 	<ul style="list-style-type: none"> Sums required for the payment to cooperatives for the work completed will be provided for in the maintenance budget for the highway. Sums required for the administration of this project, including hosting workshops and maintaining records (\$2500.00) 	<ul style="list-style-type: none"> PEU, Engineers/Contractors, Cooperative Department, Beltraide, Ministry of Works and interested stakeholders discuss possibilities for the development of micro-companies to support the project. Possibilities include collecting garbage, keeping drains clear of mud and rocks, using weed-whackers to clear vegetation for a certain distance, and basically maintaining the right of way. Interested stakeholders are assisted to form micro-companies with the assistance of the Cooperatives Department and Beltraide. The PEU organizes for stakeholders to receive technical training and support from the Ministry of Works. PEU, Engineers/Contractors, Cooperative Department, Beltraide and Ministry of Works provide a supporting role to stakeholders throughout their tenure with the project. Report of the micro-companies project to be completed by PEU.
Total Budget					\$55,100.00	

Annex A: Directory to Accompany Communications Matrix

The following table presents contact information for all persons identified in this communications plan. The email addresses and phone numbers in this table will be used to communicate with these people.

Role	Name	Organization/Department	Email	Phone
Project Manager	Derick Calles	Ministry of Works, Project Execution Unit (PEU)	Zone.Engineer_South@mow.gov.bz	822-0100
Supervision Engineer	Andrew Clough	IMC Worldwide	Andrew.Clough@imcworldwide.com	802-1749
Engineers	Julio & Romy Chia	Chia's Engineering	chias.engineering@gmail.com	
Contractor for Section 1	Roque Matus	M&Ms Engineering Consultants Ltd.	mmengineeringconsultants@gmail.com	
Contractor for Section 2	Peter Teichroeb	Teichroeb and Sons Ltd.	info@teichroebandsons.com	225-2395
Road Safety	Ruth Meighan (CEO)	Transport Department		822-2138
Road Safety	Pamela Scott-Bradley	Belize Road Safety Project		
Gender Specialist	Taheera Usher	Women's Department	hdc.wd@humandev.gov.bz	227-7397
Sexual and Reproductive Health		Belize Family Life Association	info@blfabelize.org	203-1018 824-2648
Communicable Diseases	Dr. Ramon Figueroa (CEO)	Ministry of Health	seniorsecretary@health.gov.bz	822-2325/2363/0809
Female Engineering Intern		University of Belize (Engineering Department)		822-1000
Cooperative Development	Gareth Murillo (Registrar)	Cooperative Department	gmurillo.bzecoopsdept@gmail.com	822-2131
Technical Assistance for women's cooperative	Jose Alpuche (CEO)	Ministry of Agriculture		
Administrative and Financial Assistance for micro-companies		Beltraide – Small Business Development Centre	SBDCBelize@belizeinvest.org.bz	822-3737 223-3195
	Errol Gentle (CEO)	Ministry of Works	ceo@mow.gov.bz	822-2138/2136
Notifications		Government Press Office		822-0759/0094
Notifications and Talk-Show Presentations		Love FM		203-2098
Notifications and Talk-Show Presentations		Wave Radio Station		202-5360
Notifications and Talk-Show Presentations		Plus TV	plustvbelize@gmail.com	822-2536

Graphic Designer	DalheartMcFadzean	Independent Designer	dalsheart@gmail.com	615-8636
Promotional Items		Creative Graphic Impressions	cgi@btl.net	322-2282

Government of Belize

Ministry of Works



George Price Highway Rehabilitation II Project

Annex 4

Socio Cultural Analysis

This section was prepared by Christa Hulse, Social Consultant
for the Government of Belize, Ministry of Works.
Belmopan, Belize.

2018

Table of Contents

Introduction.....	3
Background	3
Who are the Indigenous Peoples of Belize.....	3
Regulatory Framework.....	4
National Legislation	4
International Treaties, Declarations and Conventions.....	4
Rights Recognized by the Courts	4
IDB Policies	5
Indigenous Peoples Policy (OP-765)	5
Development with Identity	5
Indigenous Peoples Safeguards	6
Sociocultural Context of Indigenous Peoples	6
Demographics	6
Geographical Distribution in the Project Area.....	7
Language	7
Economic Activities.....	7
Poverty	8
Poverty Level among Indigenous Peoples.....	10
Labor Force	11
Organization and Political Participation.....	11
Cultural, Material and Intangible Heritage	12
Main Sociocultural Risks and Impacts.....	13
Impacts to Indigenous Lands/Territories	13
Impacts to Indigenous Peoples Private Properties	13
Other Impacts.....	13
Indigenous Peoples Plan	13
Consultation and Participation of Indigenous Peoples	14
Monitoring and Evaluation	14

Introduction

This Socio-cultural analysis seeks to illuminate the situation of Indigenous Peoples (IPs), particularly Garifuna and Maya, within the project zone. The project zone includes all communities along the George Price Highway from Roaring Creek Village to the western border with Guatemala. Indigenous peoples live in most of these communities however, they have integrated into the mainstream and as such have no separate traditional organizational or governance structures. Accordingly, this assessment was conducted from the perspective of their general vulnerabilities. This assessment also includes recommendations for culturally sensitive consultation with these groups.

Background

Who are the Indigenous Peoples of Belize

The Inter-American Development Bank (IDB) define indigenous peoples using the following criteria:

- They are descendants from populations inhabiting Latin America and the Caribbean at the time of conquest or colonization
- Irrespective of their legal status or current residence, they retain some or all of their own social, economic, political, linguistic and cultural institutions and practices; and
- They recognize themselves as belonging to indigenous or pre-colonial cultures or peoples

In Belize, two groups fit that criteria. They are the indigenous Garifuna and Maya peoples.

The Garifuna are a people of African, Arawak and Taino ancestry who were exiled by the British from the island of St. Vincent to the Island of Roatan in Honduras. From Roatan, the Garifuna immigrated to Belize around the 1800s and settled in Dangriga in the Stann Creek district.

The Mayas traditionally inhabited Toledo in southern Belize. The first inhabitants were the Manche Chol Maya¹, whose historical occupation can still be evidenced through the numerous Maya heritage sites, such as Lubaantun and Nim Li Punit, left scattered throughout the district. Today however, the district is inhabited by the Mopan and Queq'chi Mayas who immigrated to Belize, from Guatemala, in the late 19th and early 20th centuries.

¹ <http://www.southernbelize.com/history.html>

Regulatory Framework

National Legislation

Belize does not have any legislation specific to the protection or any other kind of treatment of indigenous peoples. The preamble of the Constitution of Belize, however does make mention of indigenous peoples in requiring that “policies of state protect the identity, dignity and social and cultural values of Belizeans, including Belize’s indigenous peoples.”² Further to this, indigenous peoples in Belize do not enjoy any separate legal rights and protections outside of the traditional fundamental rights and freedoms of the individual (section 3) and protection from discrimination (section 16) on the grounds of race, place of origin, political opinion, colour, creed or sex, which every Belizean enjoys.³

International Treaties, Declarations and Conventions

Belize has not signed nor ratified the landmark International Labour Organization (ILO) Convention No. 169, which specifically recognizes and provides substantial protections for indigenous peoples. It has however, signed but not ratified the United Nations Declaration on the Rights of Indigenous Peoples. While the country seem to have taken a very cautious stance towards defining indigenous peoples and singling them out for special treatment, perhaps because of the very multi-ethnic, multicultural nature of the country, the State has nonetheless demonstrated its commitment to the indigenous Garifuna and Maya peoples by promoting initiatives that respect their distinct rights.

Rights Recognized by the Courts

In April 2015, the Caribbean Court of Justice (CCJ), Belize’s highest appellate court, recognized the customary land rights of some 38 Queq’chi and Mopan Maya indigenous communities of southern Belize. The court indicated that the lands that the Maya peoples had customarily used and occupied in southern Belize constituted property equal in legitimacy to any other form of property under the laws of Belize.⁴ The CCJ further, required that the Government of Belize, demarcate and register Maya village lands and also issued an order that it cease and desist from any further interference, destruction or use of the land without the Maya peoples Free, Prior and Informed Consent (FPIC).

The government had in 1997 declared a large area of Maya ancestral lands in southern Belize, the Sarstoon-Temash National Park, and had subsequently used its authority over the park to grant concessions for logging, oil exploration and other developments, without the consultation and approval of the Maya peoples.

² Government of Belize. (2012). Belize Constitution chapter 4, preamble

³ Belize Constitution 2012, s 3, s 16

⁴ Howard, S. (2015). *IPLP wins landmark human rights case in Belize*. Retrieved from <https://law.arizona.edu/iplp-wins-landmark-human-rights-case-belize>

IDB Policies

Indigenous Peoples Policy (OP-765)

The IDB developed the Indigenous Peoples Policy (IPP) with the goal of “contributing to the development of indigenous peoples.”⁵ The objectives to achieving these goals include a) Supporting the development with identity of indigenous peoples which, simply put, means fostering the development of indigenous peoples with their identity in tact, and b) Safeguarding indigenous peoples and their rights.

Development with Identity

In promoting development with identity, the bank seeks to:

1. Mainstream specifically indigenous issues in development agendas through independent operations
2. Mainstream indigenous specificity in projects with a general approach. Adjustments in the project that the bank initiates to support this approach, includes
 - a. Identifying and targeting indigenous peoples that could potentially benefit
 - b. Implementing socio culturally appropriate and effective consultation processes with these peoples
 - c. Respecting the traditional knowledge, cultural heritage, natural assets, social capital, and the systems specific to indigenous people with respect to social, economic, linguistic, spiritual and legal systems
 - d. Adapting services and other activities to facilitate access to them by indigenous beneficiaries, including equitable treatment and, whenever feasible, adequate procedure and criteria, and programs for capacity-building and compensation of exclusion factors
 - e. Designing complementary measures and activities through a process of good faith negotiation with affected indigenous communities.

The bank has selected ten specific activities to promote development with identity. These include:

1. Improving the visibility and understanding of challenges to indigenous development, in rural and urban contexts.
2. Developing socio culturally appropriate solutions to increase the availability and quality of social services, particularly health and education.
3. Recognizing, articulating and implementing indigenous rights in accordance with the applicable legal norms.
4. Supporting the indigenous culture, identity, language, traditional arts and techniques, cultural resources, and the intellectual property of indigenous peoples.
5. Strengthening of titling and physical management processes for territories, lands, and natural resources traditionally occupied or used by indigenous peoples, in

⁵ Inter-American Development Bank. (2006). *Operational policy on indigenous peoples and strategy for indigenous development*. Washington, DC: Inter-American Development Bank.

accordance with applicable legal norms, and with environmental protection objectives.

6. Promoting mechanisms for appropriate consultation, participation in natural resources management, and benefit sharing.
7. Developing specific initiatives to implement socio culturally appropriate project alternatives for better access by indigenous peoples to labor, production and financial markets, technical assistance and information technology.
8. Supporting indigenous peoples governance.
9. Supporting the participation and leadership by, and protection of women, the elderly, youth and children.
10. Strengthening the institutional capacity of indigenous peoples, government entities, the private sector, civil society and the Bank itself to address indigenous issues in all areas.

Indigenous Peoples Safeguards

The IDB addresses seven areas in its framework to safeguard indigenous peoples in all its financing operations. These include

1. The prevention and mitigation of *adverse impacts*
2. Respect for indigenous peoples rights to their ancestral *territories, land, and natural resources*
3. Respect for *indigenous rights*
4. *Prevention of ethnically based discrimination*
5. Protection of *indigenous culture, identity, language, and traditional knowledge*
6. Real consideration of *transborder indigenous peoples*
7. Respecting the rights of *uncontacted indigenous peoples* to remain in isolation

Sociocultural Context of Indigenous Peoples

Demographics

The indigenous peoples of Belize make up 14.24% of the population. Of the 45,906 indigenous peoples, 32% are Garifuna, 40% Queq'chi Maya, 23% Mopan Maya and 5% Yucatec Maya (see Table 1). Historically the Garifuna peoples had occupied Stann Creek in southern Belize, the Queq'chi and Mopan Mayas occupied Toledo, also in southern Belize, and the Yucatec Maya occupied Corozal and Orange Walk in northern Belize. Today however, many of these indigenous peoples are scattered throughout the country after having migrated from their traditional lands in search of better economic opportunities.

Table 1: Belize's Indigenous Population

	Indigenous Population	Male	Female
Garifuna	15,082	7,238	7,844

Queq'chi Maya	18,510	9,311	9,199
Mopan Maya	10,938	5,398	5,540
Yucatec Maya	2,196	1,150	1,046

Source: Belize Population and Housing Census 2010

Geographical Distribution in the Project Area

Garifuna and Maya peoples can be found in all of the villages within the project area. Their numbers are relatively few however with the majority Maya (6%) and Garifuna (2%) living in Roaring Creek village. Mayas living in San Jose Succotz village also make up 6%.

Table 2: Project Area Demographics

	Total Population	Male	Female	Garifuna	Maya
Roaring Creek	1,974	965	1,009	42	126
Camalote	2,562	1,276	1,286	27	96
Teakettle	1,746	886	860	19	102
Ontario	775	394	381	2	4
Blackman Eddy	533	287	247	2	8
Unitedville	971	476	495	8	4
Georgeville	922	464	458	14	8
Central Farm	205	99	106	15	-
Esperanza	1,262	641	621	17	14
Santa Elena	7,389	3,622	3,767	64	93
San Ignacio	10,490	5,129	5,360	127	272
San Jose Succotz	2,343	1,151	1,192	8	146
Benque Viejo del Carmen	6,148	3,057	3,091	31	39

Source: Belize Population and Housing Census 2010

Language

The Garifuna and Maya peoples have to a large extent tried to maintain their linguistic heritage. There has nonetheless still been some erosion, which both groups have tried to counter by developing schools and introducing curriculum that focus on their indigenous language. Below, shows the status of the various indigenous languages in Belize:

- Garifuna – spoken by 56% of the Garifuna population
- Queq'chi Maya – spoken by 96% of Queq'chi Maya population
- Mopan Maya – spoken by 86% of Mopan Maya population
- Yucatec Maya – being displaced by Spanish

Economic Activities

The indigenous peoples of Belize have all been traditional agriculturalists. The Garifuna, for example, are known for cultivating tubers such as cassava and yams, as well as other

starchy crops such as plantains. Garifuna men and women have also been avid fisherfolks. In later times however, many Garifuna people moved into the field of teaching and dedicated their lives to educating Belizeans throughout the country.⁶

The Queq'chi and Mopan Mayas economic activity is also situated around agriculture. Today in the rural area most families reside on 3-4 acres plots, which they farm using the traditional slash and burn method. Crops grown include rice, beans, corn and cocoa. Hunting also remains an integral part of the Queq'chi and Mopan Mayas way of life.

The Yucatec Maya in the north of Belize traditionally and still to this day grow sugar cane for the sugar export market. Sugar remains one of Belize's bigger foreign exchange earner.

Poverty

At the last country poverty assessment carried out in 2009, it was found that 41.3% of Belize's population or 31% of households were living below the poverty line. Of this, 15.8% of the population or 10.4% of households were considered indigent and 25.5% of the population or 20.6% of households were considered poor/not indigent.⁷ Poverty, in this instance, is defined "as not having the per capita income to afford a market basket of basic food," whereas indigence means "falling short of being able to afford even food."⁸ The market basket (MFB) is determined by calculating the minimum cost of a balanced diet, within a particular community, for an adult male consuming 2,400 calories/day. The table below shows the daily and annual MFB cost for an adult male, for each district of Belize, in 2009.

Table 3: District Minimum Food Basket Costs for an Adult Male

District	Daily Cost	Annual Cost
Corozal	\$5.35	\$1,953.00
Orange Walk	\$5.32	\$1,942.00
Belize	\$5.36	\$1,958.00
Cayo	\$4.91	\$1,791.00
Stann Creek	\$5.99	\$2,186.00
Toledo	\$6.12	\$2,234.00
Country	\$5.50	\$2,005.00

Source: Country Poverty Assessment, Final Report 2010

⁶ Enriquez, J. (2017). *To educate a nation: Autobiography of Andres P. and Jane V. Enriquez*. Belize: Producciones de la Hamaca.

⁷ Government of Belize and the Caribbean Development Bank. (2010, August). *Country poverty assessment, Final report, vol. 1, Main report*. London: Halcrow Group Ltd.

⁸ Close, D. (2017). *Latin American politics: An introduction*. (2nd ed.). Ontario, Canada: University of Toronto Press. (p. 276).

An additional 13.8% of the population or 12.9% of households, while not poor, were considered vulnerable to poverty. When individual or household expenditure is less than or equal to 25% above the General Poverty Line (GPL) of the community, then this individual or household is thought to be vulnerable to poverty. The General Poverty Line is derived from determining the average food share (of total expenses) of the poorest 40% of the community and then accounting for the difference (MFB x reciprocal of food share) in expenses.

The GPL also tells a story of the cost of living within particular areas of Belize. As shown in Table 4, the cost of living in Belmopan and surrounding areas, as well as San Ignacio/Santa Elena and surrounding areas (the site of the road rehabilitation project) is above the national average. The food share expenses however, is around 50% meaning that residents of the project area spend about 50% of their income on food. The annual market food basket cost in the area of San Ignacio/Santa Elena is the lowest in the country, while the cost in Belmopan and surrounding areas is a little above the national average. This is not surprising since the Cayo district is the largest agriculture-producing district in the country.

Table 4: District General Poverty Line

District	MFB Annual	Food Share	Annual General Poverty Line
Corozal	\$1,952.00	64%	\$3,041.00
Orange Walk	\$1,941.00	59%	\$3,308.00
Belize City & surrounding	\$1,920.00	50%	\$3,810.00
San Pedro Town	\$2,354.00	45%	\$5,279.00
Belmopan & surrounding	\$2,088.00	56%	\$3,730.00
San Ignacio/Santa Elena & surrounding	\$1,621.00	54%	\$3,537.00
Stann Creek	\$2,186.00	56%	\$3,906.00
Toledo	\$2,233.00	81%	\$2,753.00
Country	\$2,005.00	58%	\$3,429.00

Source: Country Poverty Assessment, Final Report 2010

Finally, Belize's not poor population constitutes 44.9%. These individuals have an expenditure that is more than 25% above the General Poverty Line.

While the poverty situation in Belize might look dismal, it must be remembered that the actual "not poor" figure for households is 69%, which takes into account those who are vulnerable but not poor. The Country Poverty Assessment Report also did indicate that there were several external impacts that created this picture of poverty in Belize, including but not limited to, a sluggish economy due to a global recession, setbacks in several of the agricultural industries, a hurricane in 2007, and major floods in 2008.

Table 5: Extent of Poverty in Belize

Category	Indigent	Poor/Not Indigent	Total Poor	Vulnerable	Not Poor	Total Not Poor	Grand Total
Households	8,539	16,852	25,390	10,583	45,927	56,510	81,900
	10.4%	20.6%	31%	12.9%	56.1%	69%	100%
Population	52,185	84,455	136,640	45,614	148,460	194,074	330,715
	15.8%	25.5%	41.3%	13.8%	44.9%	58.7%	100%

Source: Country Poverty Assessment, Final Report 2010

Poverty Level among Indigenous Peoples

Table 6 below, shows a disturbing picture of poverty among the indigenous Queq'chi and Mopan Maya population. This however, is indicative of the situation in the Toledo district mostly. As can be seen in Table 4, the Toledo District is the least expensive place in the country to live. However, the food share expenses in Toledo is an alarming 81% indicating that residents of Toledo spend almost all of their monies on food. In addition, Toledo has the second highest MFB (after San Pedro Town) in the entire country.

This detail would seem surprising as the Toledo District is home to one of the most fertile agricultural lands in the country. The situation however, is an amalgam of different issues. First of all, the Maya in the Toledo district engage in subsistence farming and not commercial farming, therefore there is no revenue coming in except for the occasional sale on the market which is done on a need-by-need basis. Secondly, the diet considered in the market basket equation is not case specific and would not have considered that the Mayas would have adjusted their diet to take into account the foods that are available as well as their disposable incomes. Indeed, the Ministry of Agriculture research station in Jalacte, Toledo has indicated that the Mayas in Toledo are reluctant to grow non-traditional crops, even those that would provide for better sources in a balanced diet.⁹ Finally, the Toledo district is very sparsely populated and has only recently been the focus of infrastructure development. The lack of proper roads has made the distribution of food between villages in the Toledo district and from outside the district very costly.

The Garifuna, Yucatec Maya and Queq'chi and Mopan Mayas living outside of the Toledo district would not have this same experience of poverty. However, those assimilated indigenous peoples might still experience poverty as many times they live on the fringes of society due to social discrimination and barriers to full assimilation.

Table 6: Poverty Level among Indigenous Peoples

	Indigent	Poor	Not Poor
Garifuna	12.9%	25.4%	61.7%
Queq'chi Maya	60.8%	23%	16.3%

⁹ Personal communication (2017, January).

Mopan Maya	49.1%	21%	29.8%
Yucatec Maya	16.8%	26.7%	56.5%

Source: National Poverty Elimination Strategy and Action Plan 2006-2010

Labor Force

There are 60,650 people who comprise the working age population of the Cayo district. Of this, 519 people are Garifuna and 5,227 are Maya. Four hundred and eighty three people make up the Garifuna labor force in the Cayo district, while 2,839 people make up the Maya labour force in the Cayo district. The remaining 7% of Garifuna and 46% Maya do not comprise the labor force because they are not available or not able to work. This includes students, housewives, disabled, retired persons or persons who are simply not looking for work.

The unemployment rate of the Garifuna in the Cayo district is rather large at 25%, while the unemployment rate of the Maya in the Cayo district is little under the average for the district at 9%.

The majority of the Cayo district's unemployed has only a primary school education (47.9%), followed by those with no education (24.3%), while 16.3% and 9.9% have a secondary or tertiary education respectively. The unemployment rate in the Cayo district is 13%. Similar to elsewhere in the country, the bulk of the unemployed in the Cayo district are more interested in the service industry (69.7%), followed by the secondary (22.2%) and primary industries (8.1%).¹⁰ Of note is that the educational level of the unemployed would not be considered sufficient to access the jobs in the service industries that the unemployed are primarily seeking.

Table 7: Indigenous Labor Figures in the Cayo District

	Total Population	Working Age Population	Labor Force	Employed	Percentage Unemployed
Cayo	93,938	60,650	38,297	33,303	13%
Garifuna	865	519	483	361	25%
Maya	8330	5,227	2,839	2,582	9%

Source: Labour Force Survey (2017, September)

Organization and Political Participation

The Mayas in southern Belize still have an alcade system, as a sort of governance structure that operates in tandem with the village council system. The village council system however, supersedes the alcade system.

¹⁰ Statistical Institute of Belize. (2017, September). *Labour force survey*. Belize: Statistical Institute of Belize

Elsewhere, the Westernized council system is the only recognized governance or representative system operating. Integrated indigenous Garifuna and Maya peoples must therefore rely on this system for representation. Indeed, throughout the country, Garifuna and Mayas have many times also become politically active in this system offering themselves up as councillor candidates.

There are also a number of indigenous organizations that have been created to foster the continued development of their groups and to lobby for the rights of indigenous peoples. Two of the larger organizations include the National Garifuna Council and the Maya Leaders of Southern Belize. The National Garifuna Council (NGC) has a chapter in San Ignacio, however the Mayas living in the project area have no known indigenous representation. In speaking with the President of the NGC (San Ignacio Chapter), Cynthia Ellis-Topsey, she indicated that many of the Garifuna peoples living in the area may not be a part of the Council, however when a need arises they will operate collectively as families.¹¹

Cultural, Material and Intangible Heritage

The Mayas locate most of their cultural practices in milpa farming. In addition, they are very knowledgeable of the jungle and the many resources it provides, such as medicinal plants, building material, and foods. Maya women also engage in art and craftwork, making such items as embroidered clothing, pottery, and small figurines from a number of raw materials. The Maya people living in the village of San Jose Succotz have been able to draw on these skills to develop enterprises in the tourism industry. Many occupy vendor booths in the artisanal market place of the historical Xunantunich Maya site.

The Cayo district, and the project area itself, is home to many Maya archaeological features, including mounds, plazuelas and patios. The following features are located in or near the project site:

- Near the National Agricultural Fairgrounds in Road Section I, the Rivera Site (E308780, N1908287).
- Along Road Section II near Camalote, Teakettle, Warrie Head (E300583, N1905461), Ontario (E299385, N1905622; E298502, N1905452; E298190, N1905301), and Blackman Eddy (E296830, N1905387), within the existing carriageway buffer zone or road corridor.
- Along Road Section III near Lower Dover, Floral Park (E291633, N1903038), Baking Pot and Esperanza, located within the road corridor or study area.
- Along Road Section IV, the sites of Cahal Pech, Buenavista, Nohoch Ek, Actuncan and Xunantunich, which are partially within the road buffer zone or the proposed by-pass route.
- Near the quarry at Nohoch Ek.

¹¹ Personal communication (May 9, 2018)

The Garifuna within the project area have mostly assimilated and therefore they have no distinct cultural heritage that will require specific safeguards.

Main Sociocultural Risks and Impacts

Impacts to Indigenous Lands/Territories

The George Price Rehabilitation II Project, as the name implies is the rehabilitation of an existing highway. The only new features to the highway include substantial widening of the road as compared to the current highway, changes in alignment of the road in a few sections, a new Roaring Creek bridge with a new alignment and a new bypass in the village of San Jose Succotz.

No part of the project is located or will pass in close proximity to any recognized indigenous lands, although the road will pass near to some Maya archaeological features. These features are either on State protected lands, administered by the National Institute of Culture and History (NICH) or they are on private lands but also protected under the protocols of NICH. Safeguards for protecting these cultural heritage sites have been provided for in the project's Environmental and Social Management Plan (ESMP).

Impacts to Indigenous Peoples Private Properties

In road sections 1 -3, there are no indigenous person's property that will be affected. However, it is estimated that several properties of indigenous peoples will be affected in section 4. This is particularly so in the area of an Artisanal Plaza near the entrance of the Xunantunich Maya Site in San Jose Succotz. This Artisanal Plaza houses several Maya artisans and their art and craft ware. Additionally, properties to be acquired on the existing George Price Highway and the proposed route of the new Succotz by-pass have not yet been surveyed and therefore their status as indigenous people's property has not yet been verified.

Since there is a likelihood that indigenous peoples will be affected by the project in section 4, it is recommended that an indigenous peoples plan be developed for this section.

Other Impacts

It is not expected that the project will lead to any direct, indirect or cumulative impacts to indigenous peoples living in the project area, except for those mentioned above.

Indigenous Peoples Plan

This project will not require a specific indigenous peoples plan since it is not operating near any traditional indigenous land or territory nor are there any distinct indigenous

communities within any of the villages of the project area. Indigenous peoples living within the project area have integrated in the mainstream and will require no specific safeguards as outlined in the IDB's Indigenous Peoples Policy.

Consultation and Participation of Indigenous Peoples

The following general recommendations are made for the consultation and participation of Indigenous Peoples:

- Verify how many indigenous peoples will be affected by the project
- Provide invitations to these individuals or their representatives to participate in discussions about the project, its potential affect on them and their recommendations for mitigation.
- Conduct culturally sensitive consultations, including considerations for language to be used in meetings, whether interpreters will be required, type of participation procedures preferred and any other cultural aspect that needs to be taken into account.
- Determine appropriate nature of agreements, whether there must be community consent, etc. to any agreements. Further, consideration should be given to who is allowed to make agreements.

Monitoring and Evaluation

All consultations with indigenous people along with the nature of their participation in the consultation should be fully documented. This includes the number of consultations held, participants, logistics and all arrangements and agreements made. Picture evidence must be included with all documentation. All these provisions are explained in greater detail in the consultation plan.

An evaluation of each consultation should be made with a view to implementing lessons learned in subsequent consultations. Evaluations and the particulars of such evaluations must also be documented.

Government of Belize

Ministry of Works



George Price Highway Rehabilitation II Project

Gender Strategy and Gender Action Plan

2018

This document was prepared by Christa Hulse, Social Consultant
for the Government of Belize, Ministry of Works.
Belmopan, Belize. May 2018.

Table of Contents

Introduction	5
IDB Operational Policy on Gender Equality in Development	5
Background.....	5
Directives of the IDB Gender Policy.....	6
Consistency with Other Safeguard Policies.....	6
IDB's Strategic Gender Objectives (Proactive Action).....	6
IDB's Gender Safeguards (Preventative Action).....	7
The Belize Gender Policy	8
Background.....	8
Vision of the Belize Gender Policy	8
Belize Gender Policy Framework	9
Gap Analysis	10
George Price Highway Rehabilitation II Project – Gender Strategy and Action Plan	10
Monitoring the Gender Strategy and Action Plan.....	11

List of Tables

Table 1: IDB Strategic Gender Objectives.....	7
Table 2: IDB Gender Safeguards.....	7
Table 3: Vision for Belize's Gender Policy	9
Table 4: Belize Gender Policy	9
Table 5: George Price Highway Gender Strategy and Action Plan.....	10
Table 6: Monitoring Framework.....	12

Introduction

This Gender Strategy and Action Plan form the basis to understanding how gender equality and women's empowerment will be specifically approached in the George Price Highway Rehabilitation Project II (BL-L1029). In addition, it outlines specific actions to be undertaken and monitoring tools to be applied to ensure that the above-mentioned approach or strategy taken becomes operational and achieves the objectives that have been set out.

IDB Operational Policy on Gender Equality in Development¹

Background

The world has long recognized that gender equality contributes to a myriad of benefits and advancement on both a macro and micro level. When there is equality in the household, in the labor market, in access to financial services and technology, and in civic and political participation, a society's efforts in development increases. Gender equality also has the effect of improving quality of life for individuals and their families. It is with this understanding that the IDB has taken a bold step through its Operational Policy on Gender Equality in Development (OP-761) to support the Bank's member countries to reach their goals and commitments for gender equality and women's empowerment.

Member countries of the IDB within the region have all signed and ratified the following agreements which make gender equality a priority:

- Universal Declaration of Human Rights (1948)
- Convention on the Elimination of All Forms of Discrimination against Women or CEDAW (1979)
- Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women (1994)
- Programme of Action of the International Conference on Population and Development (1994)
- Platform for Action of the Fourth World Conference on Women (1995)
- Millennium Development Goals (2000)

Through policy directives that promote proactive and preventative actions, as well as various monitoring mechanisms, that are incorporated in numerous investment and initiative schemes, the Bank ensures that it supports the integration of women as leaders, participants, and beneficiaries in development and that it integrates a gender perspective that seeks equal conditions and opportunities for women and

¹ Inter-American Development Bank. (2010, November). *Operational policy on gender equality in development*. Inter-American Development Bank.

men to reach their social, economic, political, and cultural potential that is in keeping with the goals and commitments of each member country.

Directives of the IDB Gender Policy²

The IDB's Operational Policy on Gender Equality in Development sets out two lines of action that incorporate three broad policy directives. These are as follows:

1. Proactive Action – actions, which actively promote gender equality or women's empowerment.
 - a. Direct Investment – financial operations whose primary objectives are to address strategic gender issues, generate knowledge to enhance value added in this area, and build institutional capacity.
 - b. Gender mainstreaming – is the process that seeks to identify and address gender equality issues, including the differential needs of women and men, in the design, implementation, monitoring, and evaluation of the Bank's interventions.
2. Preventative Action (Gender Safeguards) – this is the process through which the Bank identifies and addresses potential adverse impacts for women and men and risks of exclusion based on gender.

Consistency with Other Safeguard Policies

The IDB's Operational Policy on Gender Equality in Development (OP-761) is consistent with the following IDB policies:

- Disclosure of Information Policy (OP-102)
- Environment and Safeguards Compliance Policy (OP-703)
- Operational Policy on Involuntary Resettlement (OP-710)
- Operational Policy on Indigenous Peoples (OP-765)

IDB's Strategic Gender Objectives (Proactive Action)³

In working to achieve greater gender equality and women's empowerment in the Latin American and Caribbean region the IDB has elected to focus on six strategic gender objectives that encompass a number of sub-objectives (see Table 1).

² Inter-American Development Bank. (2010, November). *Operational policy on gender equality in development*. Inter-American Development Bank.

³ Inter-American Development Bank. Gender and Diversity Division. (2013, September). *Implementation guidelines for the operational policy on gender equality in development*. Inter-American Development Bank

Table 1: IDB Strategic Gender Objectives

Strategic Gender Objectives	
Objectives	Outcomes
Empower women economically	<ul style="list-style-type: none"> • Increase women's access to quality jobs and economic opportunities • Support the growth of women-owned businesses and female entrepreneurs
Reduce violence against women	<ul style="list-style-type: none"> • Prevent violence against women (including sexual violence, physical violence and femicide) • Improve law enforcement's capacity to manage VAW cases • Expand access to VAW support and services
Improve sexual and reproductive health	<ul style="list-style-type: none"> • Increase accessibility of gender-sensitive, culturally appropriate, and quality sexual and reproductive health services (including maternal health) • Improve young men and women's ability to make informed decisions about their sexual and reproductive health
Reduce gender inequalities in education	<ul style="list-style-type: none"> • Increase gender-sensitivity in school teaching strategies and curricula • Increase gender equality in school attendance for boys and girls (particularly for indigenous girls and boys in Central America and the Caribbean) in primary, secondary, and tertiary education
Increase women's participation in decision-making	<ul style="list-style-type: none"> • Increase women's participation in public and private sector leadership • Improve women's participation in consultation and decision-making at multiple levels
Reduce the burden of caring on women	<ul style="list-style-type: none"> • Improve individual care systems for children and seniors/adults • Support the equal distribution of household and child care duties between men and women

IDB's Gender Safeguards (Preventative Action)⁴

The IDB's Gender Safeguards Directive requires project teams to identify the potential for gender-based risks and adverse impacts and mitigate for these throughout the project life cycle. This is particularly important in the design stage where potential risks and impact can be avoided completely or substantially reduced.

The IDB's Operational Policy on Gender Equality in Development has delineated three key areas for potential gender risks and safeguards (see Table 2).

Table 2: IDB Gender Safeguards

IDB Gender Safeguards	
Key Area	Description
Economic	<ul style="list-style-type: none"> • Introducing unequal requirements for access to project-derived economic

⁴ Inter-American Development Bank. (2010, November). *Operational policy on gender equality in development*. Inter-American Development Bank.

Opportunities	opportunities and benefits, including paid work, training, credit, or business opportunities. Includes introducing unpaid work unevenly, and introducing requirements that restrict the participation of women or men in project activities and benefits based on pregnancy, maternity/paternity leave, or marital status.
Property Rights	<ul style="list-style-type: none"> Disregarding the right of women to inherit and own land, homes, and other assets or natural resources.
Gender-based Violence	<ul style="list-style-type: none"> Increasing the risk of gender-based violence, including sexual exploitation, human trafficking, or sexually transmitted diseases, including HIV/AIDS.

The Belize Gender Policy

Background

Belizean women have a history of fighting for greater political, social and economic rights. However, while there have been many gains, the particular situation of women in Belize have been mostly disregarded by the general public and subsumed under the rhetoric of an already existing gender equality. This is particularly so since women in Belize appear to have equal opportunities as men and in fact, contradictory data that speaks to underlying gender issues and that is at the same time sex-disaggregated is non-existent. The narrative then, and lack of critical data has made it difficult to table women's issues, especially those that are beneath the surface level.

In an effort to nonetheless put women's issues on the forefront and to ensure Belize's compliance with CEDAW, the National Women's Commission (NWC), through the Government of Belize, has endeavoured to articulate a Gender Policy which acts as a framework to understanding the nature of gender in Belize and also to provide specificity to areas that need immediate attention.

The Constitution of Belize and several other International Conventions, to which Belize is a signatory, undergird the Belize Gender Policy. The Constitution of Belize guarantees gender equality for all its citizens and provides them protection from discrimination on the grounds of race, place of origin, political opinion, colour, creed or sex.⁵ These Constitutional provisions along with those from the International Conventions provide a number of key guiding principles that ultimately are enshrined in the below Gender Policy Vision.

Vision of the Belize Gender Policy⁶

⁵ Belize Constitution 2012, preamble, s 3, s 16

⁶ The National Women's Commission. (2013). *Part 2, The revised national gender policy* (Updated Version 2013). The National Women's Commission

Table 3: Vision for Belize's Gender Policy

Belize Gender Policy Vision
“A society in which all men and women, boys and girls are able to achieve their full potential through the enjoyment of their human rights; live together in mutual respect, dignity and harmony; and are equal partners as they participate in services and resources for realizing and sustaining their economic, social, political, and cultural development for equal enjoyment of all.”

Belize Gender Policy Framework⁷

There are currently five priority areas in the Gender Policy framework of Belize. Further, there are special areas under each priority which need immediate attention and for which the Government of Belize has committed to direct its focus (see ???).

Table 4: Belize Gender Policy

Belize Gender Policy	
Policy Priorities	Special Areas of Attention
Health	<ul style="list-style-type: none"> • Investing in primary health care programs • Integrating sexual and reproductive health as a national development priority • Expanding injury prevention and treatment services geared to the special needs of women, men and children • Strengthening of the comprehensive mental health package of services delivered at the local level • Expanding preventive health education services • Sustaining the increased access to health care for rural communities • Increasing male access to sexual and productive health and primary health care services
Education and Skills Training	<ul style="list-style-type: none"> • Elimination of gender based discrimination at all levels of the education system • Building opportunities for lifelong learning that is holistic, gender responsive, integrated and geared towards sustainable national development • Increasing support for “second chance” programs for boys and girls who drop out of school and developing incentives for them to stay in school • Using formal and informal education to transform gender relation with the family and the community and in society
Wealth and Employment Generation	<ul style="list-style-type: none"> • Eliminating discrimination against women and men workers, including workers in the informal sectors • Expanding social safety nets for vulnerable women, men and children • Creating greater equity in child maintenance provisions • Increasing women’s access to land, credit and business development • Creating gender equity in labor force participation and employment

⁷ The National Women’s Commission. (2013). *Part 2, The revised national gender policy* (Updated Version 2013). The National Women’s Commission

	<ul style="list-style-type: none"> • Mainstreaming gender into disaster management programs
Violence Producing Conditions	<ul style="list-style-type: none"> • Establishing family support systems that transform gender relations • Expanding and strengthening child protection programs • Creating psycho-social support mechanisms and resources for survivors of gender-based violence • Building institutional capacity to address gender based violence, crime and guarantee access to justice
Power and Decision-Making	<ul style="list-style-type: none"> • Increasing women's participation in decision-making positions • Build institutional capacity for gender mainstreaming of all relevant policies, strategies and plans of action • Implement gender budgeting across the public sector and across civil society organizations

Gap Analysis

The Strategic Gender Objectives of the IDB and the Priority Areas of the Belize Gender Policy are similarly aligned. The IDB however, has one additional objective, which is not elaborated in the Policy of Belize, that is, to “Reduce the burden of caring on women.”

George Price Highway Rehabilitation II Project – Gender Strategy and Action Plan

The Gender Strategy and Action Plan for the George Price Highway Rehabilitation II Project is guided by the following IDB Strategic Gender Objectives, which include a number of specific actions executable throughout various phases of the project's life cycle (see Table 5). Also reflected in the plan are mitigation measures for the three key areas of potential risks identified by OP-761, that is, Economic rights, Property rights and Gender-based violence.

Table 5: George Price Highway Gender Strategy and Action Plan

Gender Strategy and Action Plan (GPH Rehab II Project)	
Strategic Gender Objectives	Action Plan
Empower women and men economically	<ul style="list-style-type: none"> • Develop a mentorship program in which local women from the community can gain employment and learn to work in different aspects of the construction field from a mentor. • Through the Cooperative Department of the Ministry of Agriculture, organize for local men and women to develop cooperatives to help with and take ownership of the re-vegetation of the Z-curve, work camps during decommissioning, etc. Associated with this is to help with erosion prevention by building catchments of rock or vegetation – like check dams, berms, bunds, etc. with the idea to catch soil and water, thereby promoting re-vegetation. • Through the Cooperative Department, Belize Trade and Investment

	<p>Development Service (Beltraide) and the local Village Councils, encourage the development of micro-companies for road maintenance. These crews of 5-6 who would be contracted with the project and would be in charge of cutting weeds, removing rocks and dirt from drains, culverts, etc.</p> <ul style="list-style-type: none"> Engage several local community safety representatives to monitor and report vandalism, unsafe actions, dumping, fires, accidents, breakdowns, abandoned vehicles, etc. along a particular stretch of the road.
Reduce violence against women	<ul style="list-style-type: none"> A worker ethical code of conduct shall be developed. Non-employees shall not be allowed in the dorms. Workers shall be given a training session on sexual harassment and exploitation. There should be a zero-tolerance policy for sexual harassment and exploitation. In addition, workers should be apprised of the Protection Against Sexual Harassment Act, CAP. 107, Rev. ed. 1980 – 1990, of the Laws of Belize. A telephone hotline shall be provided to workers and their partners to seek counselling and guidance so that work related stress may not trigger domestic violence. All restrooms at work camps and work sites shall be outfitted with proper door locks, hooks for securing handbags and carrying bags, and privacy curtains. Female dorms shall be separate from male dorms and equipped with their own secured restroom facilities. Dorm areas shall be adequately lit.
Improve sexual and reproductive health	<ul style="list-style-type: none"> Workers and communities should be given a training session on safe practices as it relates to the transmission of sexually transmitted diseases. Condoms should be made accessible to workers. Portable restrooms shall be provided for both male and female employees at each work site.
Education and skills training	<ul style="list-style-type: none"> Engage female engineering students from the University of Belize to conduct a stipended internship with the various design, engineering and construction aspects of the project. Job application forms, recommendation templates, and other job readiness services shall be provided to local communities at public consultations and through Village Councils.
Increase women's participation in decision-making	<ul style="list-style-type: none"> Conduct consultations in a gender sensitive way, that is, through women's groups, focus groups, face-to-face, etc. The public should be apprised of sexual harassment legislation. A gender sensitive grievance mechanism will be developed for use by project workers, communities within the project and stakeholders. Project workers, local communities and stakeholders will be sensitized to using the grievance mechanism.

Monitoring the Gender Strategy and Action Plan

The following matrix provides the expected outcomes for each objective of the strategy proposed for the George Price Highway Rehabilitation II Project, as well as indicators to measure the level of success.

Table 6: Monitoring Framework

Empower Women and Men Economically		
Strategic Objective	Expected outcomes	Indicators
Increase women’s access to quality jobs and economic opportunities	Increase women’s participation in the design, engineering and construction sector.	# of women from the community in mentorship program
		Role of women in mentorship program
Increase vulnerable men’s access to quality jobs and economic opportunities	Increase men’s participation in the construction sector	# of men from the community hired
Support the growth of women-owned businesses and female entrepreneurs	Increased number of women-owned businesses	# of new and functioning women cooperatives and micro-companies working with the project
Support the growth of vulnerable men-owned businesses and male entrepreneurs	Increased number of vulnerable men-owned businesses	# of new and functioning men cooperatives and micro-companies working with the project
Reduce Violence Against Women (VAW)		
Strategic Objective	Expected outcomes	Indicators
Prevent violence against women (including sexual violence, physical violence and femicide)	Increased number of safe spaces for women	# of secured dorm rooms and restrooms
	Decreased number of sexual harassment and exploitation cases	# of grievances related to sexual harassment and exploitation
	Decreased number of VAW cases	# of workers who took training on VAW
		# of community women and female workers who underwent VAW rights training
		# of grievances related to VAW
Expand access to VAW support and services	Decreased number of VAW cases	# of worker or their partners who access the counselling hotline.
Improve Sexual and Reproductive Health		
Strategic Objective	Expected outcomes	Indicators
Increase accessibility of gender-sensitive, culturally appropriate, and quality sexual and reproductive health services (including maternal health)	Increased accessibility of sexual and reproductive health services	# of men and women employed and in communities who underwent training in sexual and reproductive health
		# of condoms distributed
Improve young men and women’s ability to make informed decisions about their sexual and reproductive health	Improved men and women’s sexual and reproductive health knowledge	# of men and women employed and in communities who underwent training in sexual and reproductive health
Education and Skills Training		
Strategic Objective	Expected outcomes	Indicators

Build opportunities for lifelong learning that is holistic, gender responsive, integrated and geared towards sustainable national development	Increased number of women entering the engineering fields	# of female University interns
Increase support for “second chance” programs for boys and girls who drop out of school and developing incentives for them to stay in school	Increased number of vulnerable men and women accessing jobs in the project	# of vulnerable men and women who have been employed by the project
	Increased number of vulnerable men and women engaging in cooperatives and entrepreneurial endeavours that support the project	# of vulnerable men and women who have formed cooperatives or micro-companies to support the project
Increase Women’s Participation in Decision-making		
Strategic Objective	Expected outcomes	Indicators
Increased women’s participation in consultation and decision-making	Improved women’s decision making power in their lives and households	# of community women who participate in consultation meetings
		# of women who use the grievance mechanism to advance their concerns

ANNEX 6
GRIEVANCE MECHANISM

George Price Highway Rehabilitation Project Belize
Grievance Mechanism - 2018

ANNEX 6. GRIEVANCE MECHANISM¹

A grievance can be defined as an actual or perceived problem giving ground for complaint. In line with international standards, projects should provide a Grievance Mechanism which should address concerns promptly, using an understandable and transparent process that is culturally appropriate and readily accessible to all segments of the affected communities, and at no cost and without retribution.

MOW is proactively seeking to prevent grievances through managing Project impacts and through pre-emptive community liaison activities designed to anticipate and address potential issues before they become grievances.

Notwithstanding, the Grievance Mechanism is the official process by which people affected by the Project can bring their comments, concerns and grievances to the Community Liaison Officer (CLO) and the MOW management team. The Grievance Mechanism specifies: the Purpose; Scope and Target Group; Procedure; Management Structure and Tracking; and Monitoring and Reporting. The overall process flow is outlined in Figure 6-1.

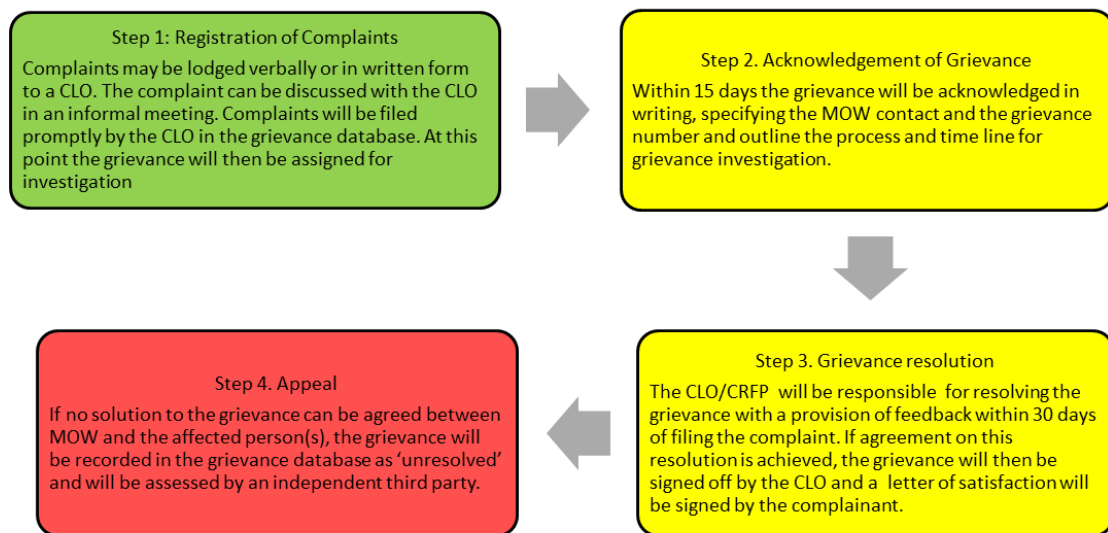


Figure 6-1: Grievance Mechanism Process Flow

¹ Reproduced from the 2014 ESIA: <https://www.iadb.org/Document.cfm?id=38969666>

Management and Tracking of Grievances: The roll out of the Grievance Mechanism to community members will be the responsibility of the CLO. Explanations of the process to community members will be led by the CLO.

Specific issues to be addressed during testing and subsequent roll out of the mechanism are:

- The Grievance Mechanism is accessible to Potentially Affected Parties (PAPs) with low levels of formal education;
- The Grievance Mechanism is publicized using culturally relevant and inclusive media;
- The Grievance Mechanism is accessible for local, national and international stakeholders;
- Community members are aware that they can use the Grievance Mechanism without retribution; and
- Grievances can be lodged without danger of retribution in practice, given that some Project affected stakeholders are reliant on informal livelihoods, and that some grievances may be lodged by workers against contractors who are their employers.

A Grievance Database System will be set up by the CLO before construction starts. This database will be designed to make it easily possible to track individual grievances, giving each grievance a unique ID number (UIDN), trigger deadlines for progress on grievance communications and resolution as specified in the grievance process. The Grievance Database should specify where grievances have been resolved and a statement of satisfaction has been signed by the complainant. Where it has not been possible to resolve grievances to the satisfaction of both parties, this should be specified in the database, and unresolved grievances should be assessed during third party monitoring.

Monitoring and Reporting of Grievances: The implementation of the Grievance Mechanism is subject to third party monitoring (e.g. Department of Environment, Ministry of Human Development, Inter-American Development Bank) to ensure that MOW is performing effectively in its commitments to resolving community grievances. Third party monitors of the Grievance Mechanism will be provided with access to the Grievance database to audit performance. MOW through the CLO will report on performance in closing out grievances (i.e. the number of grievances resolved within agreed time frames) as part of an annual public report. A sample Grievance Mechanism Leaflet for MOW is presented in Figure 6-2, and a draft Grievance Form in Figure 6-3.

Figure 6-2: MOW Sample Grievance Mechanism Information Leaflet

INFORMATION ON MOWT'S GRIEVANCE PROCESS

The Government of Belize through the Ministry of Works and with loan facility from the IDB is proposing to undertake rehabilitation of the GPH from its junction with the Hummingbird Highway extending to the Benque-Guatemalan border.

The purpose of this Grievance Mechanism is to ensure that anyone with a grievance or concern about the Project can communicate it to MOWT and get feedback from MOWT on how they will address this concern.

WHAT KINDS OF GRIEVANCES CAN I RAISE?

Anyone, including both community members and staff of contractors or contractors themselves can raise a grievance with MOWT if they believe that the Project is having a negative effect on their community, nation, the environment or their quality of life. Examples of grievances could include, but not limited to:

- ✓ Concerns about the environmental impact of the Project;
- ✓ Project impacts on your quality of life, such as traffic problems, dust and noise;
- ✓ Project impacts on your livelihood and employment activities;
- ✓ Health and safety problems related to the Project;
- ✓ Failure to comply with standards or legal obligations;
- ✓ Improper behaviour by Project staff;
- ✓ Financial malpractice, impropriety or fraud;

MOWT through its PEU will investigate all grievances that are submitted.

HOW TO REPORT A GRIEVANCE

MOWT has a number of ways of receiving your grievances. You can:

Complete the attached Grievance Form and send it to the address on the form or drop off at any MOWT Office;

Contact the Community Liaison Officer in person/via phone to lodge a verbal grievance; the CLO will then fill out a form for you to ensure that your grievance is tracked.

Communicate a Grievance through the MOWT website.

FOLLOW UP (Case Management)

Unless a CLO is able to deal with your grievance immediately, MOWT will go through the following steps to deal with it:

When MOWT get your grievance form or are notified verbally of your grievance, a member of staff will be assigned to investigate;

MOWT will acknowledge your grievance by letter (posted, dropped off in person by a CLO) within 15 days of receiving the grievance or by email if appropriate. This letter will acknowledge your contact person at MOWT, and give a reference number for your grievance;

MOWT will then investigate your grievance and may need to contact you in order to do this. When MOWT has completed its investigation, you will be contacted with the findings of the investigation and proposed response within 30 days of you lodging your grievance.

If you are satisfied with the investigation and the proposed response MOWT will ask you to sign a statement to this effect.

If you are unsatisfied with the investigation and/or response MOWT will discuss with you other options for dealing with the grievance and attempt to agree to a response. If parties are unable to agree to a response, the grievance will be assessed by an independent third party.

CONFIDENTIALITY AND ANONYMITY

If you ask MOWT to keep your identity confidential in relation to your grievance, we will ensure that your name and details are known only to the grievance investigator/s and are not shared with other MOWT employees/management, Contractors, or people or organisations outside MOWT. If it is not possible for MOWT to resolve the grievance without revealing your identity, MOWT will contact you to ask how you prefer to address this situation. If you wish to raise a grievance anonymously you may do so, and MOWT will investigate the grievance. However, in this case MOWT will not be able to contact you to discuss the results of our investigation and the proposed mitigation measure/s.

**George Price Highway Rehabilitation Project,
Belize Grievance Mechanism – 2018**

Figure 6-3: Draft MOW Grievance Form

MOW Grievance Form (Sample)		Contact Information	
Full Name:		<input type="radio"/>	<input type="radio"/>
	(first) (last)	Male	Female
Address:			
Phone:			
e-mail:			
Location of Complaint (Description of Road Section, Town, or nearby Feature of Interest):			
CTVC:			
Complainant Category:	<input type="radio"/> Resident	<input type="radio"/> Local Business	<input type="radio"/> Village Chairperson
	<input type="radio"/> Contractor	<input type="radio"/> Contractor Employee	<input type="radio"/> Councilor <input type="radio"/> NGO
	Other: _____		
If with an Agency:			
	Name of Agency		Position with Agency
Description of Grievance (when relevant, please provide specific names, dates and locations of incidents):			
Recommendation for resolving the grievance?			
Signature		Date	

ANNEX 7
RESETTLEMENT AND LIVELIHOOD RESTORATION PLAN

This annex is available as a separate document.