CARIBBEAN DEVELOPMENT BANK

TWO HUNDRED AND NIGHTY-SECOND MEETING OF THE BOARD OF DIRECTORS

TO BE HELD IN BARBADOS

DECEMBER 10, 2020

PAPER BD 100/20

PHILIP GOLDSON HIGHWAY AND REMATE BYPASS UPGRADING PROJECT – BELIZE (President's Recommendation No. 999)

The attached Report appraises a proposal for a loan and a grant to the Government of Belize (GOBZ) to upgrade the Philip Goldson Highway between Miles 24.5 to 92, and the Remate Bypass, to increase safety, accessibility, efficiency and resilience; and to improve GOBZ's capacity for informed decision-making for livelihood enhancement along those corridors.

2. On the basis of the Report, I recommend:

- (a) a loan to GOBZ of an amount not exceeding the equivalent of thirty-four million, three hundred thousand United States dollars (USD34.3 mn) (the Loan) consisting of:
 - (i) an amount not exceeding the equivalent of twenty-one million, three hundred thousand United States dollars (USD21.3 mn) from the Ordinary Capital Resources (OCR) of the Caribbean Development Bank (CDB); and
 - (ii) an amount not exceeding the equivalent of thirteen million United States dollars (USD13.0 mn) from the Special Funds Resources (SFR) of CDB;
- (b) grants to GOBZ of:
 - (i) an amount not exceeding fourteen million, two hundred and eighty-eight thousand, eight hundred and seven Pounds Sterling (GBP14,288,807) (approximately USD18.575 mn) allocated from resources provided to CDB by the United Kingdom through the Foreign, Commonwealth and Development Office (FCDO) under the United Kingdom Caribbean Infrastructure Partnership Fund (UKCIF); and
 - (ii) an amount not exceeding the equivalent of one hundred thousand United States dollars (USD100,000) allocated from CDB's SFR, to assist in financing services associated with improving road safety at selected schools;

(together the Grant)

on CDB's standard terms and conditions and on the terms and conditions set out in Chapter 7 of the said Report;

3. Funds are available within CDB's existing resources and/or borrowing and grant programme for the relevant disbursement period.



CARIBBEAN DEVELOPMENT BANK

APPRAISAL REPORT

ON

PHILIP GOLDSON HIGHWAY AND REMATE BYPASS UPGRADING PROJECT - BELIZE

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Considered at the 292 Meeting of the Board of Directors held on December 10, 2020

BD 100/20 AR 20/4 BE

Director, Projects Department

Mr. Daniel M. Best

Division Chief Economic Infrastructure Division Mr. L. O'Reilly Lewis

DECEMBER 2020

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CURRENCY EOUIVALENT

Dollars (\$) throughout refer to United States Dollars (USD) unless otherwise stated.

Belizean Dollar (BZD) to USD Conversion at October 27, 2020 USD1.00 = BZD2.00 BZD1.00 = USD0.50

Pound Sterling (GBP) to USD Conversion at October 27, 2020 USD1.00 = GBP0.77 GBP1.00 = USD1.30

ABBREVIATIONS

AASHTO-American Association of State Highway and Transportation OfficialsADT-Average Daily TrafficBMCs-Borrowing Member CountriesBOD-Board of DirectorsBZD-Belizean DollarCBB-Central Bank of BelizeCBRs-Correspondent Banking RelationshipsCC-Climate ChangeCCRIF-Caribbean Catastrophe Risk Insurance FacilityCDB-Community Liaison OfficerCOVID-19-Corona Virus Disease 2019CRVA-Climate Risk and Vulnerability Assessment
BMCs-Borrowing Member CountriesBOD-Board of DirectorsBZD-Belizean DollarCBB-Central Bank of BelizeCBRs-Correspondent Banking RelationshipsCC-Climate ChangeCCRIF-Caribbean Catastrophe Risk Insurance FacilityCDB-Caribbean Development BankCLO-Community Liaison OfficerCOVID-19-Corona Virus Disease 2019
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CDB - Caribbean Development Bank CLO - Community Liaison Officer COVID-19 - Corona Virus Disease 2019
CLO - Community Liaison Officer COVID-19 - Corona Virus Disease 2019
COVID-19 - Corona Virus Disease 2019
CDVA - Climate Risk and Vulnerability Assessment
CRVA - Climate Risk and Vulnerability Assessment
CSP - Country Strategy Paper
CTV - Classified Traffic Volume
DFID - Department for International Development of the United Kingdom
DRM - Disaster Risk Management
ESHSMP - Environmental, Social, Health and Safety Management Plan
ERR - Economic Rate of Return
ESIA - Environmental and Social Impact Assessment
ESMP - Environmental and Social Management Plan
FCDO - Foreign, Commonwealth and Development Office of the United Kingdom
FY - Fiscal Year
GBP - Pound Sterling
GBV - Gender-Based Violence
GDP - Gross Domestic Product
GOBZ - Government of Belize
GPH - George Price Highway
GRM - Grievance Redress Mechanism

GSDS	-	Growth and Sustainable Development Strategy
HDM	-	Highway Development and Management
HGV	-	Heavy Goods Vehicles
IDC	-	Interest During Construction
IMF	-	International Monetary Fund
iRAP	-	International Road Assessment Programme
MED	-	Ministry of Economic Development, Petroleum, Investment, Trade and Commerce
mn		Million
MOW		Ministry of Works
MVIA		Motor Vehicle Insurance Act
MVRTA		Motor Vehicle and Road Traffic Act
NGOs	-	Non-Governmental Organisations
NPV	-	Net Present Value
OCR	-	Ordinary Capital Resources
p.a.	-	per annum
PAPs	-	Project-affected Persons
PAS	-	Performance Assessment System
PC	-	Project Coordinator
PCR	-	Project Completion Report
PGH	-	Philip S. W. Goldson Highway
PEU	-	Project Execution Unit
PRA	-	Public Roads Act
PSC	-	Project Steering Committee
RFI	-	Rapid Financing Instrument
RSU	-	Road Safety Unit
RTIs	-	Road Traffic Incidents
RTFs	-	Road Traffic Fatalities
SCF	-	Standard Conversion Factor
SEA	-	Sexual Exploitation and Assault
SEP	-	Stakeholders Engagement Plan
SFR	-	Special Funds Resources
SpCF	-	Specific Conversion Factor
TOR	-	Terms of Reference
UKCIF	-	United Kingdom Caribbean Infrastructure Partnership Fund
USD	-	United States Dollar
VOC	-	Vehicle Operating Costs
VOT	-	Value of Time

MEASURES AND EOUIVALENTS

1 hectare (ha)	=	2.47 acres
1 kilometre (km)	=	0.621 mile (mi)
1 square kilometre (km ²)	=	0.386 square mile (mi ²)
1 metre (m)	=	3.281 feet (ft)
1 millimetre (mm)	=	0.039 inch (in)
1 square metre (m ²)	=	10.756 square feet (ft ²)

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COUNTRY DATA: BELIZE

	2015	2016	2017	2018	2019 ^P
GDP per capita (USD)	3,670	3,579	3,553	3,534	3,454
GDP at constant market prices (USD million)	1,351.7	1,352.8	1,378.1	1,406.8	1,379.0
Sectoral Distribution of Constant GDP (%)					
Agriculture, Forestry and Fishing	14.7	11.3	11.9	11.2	11.2
Mining and Quarrying	0.5	0.5	0.4	0.3	0.3
Manufacturing	7.7	6.9	6.8	6.8	6.9
Electricity and Water	6.1	6.4	6.5	6.2	4.8
Construction	3.6	3.9	3.7	3.3	2.7
Transport and Communication	9.2	9.8	9.6	9.9	10.3
Hotels and Restaurants	4.7	4.6	4.6	5.0	5.0
Wholesale and Retail Trade	21.4	21.0	20.1	24.3	24.8
Finance, Insurance, Real Estate, etc.	20.7	20.5	19.7	15.6	16.1
Government	12.3	12.6	12.6	13.0	13.6
Other Services	6.5	6.4	6.2	6.2	6.2
Less Financial Services Indirectly Measured	7.0	7.0	6.6	5.4	5.5
					0.001.0
GDP at constant 2000 prices (\$ million)	2,703.3	2,705.6	2,756.2	2,813.5	2,821.2
GDP (annual % change)	2.8	0.1	1.9	2.1	0.3
MONEY AND PRICES					
Money Supply (M2, annual % change)	7.5	2.7	(0.4)	2.7	5.8
Credit to the Private Sector (annual % change)	3.1	1.6	0.3	2.6	5.6
Inflation (period average) (%)	(0.9)	0.7	1.1	0.3	0.2
initiation (period average) (70)	(0.))	0.7	1.1	0.5	0.2
PUBLIC FINANCES (% of GDP)					
Overall Surplus (Deficit)	-8.0	-3.4	-2.8	-0.7	-3.4
Central Government Debt	80.3	86.5	93.8	92.9	94.0
BALANCE OF PAYMENTS (% of GDP)					
Total Exports	58.8	54.5	54.4	57.8	59.1
Total Imports	58.8 67.1	62.3	54.4 59.3	57.8 60.4	59.1 64.5
Current Account Balance	(9.8)	(8.6)	(7.8)	(8.1)	(9.4)
Capital and Financial Account	(9.8)	(8.0)	3.7	(8.1)	(9.4) 8.6
Overall Balance	-2.8	-3.3	-3.5	-1.0	-0.9
	2.0	5.5	5.5	1.0	0.7
AVERAGE EXCHANGE RATE					
Belize dollars to 1 USD	2.00	2.00	2.00	2.00	2.00

COUNTRY DATA: BELIZE

	2015	2016	2017	2018	2019 ^P	
POPULATION						
Population ('000)	368.3	378.0	387.9	398.0	406.5	
Population (annual % change)	2.6	2.6	2.6	2.6	2.6	
EDUCATION						
Net School Enrolment Ratio						
Primary	96.1	96.0	96.1	95.9	n.a.	
Secondary	69.5	72.2	70.5	71.1.	n.a.	
Pupil-Teacher Ratio						
Primary	20.4	20.5	19.6	19.8	n.a.	
Secondary	16.3	18.4	16.6	16.7	n.a.	
LABOUR FORCE						
Unemployment Rate (%)	10.2	9.6	9.4	9.4	9.1	
Male	6.5	5.6	6.0	5.6	5.5	
Female	10.1	12.4	14.6	14.9	13.4	
HEALTH						
Life Expectancy at Birth (years)	74.0	74.2	74.4	74.5	n.a.	
Male	74.0	74.2	71.5	71.6	n.a.	
Female	76.9	77.2	77.5	77.7	n.a.	
Mortality Rate, Infant (per 1,000 live births)	13.2	12.5	11.8	11.2	n.a.	
Human Development Index	0.715	0.722	0.719	0.720	n.a.	
Sources: Statistical Institute of Belize, International Monetary Fund's World Economic Outlook (April 2019), Central Bank of Belize, UN Development Reports, and World Development Indicators.						
Unemployment data for 2015 to 2017 and 2019 inclusive are average of April and September Labour Force Surveys. For 2018 there was only one survey, in April.						

Some data for 2019 are provisional.

PROJECT SUMMARY

		Financial Term	and Conditions				
Borrower Implementing Agency		Government of Belize (GOBZ)					
		Ministry of Wor	Ministry of Works (MOW)				
Disburseme	nt Period	May 31, 2021 to	December 31, 202	4			
Fund	Fund Source	Amount (000's)					
OCR-USD	Equity and Market Resources	21,300	12	5	3.75		
SDF 9	SDF Loan Resources	13,000	20	5	1.00		
Loan Total:		34,300	-	-	-		
OSF-GBP	UK CIF Resources ¹	18,575	-	-	-		
SDF 9	SDF Grant Resources	100	-	-	-		
Grant Total:		18,675					
Counterpart 7	Fotal:	6,892					
Total Project	Cost	59,867					

Office of Risk Management (ORM) Commentary:

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

¹ USD equivalent shown.

Project Outcome and Description

The expected outcomes of the Project are:

- 1. increased safety, accessibility, efficiency, and resilience of the Philip Goldson Highway (PGH) Miles 24.5 to 92, and the Remate Bypass; and
- 2. improved capacity for informed decision making for livelihood enhancement along PGH and the Remate Bypass.

The Project is categorised "B" based on CDB's Environmental and Social Review Procedures. There is the potential for limited adverse environmental or social impacts/risks for which mitigation and management measures are known and available.

The Project consists of the following components:

- (a) Project Preparation assistance
- (b) Land
- (c) Infrastructure Works
- (d) Engineering and construction-related services
- (e) Other Project Support Services
- (f) Project Management

Exceptions to CDB Policies: No exceptions to CDB policies are in place for this Project.

<u>Gender Marker Summary</u>

Analysi	s	Design	Implementation	Monitoring & Evaluation	Score	Code
1.0		0.5	0.5	1.0	3.0	Gender Mainstreamed (GM) ²

² GM – Gender Mainstreamed: Project has potential to contribute significantly to gender equality.

1. STRATEGIC CONTEXT AND RATIONALE

REOUEST

1.1 By letter dated December 02, 2019, the Government of Belize (GOBZ), through the Ministry of Economic Development, Petroleum, Investment, Trade and Commerce (MED) submitted a request to the Caribbean Development Bank (CDB) to assist in financing the upgrading of the Philip S. W. Goldson Highway (PGH), formerly known as the Northern Highway, between Mile 24.5 and Mile 92, as well as the Remate Bypass. Technical Assistance (TA) to prepare this capital project was approved by CDB's Board of Directors (BOD) in May 2017 (Paper BD 59/17), with additional funding approved in March 2019 (Paper BD 59/17 Add.1). The TA was funded by a 1,760,000 Pound Sterling (GBP) grant from the United Kingdom Caribbean Infrastructure Partnership Fund (UKCIF), and in-kind contributions from GOBZ and was completed in August 2020.

MACROECONOMIC CONTEXT

1.2 Belize's economy will contract by about 20% this year, as a result of the ongoing Corona Virus Disease (COVID-19) crisis. Gross Domestic Product (GDP) growth was already weakening, following the effects of the 2019 drought on agriculture. However, since March 2020, when the first COVID-19 case was confirmed in Belize and the borders were subsequently closed, tourism has been virtually inactive. Most hotels have closed and there have been no cruise visits. Tourism is responsible for about 40% of GDP and is the country's largest earner of foreign currency. The contraction in the economy means that debt as a share of GDP will jump from 92.4% of GDP in 2019 to over 125% in 2020.

1.3 The economy needs to return to growth to improve foreign currency earnings, increase tax revenues, and provide good quality employment. According to the most recent Labour Force Survey (September 2019), the rate of unemployment was 10.4%. The rate for women (15.7%) was more than twice the rate for men (6.6%). However, following the COVID-19 outbreak, over 40,000 persons have been approved for unemployment relief – about 24% of the workforce.

1.4 Achieving higher growth requires an improved environment for doing business. Belize has made some recent progress in key indicators such as getting electricity (fewer processes, less time, and less cost to get connected) and trading across borders. Further reforms are however needed, such as making it easier and quicker to start a business, and issuing construction permits more promptly.

1.5 The provision of safe and resilient infrastructure is another necessity. The Project will help in that regard, by lowering the costs of transportation and therefore business costs, so increasing competitiveness, including in the tourism and agricultural sectors. It is consistent with Belize's Growth and Sustainable Development Strategy (GSDS) 2016-19, which advocates growth-enhancing investments financed on concessional terms.

1.6 The Project will add about 2.75% to GOBZ's external debt stock, requiring GOBZ to record consistent primary surpluses to help lower debt towards the long-term target of 60%. In fiscal year 2019/20, GOBZ had already failed to meet the fiscal targets required following commercial debt restructuring in 2017. Also, GOBZ's credit rating was downgraded twice this year (June and August), while it sought and obtained agreement to capitalise three interest payments on external commercial debt, worth \$26mn in total. Having to capitalise the commercial interest payments is a sign of debt distress, which would be more serious in the event of further negative growth shocks (see Appendix 1.1 for Macroeconomic Context Details).

SOCIAL CONTEXT

1.7 **Population and Demographics**: According to the Statistical Institute of Belize, the northern districts of Corozal and Orange Walk (significant districts in the project area) recorded populations in 2019 of 49,446 and 52,550 respectively, with approximately 74% living in rural areas and the remainder living in towns. Corozal is the country's second most densely populated district with 25 residents per square kilometre (sq.km) while Orange Walk has the second smallest density at 11 inhabitants per sq.km. The average household size in the Corozal and Orange Walk districts of 4.4 members is slightly larger than the national average. The male to female ratio in the Corozal District is similar to the rest of the country at 1:1, while Orange Walk's ratio is 1:0.98. Twelve small villages are in the project area and several others are in close proximity. Of those villages, San Jose is the largest and Buena Vista the smallest with 3,000 and 500 residents, respectively.

1.8 **Labour Force**: Among the three districts the Project traverses – Corozal, Orange Walk and Belize - an estimated 68% of the population is of working age. In Corozal and Orange Walk, approximately 70% of the working age population is resident in rural areas, while Belize district accounts for 63%. High unemployment within occupational groups including agricultural workers, and particularly among women (lower wage earners), has contributed to maintaining high poverty levels in the northern districts. The findings of the Multiple Indicator Cluster Survey (2015:17) highlighted that Corozal and Orange Walk districts were included in the 30% of rural households' population within the poorest wealth index quintile, calculated using indicators including ownership of selected assets, water access and sanitation facilities, and housing construction.

1.9 Project Areas: A number of communities in the project area display significant social need and are benefitting from improved infrastructure and services supported by CDB and delivered through the Basic Needs Trust Fund and the Belize Social Investment Fund. Interventions include inter alia, the areas of education, health, water and sanitation and have contributed to beneficiaries' improved quality of life. Despite positive development outcomes, the Project's Environmental and Social Impact Assessment (ESIA, 2020:170) identified a range of social maladies afflicting project communities, namely crime and genderbased violence (GBV) including human trafficking and human smuggling. During consultations at appraisal, stakeholders stressed that communities in the Project area, and particularly women and youth, may be at increased risk for such activities, especially the latter, given the proximity to the northern border. The ESIA highlighted that construction and operation of improved infrastructure may increase the risk of criminal activity, particularly since workers and outsiders would be able to more quickly access some of the remote villages, especially those in the vicinity of the Remate Bypass. Human trafficking is one dimension of GBV which continues to be one of the gravest manifestations of gender inequality in country, involving domestic violence, rape, indecent assault, unlawful carnal knowledge, and commercial sexual exploitation of children and adolescents (Country Gender Assessment, 2016). Belize acknowledges this pervasive GBV scourge which has placed the country at Tier 2 on the United States Trafficking in Persons Watch List (2020). Although challenged, Belize continues its efforts to achieve compliance with internationally articulated minimum standards. Stakeholders also noted the need for engagement around livelihoods enhancement as a mitigant to these social problems (see Appendix 1.2 for Macro Social Context Details).

SECTOR ISSUES

1.10 **Introduction**: CDB provided technical assistance as part of the Fifth Road (Philip Goldson Highway) Project (Paper BD 35/14 Corr. 1) for an Institutional Strengthening Study for Management and Maintenance of Public Roads in Belize. The Final Report delivered in November 2019 (2019 Study) identified several issues within the road and transport sector. They include a large vulnerable road network; poor road safety; inadequate funding for maintenance, a prevalence of over-loaded vehicles; and splintered administration. The 2019 Study identified options to improve funding arrangements and overall road

maintenance and management and has been accepted by GOBZ. It drew from a March 2014 Vehicle Weight Control Study Final Report (2014 Study), also the result of CDB-funded technical assistance as part of the Fourth Road (Santa Elena/San Ignacio Bypass) Project (Paper BD 98/10 Corr. 1).

1.11 **Large, Vulnerable Road Network**: Belize's road network consists of 603 kilometres (km) of main roads (mainly consisting of the Hummingbird Highway, Southern Highway, PGH and George Price Highway (GPH); 783 km of secondary roads; and 2,160 km of feeder roads. Approximately 18% of the total network is paved, of which 65% is in good and 35% in fair condition. The road network includes a total of 313 bridges. The large percentage of unpaved roads contributes to poor accessibility within the country. The network is also vulnerable to flooding and storm surges due to the country's low-lying topography, impeding year-long access to essential services and compromising response in the event of disaster. Limited land use planning and insufficient drainage infrastructure further enhance that vulnerability, while the resilience of the network is compromised as flooding accelerates deterioration of both paved and unpaved surfaces. Climate change and climate variability are expected to result in, among other things, sea level rise, increased temperatures, and more intense precipitation. The network's existing vulnerabilities to flooding and storm surge will be exacerbated by these effects.

1.12 **Poor Road Safety**: Road Traffic Fatalities (RTFs) continue to be an issue of concern to Belize. According to Belize's Road Safety Unit (RSU), based on data from the Ministry of Health (MOH) and the Police Department's Joint Intelligence Coordination Centre (JICC), over the last three years an average of 91 deaths were recorded annually due to vehicular incidences. To support GOBZ's efforts to improve road safety, CDB has provided assistance since May 2012, through the First Belize Road Safety Project (Paper BD 44/12), which contributed to a significant reduction in RTFs along a portion of the GPH. However, fatality rates on the rest of the network have increased between 2012 to 2019. Following the success of the first project, CDB provided funding for a Second Road Safety Project in 2018 (Paper BD 119/18), which is under implementation, includes the Project corridor, and provides for improved traffic law enforcement, post-crash care, and education and awareness.

1.13 **Inadequate Maintenance Funding**: The availability of adequate funding for road maintenance remains one of the primary challenges facing the sector. MOW only receives 19% of the funding required to adequately fund maintenance and as a result, has focused on the paved network, giving priority to highways at the expense of the secondary and feeder road network. The 2019 Study recommended the identification of a Strategic Road Network (SRN) to be maintained through the establishment of a road maintenance fund. Implementation dates for those recommendations are uncertain.

1.14 **Over-loaded Vehicles**: Overloading has been a persistent problem on Belize's road networks. The 2014 Study indicated that 26-40% of medium and heavy goods vehicles (HGV) operating on the network are over-loaded. These levels of overloading are contributing to the accelerated deterioration of Belize's road network. MOW is at various stages of implementing the Vehicle Weight Control Programme recommended in that Study, which will include enforcement measures, improved regulations, and a public awareness campaign. For example, funding has been secured for the procurement in 2021 of three fixed weighbridges to be located on the Hummingbird Highway, GPH and PGH. However, the supporting legislative changes are outstanding.

1.15 **Splintered Administration**: The road sector in Belize is administered under several Acts: the Public Roads Act (PRA), the Motor Vehicles and Road Traffic Act (MVRTA), the Motor Vehicle Insurance (Third Party Risks) Act (MVIA), the Town Councils Act, the Belize City Council Act and the Belmopan City Council Act. Therefore, while the Ministry of Works (MOW) is generally responsible for the construction and maintenance of the roads in Belize, aspects of regulation of the sector fall outside of its mandate. For example, the transport portfolio has a dedicated ministry.

COUNTRY SECTOR STRATEGY

1.16 The Project is consistent with and supports Belize's Long Term National Development Framework - Horizon 2030, as well as its medium-term development plan, the GSDS 2016-2019 (extended to 2021). Both identify investing in infrastructure, including roads, as important for facilitating sustainable and inclusive economic growth. It is also consistent with Belize's National Transportation Master Plan (2018) and aligns with Belize's National Road Safety Masterplan 2030.

LINKAGE OF PROJECT TO CDB'S COUNTRY AND SECTOR STRATEGY AND POVERTY GOALS

1.17 The Project is consistent with CDB's Country Strategy Paper (CSP) for Belize (2016 - 2020), and is part of a programme designed to modernise the road network, improving communication, safety and resilience thus contributing to the achievement of the outcome of increasing competitiveness and productivity. The CSP specifically identified this project as an important intervention. In addition, the Project complements measures to improve road safety, which are also highlighted in the CSP.

1.18 The Project is also consistent with the purposes and objectives of UKCIF in that it supports economic growth, is transformational with a high economic rate of return; supports greater climate resilience; and promotes poverty reduction and strong positive social impacts including gender equality.

- 1.19 The Project is consistent with the following of CDB's strategic objectives:
 - Building Economic Resilience
 - Building Environmental Resilience
 - Building Social Resilience
- 1.20 The Project is consistent with the following of CDB's corporate priorities:
 - Improving the provision of quality, reliable, safe, sustainable and resilient infrastructure
 - Increasing resilience and adaptive capacity to disaster risk and climate change impacts
 - Increasing access to quality, inclusive and equitable education and training
- 1.21 The Project is expected to contribute to the following Sustainable Development Goals:
 - SDG 9. Industry, innovation and infrastructure
 - SDG 13. Climate action
- 1.22 The Project integrates the following of CDB's cross-cutting themes:
 - Enhancing economic cooperation and deepening cooperation
- 1.23 The Project is consistent with the following of CDB's Sector and Thematic Policies:
 - Poverty Reduction Strategy
 - Transportation Policy
 - Climate Resilience Strategy

RATIONALE

1.24 PGH is a vital trade corridor, facilitating the movement of goods between Belize, Guatemala and Mexico. Recommended for inclusion in Belize's national SRN, it also forms part of the Atlantic Corridor of the International Network of Mesoamerican Highways, which links the road transportation networks of Central American countries and Mexico. Approximately 20% of Belize's imports originate from its Central American neighbours, much of it transported by road. PGH connects Belize City, the country's commercial capital and home to its principal seaport, with the Mexican border. The Corozal Commercial Free Zone on

the Belize side of the Belize-Mexico border was established to attract foreign investment into Belize, and to drive economic growth through the export of consumer goods. It is an important commercial hub and a significant attraction for visitors and Belizeans. The main airport also lies along PGH. Economic activity along the corridor relies heavily on agriculture, tourism, and forestry.

1.25 Despite its importance, PGH's width, alignments, and pavement condition, along with inadequate signage, markings and lighting, have hindered its performance. Miles 1 to 7 were recently upgraded under the CDB-funded Fifth Road Project and upgrades to Miles 7 to 24.5 have already been designed under another project. The Remate Bypass shortens the route to the Mexican border by almost 3km, and should serve to divert traffic, especially HGV, out of Corozal Town, but is unpaved. An upgrade to the remaining length of PGH, and the Remate Bypass, will further facilitate greater economic development, trade and agriculture, as alignment and pavement improvements will positively impact travel times and vehicle operating costs (VOC).

1.26 RTFs on PGH are the highest on Belize's highways, and the corridor comprising the Project contains several of the major accident hotspots. It is notable that RTFs outside of the highways also represent just under 50% of total RTFs. Improving road safety will have significant social and economic benefits. To achieve these benefits, infrastructural improvements are needed to complement ongoing non-infrastructural initiatives under the 2nd Road Safety Project, which together will increase the overall safety rating, as proven by similar initiatives on GPH.

1.27 Sections of the project corridor are vulnerable to the effects of climate change. Improvements in drainage are needed to reduce time lost due to flooding. Improvements in widths, signage and markings are needed to facilitate safer travel in rain conditions. An upgrade of the Remate Bypass from an unpaved gravel road to a paved road is required to provide an all-weather alternative route.

1.28 PGH passes through the districts of Belize, Orange Walk and Corozal, which collectively represent 56% of the country's population and which have high levels of poverty. While a road intervention will facilitate economic development, the communities along the corridor need support in livelihoods enhancement and skills development in order to more fully participate in that development in the short and long term. The Project will provide such support, which will not only help reduce poverty but also reduce vulnerability to some of the prevailing social issues.

2. <u>PROJECT DESCRIPTION</u>

PROJECT OUTCOME

- 2.1 The expected outcomes of the Project are:
 - 1. increased safety, accessibility, efficiency, and resilience of PGH Miles 24.5 to 92, and the Remate Bypass; and
 - 2. improved capacity for informed decision making for livelihood enhancement along PGH and the Remate Bypass.

PROJECT COMPONENTS

2.2 The Project consists of the following components, further details of which are presented in Appendix 2.1.1:

- (a) **Project Preparation Assistance**: The Project was informed by a consultancy for the preparation of a feasibility study and detailed designs, undertaken with grant funding from UKCIF. A portion of that completed consultancy contract is to be retroactively financed under this project and therefore the Terms of Reference (TOR) are included at Appendix 2.2.1. That technical assistance consultancy was managed by MOW's PEU.
- (b) **Land**: Acquisition (ongoing) of approximately 6.9 hectares of land by GOBZ for road realignment and widening.

(c) Infrastructure Works:

- (i) Major works for road rehabilitation and upgrade work to approximately 125 km of roadway to be undertaken in four lots. These major works are to include pavement upgrades, road realignments, junction improvements, culvert construction, and signage, markings, sidewalk, bus shelter and pedestrian crossing installations.
- Minor works (crossings, signage etc.) to create Safe School Zones at schools at high risk of Road Traffic Incidents (RTIs), to be identified under the ongoing 2nd Road Safety Project.

(d) Engineering and Construction Related Services:

- (i) Consultancy services for the construction supervision of major works. The Terms of Reference (TOR) can be found at Appendix 2.2.2; and
- (ii) Consultancy services for the design and construction supervision of minor works associated with the creation of safe school zones (see TOR at Appendix 2.2.3).
- (e) **Other Project Support Services:** Consultancies targeting the communities along the project corridor, namely:
 - (i) Consultancy services for the development and implementation of a livelihood's capacity development strategy and action plan (see TOR at Appendix 2.2.4); and

- (ii) Consultancy services for the development and implementation of a community and schools public education programme to increase awareness and outreach on Gender-based Violence (GBV) and Transmission of Sexually Transmitted Diseases (STDs) (see TOR at Appendix 2.2.5).
- (f) **Project Management**: This component has the following sub-components. Additional information is provided in Chapter 6.
 - (i) Current Project Execution Unit (PEU) personnel with project responsibilities (Project Coordinator, Administrative Assistant, Accounts Clerk, Data Analyst and Office Assistant) and sundries;
 - (ii) Additional personnel/consultants to supplement the PEU namely a Project Engineer (PE), Community Liaison Officer (CLO), a Social and Gender Specialist, an Environmental Specialist, Road Inspector, and a Monitoring and Evaluation Specialist;
 - (iii) Two project management vehicles; and
 - (iv) Furniture and equipment for the PEU.

RESULTS FRAMEWORK

Project Impact

Increased trade with neighbouring Central American countries and enhanced connectivity, reliability and safety of the road transportation network in Belize.

Outcome	Indicator	Baseline	Target	Data Sources, Reporting Mechanisms and Report Frequency
1 Improved capacity and decision making for	1.1 Elements of the Action Plan programmed for implementation by Ministry of Human Development (Yes/No)	No; 12/3/2020	Yes; 3/29/2024	MOHD annual workplans
livelihood enhancement along PGH and the Remate Bypass	1.2 Percentage of beneficiaries who report improved livelihoods as a result of the pilot interventions [disaggregated by intervention, age and sex] (%)	0; 12/3/2020	70; 3/29/2024	M&E Specialist's Reports, BSIF Reports
2 Increased safety, accessibility, and resilience of PGH and the	 2.1 Annual RTF on PGH due to automobile accidents (#) 2.2 International Road Assessment Programme Star Rating for the Safety of Road Users (#) 2.3 Road accur and flooding for 1:20 years 	15; 12/31/2019 1; 8/31/2020	12; 12/31/2024 3; 12/31/2024	MOH/JICC Annual RTF Factsheet Construction Supervision Consultant's Contract Completion Report
Remate Bypass	2.3 Road scour and flooding for 1:20 year event (Yes/No)	Yes; 8/31/2020	No; 12/31/2024	MOW's Road Closure Reports

				Data Sources, Reporting Mechanisms
Outcome	Indicator	Baseline	Target	and Report Frequency
	2.4 Percentage of road users and	0;	75;	Second Road Safety
	community rating the project corridor	12/31/2019	12/31/2023	Project's Knowledge,
	as accessible and safe [disaggregated			Attitudes and Practices
	by age, sex and disability] (%)			(KAP) Report and
				Monitoring and Evaluation
				(M&E) Specialist's Report
	2.5 HGV as a percentage of AADT on	7;	35;	MOW's annual traffic
	Remate Bypass (%)	8/31/2020	12/31/2024	surveys
	2.6 Annual average road user cost (RUC)	0;	12.8;	Re-run of Highway
	savings (\$ mn)	8/31/2020	12/31/2024	Development and
				Management 4 (HDM-4)
				for CDB's Project
				Completion Report (PCR)

Assumptions for achieving outcomes

- 1. Traffic levels increase as projected.
- 2. Remate Bypass utilised as projected.
- 3. Climate related events do not exceed the design thresholds for project infrastructure.
- 4. GOBZ implements road safety initiatives along PGH that include effective enforcement, post-crash care and education.
- 5. Economic development of the corridor is conducted in an orderly and socially-responsible way.
- 6. GOBZ has capacity to programme the Livelihoods Action Plan.

Output	Indicator	Baseline	Target	Data Sources, Reporting Mechanisms and Report Frequency
1. Safe School Zones created	1.1 Minor works to school zones completed (#)	0; 12/31/2020	4; 3/31/2023	Consultant's reports
2. Project roads upgraded	2.1 Primary, secondary and other roads built or upgraded (km)	0; 12/31/2020	125; 9/30/2023	Consultant's reports
consistent with standards and safeguards	2.2 Universal access provisions included [disaggregated by contract and provision] (Yes/No)	No; 12/31/2020	Yes; 9/30/2023	Consultant's reports
	2.3 Climate resilience elements included [disaggregated by contract and element] (Yes/No)	No; 12/31/2020	Yes; 9/30/2023	Consultant's reports
	2.4 Environmental, Social, Health and Safety Management Plans (ESHSMPs) effectively implemented [disaggregated by contract, plan and activity] (Yes/No)	No; 12/31/2020	Yes; 9/30/2023	Project reports

Output	Indicator	Baseline	Target	Data Sources, Reporting Mechanisms and Report Frequency
	2.5 Road safety features included [disaggregated by contract and type] (Yes/No)	No; 12/31/2020	Yes; 9/30/2023	CSC WCR
3. Livelihoods Enhancement Strategy and Action Plan developed	3.1 Percentage of beneficiaries reporting satisfaction with the livelihood development support received [disaggregated by sex] (%)	0; 12/31/2020	70; 6/30/2022	Consultant's Reports
and piloted	3.2 Livelihoods Strategy and Action Plan accepted by Ministry of Human Development (Yes/No)	No; 12/31/2020	Yes; 6/30/2022	Consultant's reports
	3.3 Number of communities benefitting from livelihood development support (#)	0; 12/31/2020	2; 6/30/2022	Consultant's Reports

Assumptions for achieving outputs

- 1. Land acquisition is completed as efficiently as in the past.
- 2. Timely recruitment and/or assignment of project management staff.
- 3. Project not severely affected by adverse weather events and the ongoing pandemic.
- 4. Schools for the creation of Safe School Zones are identified in a timely manner under the 2nd Road Safety Project

LESSONS LEARNT

Description	Project Response
A multi-sectoral Safe System Approach supporting the United Nation's Decade for Action on Road Safety Pillars has proven to be one of the most effective means of reducing Road Traffic Fatalities with proven results in Belize.	The improvements to the safety of the road infrastructure will complement the parallel efforts of GOBZ's 2nd Road Safety Project, which supports improving road safety management; changing behaviour through increasing the awareness and understanding of risks; improved traffic law enforcement; and improving post-crash response along the PGH corridor.
Ongoing CDB-funded projects in Belize have experienced challenges in the procurement of contractors and PEU staff with the requisite qualifications.	The lessons of the UKCIF and CDB-funded Coastal Highway (6th Road) Project around procurement of works contractors, and PMU staff with social and environmental expertise, have been incorporated into project design. Accordingly, appropriately sized works packages, and capacity building of PEU personnel are both features of the Project.

3. **FINANCING PLAN**

FINANCING STRUCTURE AND COSTS

3.1 The project cost is estimated at \$59.867 mn and will be financed with resources from CDB and GOBZ. Final engineering designs and cost estimates for the road works were prepared by independent consultants, using rates from recent local road projects, including an allowance for meeting COVID-19 protocols. A physical contingency of 10% was applied to all components. A price contingency of 2% was used based on the forecast of the International Monetary Fund (IMF). CDB staff are satisfied that adequate contingencies have been provided to ensure the completion of the Project. A summary of the project cost is presented in Table 3.1, with details provided at Appendix 3.1.

3.2 In February 2016, CDB signed a Memorandum of Understanding with the Government of the United Kingdom, acting through the then Department for International Development (DFID), now the Foreign, Commonwealth and Development Office (FCDO), for the provision of up to 300 mn Pounds Sterling (GBP) (subsequently revised to GBP330 mn pursuant to Amendment Letters dated October 17, 2016, March 27, 2017 and July 26, 2018) by way of grant (UKCIF Resources) to finance economic infrastructure in FCDO's focus Official Development Assistance-eligible countries in the Caribbean. Belize is an eligible country for the purposes of the Project.

- 3.3 The proposed project will be financed by:
 - (a) a loan to GOBZ of an amount not exceeding the equivalent of \$34.3 mn (the Loan) representing approximately 57% of project cost, comprising \$13.0 mn from CDB's Special Funds Resources (SFR) and \$21.3 mn from CDB's Ordinary Capital Resources (OCR) (the OCR Portion), to finance infrastructure works, engineering and construction-related services, and project management;
 - (b) a grant to GOBZ of an amount of GBP14,288,807 (approximately \$18,575,450) allocated from UKCIF Resources, representing approximately 31% of project cost, to finance project preparation, infrastructure works, and other project support services;
 - (c) a grant to GOBZ of an amount not exceeding the equivalent of \$100,000 allocated from CDB's SFR, representing less than 1% of project cost, to finance engineering and construction-related services; and
 - (d) counterpart funding of BZD 13.784 mn (\$6.892 mn) representing approximately 12% of project costs, to finance project preparation, land acquisition, project management and financing charges. The cash portion of that counterpart contribution is estimated at \$4.329 mn.

3.4 The SFR portion of the Loan will be repayable over a period of 20 years following a grace period of 5 years, with interest rate fixed at 1% p.a. The OCR Portion will be repayable in 12 years following a grace period of 5 years. Interest on the OCR Portion is variable and is currently 3.75%. A commitment charge of 1% p.a. will be payable on the undisbursed balance of the OCR portion of the Loan, commencing the 60th day after the date of the Loan Agreement. The cost estimates are based on exchange rates for the GBP prevailing on October 27, 2020.

3.5 Based on the proposed financing structure, the UKCIF portion will not constitute the majority of funding for the Project. Accordingly, on November 21, 2019, CDB requested a waiver from FCDO of the

UKCIF requirement that the UK grant funding be the majority of the financing for the Belize Philip Goldson Highway and Remate Bypass Upgrade Project. On November 28, 2019, FCDO granted approval of this waiver.

3.6 The Project Preparation consultancy is complete. However, the final contract amount exceeded the UKCIF TA grant and GOBZ has requested the difference of approximately \$25,000 be retroactively financed from the UKCIF Capital grant. In order to support the ongoing procurement of the Works contractors, GOBZ also engaged the Construction Supervision of Major Works Consultants in August 2020 and has also requested that the \$50,000 fee for the pre-construction portion of their services be retroactively financed.

3.7 Both requests for retroactive financing satisfy the following eligibility criteria under CDB's Lending Policies (2016):

- (a) The amount of approximately \$75,000 is less than 1% of total CDB financing and is therefore below the specified limit of 20%; and
- (b) The retroactive portion of the financing applies to expenses incurred between the period May 30, 2020 and December 10, 2020. They are therefore within 12 months of this requested BOD approval and after the date of the financing request.

TABLE 3.1: SUMMARY OF PROJECT COSTS AND FINANCING (\$ shown throughout re USD)

	OCR	OSF	SDI	F 9		Coun	terpart	
Components	Equity and Market Resources (Loan)	UKCIF Resources (Grant)	SDF Resources (Grant)	SDF Resources (Loans)	Total	GOBZ	Implementing Agency	Total
 Project Preparation Land Infrastructure Works Engineering and Construction- related Services Other Project Support Services Project Management 	}	}	86,000	}	45,931,600	}	2,697,700	50,449,800
Base Cost	18,350,000	16,202,900	86,000	11,292,700	45,931,600	1,870,500	2,697,700	50,449,800
7. Physical Contingency	1,835,000	1,617,790	8,600	1,129,270	4,590,660	31,090	15,950	4,637,700
8. Price Contingency	1,115,000	754,760	5,400	578,030	2,453,190	93,204	63,056	2,609,450
Total Project Cost	21,300,000	18,575,450	100,000	13,000,000	52,975,450	1,994,794	2,776,706	57,746,950
9. Interest During Implementation	-	-	-	-	-	1,745,400	-	1,745,400
10. Commitment Fees	-	-	-	-	-	374,900	-	374,900
Total Financing	21,300,000	18,575,450	100,000	13,000,000	52,975,450	4,115,094	2,776,706	59,867,250
Percentage Financing	35.6	31.0	0.2	21.7	88.5	6.9	4.6	100

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4. **PROJECT VIABILITY**

TECHNICAL ANALYSIS

4.1 The works on PGH (Miles 24.5 to 92) and the Remate Bypass were selected for implementation on the basis of an independent feasibility study. It included an economic analysis of upgrading options undertaken utilising the Highway Development and Management software tool, HDM-4. The forecast volume of vehicular traffic used in the pavement design, was based on recent traffic surveys. A design life of 20 years, and design speeds of 50 km/hr through villages, and 100 km/hr otherwise, were used. New pavements consist of either a granular or cement-stabilised sub-base, with a cement-stabilised base and a Double Bituminous Surface Treatment, which has proven to be exceptionally durable in Belize. The exception are the roundabouts which feature jointed reinforced concrete surfaces.

4.2 The geometric standards used by MOW for design of the permanent works, are those of the American Association of State Highway and Transportation Officials (AASHTO). The pavement design is based on Overseas Road Note 31. Road furniture, signage and delineation will be in accordance with the United States of America's Federal Highway Administration's Manual for Uniform Traffic Control Devices. Design features to accommodate Persons with Disabilities (PWD) are informed by the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities. These are the same standards applied to completed/ongoing projects on PGH Miles 1 to 24.5. CDB Staff considers that these are appropriate standards for application to the Project. Acquisition of approximately 6.9 hectares of land for road adjustments to improve safety and efficiency has commenced. It will be a condition precedent to first disbursement in respect of each Infrastructure Works contract, that GOBZ has either acquired, or made satisfactory arrangements to obtain, the necessary land for that specific works contract.

4.3 Recommendations to improve the safety of the road infrastructure provided in a 2011 International Road Assessment Programme (iRAP) Safety Assessment Study, were updated by the feasibility consultants through road safety audits. Major junctions with secondary roads will be modified to improve visibility and road safety. Where traffic levels warrant it, improvements include the provision of roundabouts. Following project completion, the safety rating is expected to be upgraded from its current majority iRAP 1-star rating to at least 3 stars for all road users, which is considered the minimum acceptable standard.

4.4 Construction supervision of the major works will be undertaken by an independent multidisciplinary consultant. Engineering support will be provided for the creation of safe zones at schools at high risk of RTIs. Those schools are currently being identified under the ongoing 2nd Road Safety Project.

4.5 A Climate Risk and Vulnerability Assessment (CRVA) has informed the design of the highway, bypass and associated drainage structures. The hydraulic design criteria which informs the designs includes a 30% upward adjustment in the rainfall intensity associated with 1 in 20 (roadway and associated drainage structures), and 1 in 100-year (bridge) storm frequency return periods to accommodate for climate change. Adaption features include increasing culvert capacity and elevating sections of the road. Existing bridges along the corridor do not require additional adaptation features. The proposed works will serve to increase climate resilience of the road to an acceptable level of risk incorporating least cost considerations.

4.6 GOBZ has accepted the recommendations of the 2019 Institutional Strengthening Study to address the issues of inadequate maintenance funding, overloaded vehicles and splintered administration. GOBZ has made slight progress in implementing those recommendations, namely the approval of a Strategic Road Network, the implementation of the Vehicle Weight Control Programme, and the establishment of a Road Maintenance Fund.

ECONOMIC ANALYSIS

4.7 **Project Impact:** PGH is an integral part of Belize's transport system. It is the busiest and one of the longest segments of Belize's primary road network spanning over 148 km in the northern region in Belize. PGH accounts for the largest volumes of traffic servicing Belize's productive sectors, primarily tourism, manufacturing, agriculture, and services sectors. The most significant feature of this road is that it provides vital connectivity between Belize City and Mexico, thus facilitating trade between the two countries. However, despite PGH's importance, some sections have not always received the level of investment and maintenance required to ensure that the road can effectively and efficiently contribute to Belize's economic development agenda. GOBZ has recognised this underinvestment, as evidenced by its acceptance of the 2019 Study containing financing for road maintenance, and its pursuit of investments specifically in road safety countermeasures along the corridor. Road safety along this corridor is poor, with some of the highest fatality rates in the country, being recorded there. GOBZ recognises that failure to address the road safety issues along PGH negatively impacts the economy. Consequently, this project will seek to implement key road safety countermeasures along 109 km of PGH, as well as the 16 km Remate Bypass, that will reduce: (i) the number of deaths and serious injuries associated with RTIs, (ii) vehicle operating costs (VOC); and (iii) travel time. GOBZ anticipates that this investment will complement the country's wider road safety efforts and position PGH to better support Belize's economic development agenda as it will ultimately strengthen Belize's connectivity and trade link with Mexico.

4.8 **Approach to the Economic Analysis:** HDM-4 was used to compute the economic benefits of the Project. Benefits quantified in the analysis include savings in VOC and travel time costs, and increases in road safety benefits. Data and assumptions used in the model are provided at Appendix 4.1.1. The economic analysis was based on a comparative analysis of the benefit and cost streams "with" and "without" the Project. The "without" project scenario assumed that no road safety countermeasures will be implemented along the project corridor, that the road condition would remain unchanged and only routine maintenance, including pothole patching, would be carried out. The "with" project scenario assumes that specific road safety countermeasures will be factored into the road design, particularly in population centres. This includes road signs and markings, shoulder widening, safety fencing, bus stops, footways and pedestrian crossing points. The road safety features are to be focused on all road users including the young, elderly and PWD. It is expected that road related fatalities will be reduced by at least 23% once the road safety countermeasures are implemented. Additionally, the "with" project scenario assumes that the roads will be upgraded, pavement reconstructed in some sections, and drainage improved to better cope with extreme weather events.

4.9 **Results of the Economic Analysis**: The analysis yielded an Economic Rate of Return (ERR) of 27% and a Net Present Value (NPV) of \$58.89 mn. The ERR is above CDB's cut-off rate of 12%, which indicates that the Project is economically viable and is expected to provide significant economic benefits to the country. Details of the calculations of the ERR and NPV are shown in Appendix 4.1.2. The ERR and NPV are conservative estimates as climate resilience and other non-monetary benefits have not been included in the analysis because at the time of the assessment reliable quantifiable estimates could not be generated. Benefits related to resilience measures are those associated with increasing culvert capacity to deal with expected greater precipitation, and with elevating sections of the road currently vulnerable to flooding.

4.10 **Sensitivity Analysis**: A sensitivity analysis was carried out to determine the robustness of the ERR and NPV to the changes in key variables likely to impact the achievement of expected project benefits. A standard sensitivity test of 20% increase in investment cost, 20% decrease in time saving, no road safety benefits and 30% reduction in traffic growth decreased the NPV to \$57.94 mn, \$57.55 mn, \$48.65 mn, and \$45.57 mn, respectively. Even in the scenario where the project benefits are tested against a combination of increased project cost and no road safety benefits, the NPV is \$32.62 mn, and the ERR is a robust 20%.

Additionally, the switching values generated in the analysis shows that even in the most conservative scenarios the Project remains viable. Additional details of the analysis are outlined at Table 4.1 below.

MACROECONOMIC IMPACT

4.11 The Project is likely to have a net positive macroeconomic impact on Belize. In the short term, employment will be provided through construction activity and the spill over effects. More significantly there will be longer-term benefits, especially through the tourism and agriculture sectors. Safer and quicker access to land along the road will boost investment and create jobs. The costs of trading will fall, with positive impacts on exports and imports.

4.12 The road safety aspect of the Project will reduce disruption to the labour supply and enhance productivity, both directly and indirectly. This is based on the fact that while RTIs predominantly affect young people, the impact extends to the working age population generally. The concentration of RTIs is usually in places where people work or live. However, rural areas tend to suffer a disproportionate burden from RTIs. They can exacerbate human resources shortfalls in economically productive areas or potentially productive areas already partially depopulated by migration to cities.

4.13 With over half the project financed by grant or concessional borrowing, the impact on GOBZ's existing debt dynamics will be small. Nevertheless, external debt service payments as a share of revenue are still projected to jump from 15.1% in 2015 to 21.7% in 2022. Therefore, a return to growth from 2021 would help improve debt dynamics, along with additional fiscal effort to produce consistent primary surpluses. These actions will be required to get debt down below 100% and towards 60% in the long term. GOBZ is improving its tax administration, has started to increase pension contributions, and following COVID-19 has been able to reduce some of its recurrent expenditure. However, much more effort is needed.

SOCIAL AND GENDER IMPACT ASSESSMENT

4.14 Based on the Project's categorisation, no major social issues or conflicts are expected to negatively impact implementation. Overall, positive impacts are expected for beneficiaries across Belize, including the northern districts, those located along the PGH and Remate Bypass, and all categories of road users during and post implementation. The road improvements are expected to enhance community residents' quality of life through increased access to services and revenues from increased economic activity.

4.15 The Project's ESIA (2020) indicated the upgraded road network, including improved pedestrian walkways, will increase accessibility and enhance conditions for all road users, especially PWDs. The illumination of bus shelters will improve the safety of women and youth in particular. The improved infrastructure will boost connectivity to urban centres and promote trade and regional integration by reducing journey times for male, female and youth residents in northern communities, who commute daily to work or in search of employment opportunities.

4.16 Upgrading of the Remate Bypass to a paved standard, inclusive of climate adaptation measures, will serve four rural communities currently traversing a dusty and rutted gravel road. The improved infrastructure will increase access to schools, health facilities and administrative services, necessary to enhance the socioeconomic status of rural communities, and contribute to poverty reduction. The upgrade will lead to increased traffic and road safety concerns which will be addressed through the inclusion of appropriate signage, road markings, and other safety infrastructure along the route. 4.17 The acquisition of 6.9 hectares of land will be required primarily for junction improvements and realignments for improving road safety. No resettlement is required, and MOW has already commissioned the survey of the lands for acquisition. This process is expected to be concluded by Q1, 2021.

4.18 The works contractors will be required to comply with the Environmental, Social, Health and Safety Plan, and deliver Sexual Exploitation and Assault, HIV/AIDS, STD and GBV awareness training to their employees, including those based in workers camps, possibly in close proximity to communities. Employees will be required to comply with the Workers Code of Conduct. A Stakeholder Engagement Plan (SEP), inclusive of a transparent, gender-responsive and culturally-appropriate Grievance Redress Mechanism (GRM), scaled to the risks and adverse impacts of the Project, has been developed and will be updated to effectively facilitate resolution of concerns and complaints of Project-affected Persons (PAPs) during implementation. The SEP and GRM will be managed and supported by PEU with SEP updated taking account of COVID-19 protocols. The GRM will be at no cost and without retribution to PAPs in addressing social and environmental issues. CDB's Complaints Mechanism including the website: projectcomplaints@caribank.org will also be available to PAPs.

4.19 The Project includes two consultancies to: (i) increase stakeholders' awareness of GBV including human trafficking/smuggling to reduce vulnerability and mitigate communities' risks, and (ii) enhance small business operators' (particularly women and youth) capacity for economic empowerment and poverty reduction. Given the potential wider impact of GBV issues on project communities, a separate complementary Technical Assistance intervention will be financed by CDB and implemented during the period of the Project to increase social resilience of PAPs.

4.20 The Community Liaison Officer's (CLO) TOR will include responsibility for monitoring implementation of the key consultancy outputs with support from MOHD, BSIF, and the Social and Gender Specialist. The Monitoring and Evaluation Specialist shared by the Coastal Road Upgrading Project and this Project will develop the methodology to measure road users' perception of improved accessibility.

4.21 A Gender Action Plan is included in Appendix 4.2. According to CDB's Gender Marker Analysis (Appendix 4.3), the Project is gender mainstreamed with significant potential to contribute to gender equality.

GENDER MARKER SCORE

Analysis	Design	Implementation	Monitoring & Evaluation	Score	Code
1.0	0.5	0.5	1.0	3.0	Gender Mainstreamed (GM)

ENVIRONMENTAL ASSESSMENT

4.22 The project area falls within the broad expanse of the Northern Belize coastal plain, with the southern portion from Biscayne to Carmelita being predominantly forested open pine savannah type vegetation, and the northern portion being predominantly agricultural fields, agro-productive systems and residential communities between Carmelita and the Mexican border. The land is generally flat to slightly undulating with numerous small ponds and inland lagoons which drain into the many small creeks, several of which cross or run parallel to the roadway.

4.23 All planned works are limited to upgrades along the existing alignment, which is already heavily modified and increasingly encroached upon by human settlements and agricultural areas. Virtually no new land clearing is required beyond the existing right of way even with the proposed realignments. Those realignments should not significantly affect any natural forest ecosystem as the affected areas are small, already cleared and dedicated to agriculture.

4.24 The road does not traverse any protected areas but crosses an existing biological corridor which still retains some functionality. None of the habitats are deemed critical to the long-term survival of any protected species. All protected species are widely distributed with none exclusively endemic to the project area.

4.25 Most waterbodies within the project area are influenced by anthropogenic activities. However, the several ponds, lagoons and streams crossing PGH or adjacent to PGH have minimal human influences and impacts and would be expected to have good water quality. The only nationally important water body crossed by PGH is the New River which the road crosses three times. The Sajomal Marsh and Lagoon extends on both sides of the Remate Bypass road. Sajomal plays an important role in draining the surrounding region while acting as water reservoir during the dry season and a wildlife refuge.

4.26 An ESIA including an Environmental and Social Management Plan (ESMP) was prepared by the design consultants. In July 2020, the Department of the Environment (DOE) approved the ESIA and issued an Environmental Compliance Plan (ECP) that outlines specific terms and conditions upon which environmental clearance is being granted by DOE. The potential environmental risks and impacts during construction are predominantly site-specific and temporary. These risks and impacts include traffic disruptions; limited access to adjoining properties; degradation of natural habitat, particularly surface waters; inadequate solid and liquid waste disposal; improper sourcing of construction material; inadequate management of borrow areas and staging compounds; poor soil material disposal; occupational and community health and safety concerns; deterioration in air quality and increased vibration and noise nuisance affecting sensitive receptors within communities along the road corridor. During operation, likely project risks and impacts relate to increased noise and air pollution levels.

4.27 Mitigation measures to manage significant impacts will be implemented through the ESMP and ECP requirements. The ESMP specifies measures to avoid or reduce the impacts and estimates costs to implement the mitigation actions. It also outlines an environmental monitoring plan specifically for air quality, noise and water quality. With effective implementation of the ESMP included in the contract documents, potential impacts should be easily managed.

4.28 Contractors will be required to prepare, monitor and report on site specific ESMPs detailing proposals to implement the works as per the ESMP and ECP. The construction supervision consultants will review and approve contractors' ESMPs. Other environmental protection measures include a requirement for the contractors to source materials from licensed quarries and to obtain a quarry permit from the Mining Unit. Monitoring to ensure contractor compliance with mitigation measures stipulated in ESMP will be undertaken jointly by the construction supervision consultants, the Environmental Specialist within the PEU, and the DOE. Periodic reports will be submitted to CDB.

CLIMATE CHANGE VULNERABILITY ASSESSMENT

4.29 Belize is already experiencing some of the effects of climate variability and change through damage and loss from severe weather systems and other extreme events, as well as more subtle changes in temperatures and rainfall patterns. Climate modelling projections for Belize indicate (i) an increase in average atmospheric temperature; (ii) reduced average annual rainfall; (iii) more intense rains and longer dry spells; (iv) high likelihood of more intense storms, floods and droughts; and (v) increased storm surge and sea level rise. A climate risk and vulnerability assessment (CRVA) was conducted to determine the likely effects of projected climate change impacts on the project road corridor using increased temperatures, sea level rise, extreme precipitation and floods as the key climate hazards. Baseline climate data and future climate scenarios based on the Global and Regional Climate Model predictions were used to estimate average daily rainfall trends on a monthly basis for the 2050 horizon.

4.30 Based on the projected climate, flood vulnerability mapping and hotspot identification, the CRVA revealed that climate hazards will increasingly impact the roads, some bridges, and drainage features of the project corridor. The most notable hazards were storm surge and intense precipitation events, leading to inundation, exacerbated physical degradation, service disruptions and increased risks to worker and user safety. The CRVA considered adaptation responses to these impacts across the project design, construction, and operational phases. These responses include physical and road management response options.

4.31 The detailed designs for the road upgrade and drainage features incorporate climate resilient adaptation measures targeted to address prioritised climate vulnerable hotspots along the roadway. The adaptation measures identified in the CRVA include:

- (a) Mamayal curve realignment including a new bridge/box culvert.
- (b) Remate Bypass constructed on embankment across swamp.
- (c) Tombito realignment including a new bridge/box culvert.
- (d) Addition of new culverts and the extension and cleaning of existing culverts, or replacement, as appropriate.

4.32 CVRA indicates that approximately 38% of the total project cost can be attributed to climate resilience, with the greatest incremental cost being allocated to the upgrade of the Remate Bypass, which entails significant new construction.

4.33 A summary of the specific adaptation measures to increase climate resilience and their associated project costs are presented respectively in Table 1 and Table 2 in Appendix 4.4.1

PERFORMANCE ASSESSMENT SYSTEM GENERAL COMMENTARY

4.34 In accordance with CDB's Performance Assessment System (PAS), the Project was accorded an overall rating of highly satisfactory.

PAS TABLE

Criteria	Score	Justification	
Relevance	Highly Satisfactory	The Project contributes significantly to the achievement of GOBZ's priority development objectives of improving road transport connectivity, road safety and building natural hazard resilience in economy.	
Effectiveness	Highly Satisfactory	The Project is expected to achieve its objectives to reduce VOC on the project corridor; improve the safety of road infrastructure; and improve climate change (CC) resilience. To the extent that the Project facilitates increased competitiveness and productivity in trade and agriculture within the project areas, it should provide important social and economic benefits for communities along the corridor.	
Efficiency	Highly Satisfactory	The estimated NPV for the Project is \$48.92 mn and the ERR is 23%. These returns are the result of the relatively high traffic volumes, particularly HGV associated with the sugar industry and cross border trade.	
Sustainability	Satisfactory	The proposed works incorporate CC considerations in the design. This will add to the resilience of the roads, reducing the incidence of damage to the road due to weather related events. A CDB-financed Institutional Strengthening Study completed in September 2019 provided recommendations to secure the sustainability of the sector, both in terms of the institutional and regulatory framework, as well as the financing of road maintenance. These changes are being considered by GOBZ, and it is expected that they will be implemented within the short to medium term. In addition, as part of a proposed weight control programme, GOBZ has secured funding to implement measures to control axle loads including regulations, which, if enforced, will assist in preserving the life of the project roads. However, firmer action is needed on the required regulatory and legislative reforms.	
Overall Score	Highly Satisfactory		

5. <u>RISK ASSESSMENT AND MITIGATION</u>

RISK JUSTIFICATION

5.01 Project risks identified are listed in Table 5.1. The overall project risk can be described as moderate.

TABLE 5.1: SUMMARY OF RISKS ASSESSMENT AND MITIGATION MEASURES

Risk Category	Risk Type	Description of Risk	MitigationMeasures
Developmental	Budgetary/Local counterpart funds	Inability to meet counterpart contribution.	Most project components are funded with CDB financing. However, GOBZ is required to provide cash contributions for land acquisition, and the payment of financing charges. Neither have historically been an issue but in the current economic context, there remains a risk that will have to be monitored.
Developmental	Disaster Risk/Adverse Events	Delays as a result of shutdowns due to the COVID-19 pandemic.	The Project assumes implementation under the current partly restricted environment. Should that environment worsen, the financial contingencies and slack in the schedule provide some room for completion within the desired timelines.
Developmental	Policy/Political	Any change in administration as a result of the pending elections could delay implementation.	Belize will hold elections on November 11, 2020. The project is in line with Belize's sector and national development strategy, and the availability of the concessional aspect of the project financing is time dependent. These factors should maintain the project as a key development intervention for GOBZ. The project implementation start date has however been deferred till May 2021, which should still allow the meeting of financing deadlines.
Developmental	Sustainability	Improved roads not maintained due to prevailing inadequate institutional and financial arrangements.	While GOBZ has accepted the recommendations of the 2014 and 2019 Studies, the implementation schedule is uncertain. It will be a condition of the loan and grant that by December 31, 2022 GOBZ implement the following recommendations of the Final Report of the CDB-financed Institutional Strengthening Study for Management and Maintenance of Public Roads in Belize (2019): (i) the approval of a Strategic Road Network, (ii) the establishment of a Road Maintenance Fund and (iii) the full implementation of the Vehicle Weight Control Programme.

6. IMPLEMENTATION AND PROJECT MANAGEMENT

BORROWER

6.1 GOBZ may, pursuant to Section 3(1) of the Loans (Caribbean Development Bank) Act, Chapter 59 of the Laws of Belize [the Loans (CDB) Act], in such manner and on such terms as may be agreed between GOBZ and CDB, borrow from time to time, such sums as may be required by GOBZ. Any agreement between GOBZ and CDB in respect of sums borrowed under this power must be made in the name of the Minister responsible for Finance (the Finance Minister) for and on behalf of GOBZ and may be signed by the Finance Minister for or on behalf of GOBZ. No such agreement shall be executed unless the conditions thereof have been first approved by resolution of the House of Representatives to that effect. All amounts required for the payment of any sums borrowed by GOBZ from CDB and all interest and other charges on any such sums are charged on and payable out of the Consolidated Revenue Fund and assets of GOBZ. It shall be a condition precedent to first disbursement that evidence be provided of the conditions of the Loan having been approved by resolution of the House of Representatives.

IMPLEMENTING AGENCY ANALYSIS

6.2 The Project will be implemented by MOW, through its PEU. PEU has a long-established record with the Bank for effectively implementing road projects and has proven stakeholder coordination mechanisms. It is headed by a Project Coordinator (PC), who is supported by four Project Engineers (PEs), an Administrative Assistant, an Accounts Clerk, a Data Analyst, and an Office Assistant. Its portfolio currently includes five projects (projected/actual substantial completion dates shown in []) - Hummingbird Highway [September 2020], Coastal Highway [June 2023], Caracol Road Contract 1A [August 2022], Caracol Road Contract 1B [August 2021] and Fifth Road Contract C [to be determined]. Staff are sited in two buildings, with little additional office space available. There is however a costed design for a PEU building on MOW's compound. PC and PEs are each assigned a vehicle, furniture, desktop computer and mobile phone.

6.3 The unit will need to be augmented in order to manage the Project and the financing will support such. The Project-assigned staff will therefore each require laptop computers (partly to facilitate remote work necessitated by COVID-19), with new staff members requiring furniture and mobile phones. Two new vehicles will be required, as well as printers and a photocopier for the unit.

PROJECT MANAGEMENT

6.4 It will be a condition precedent to first disbursement of the Loan and Grant, that GOBZ assigns the implementation and management of the Project to PEU, and assigns from among the staff of PEU, a Project Coordinator (PC) for the Project. The duties of PC are set out at Appendix 6.4.1. It will be a condition precedent to disbursement with respect to major works that a Construction Supervision of Major Works Consultant has been engaged and; with respect to minor works that a Design and Construction Supervision of Minor Works Consultant be engaged; and in both cases, that the PEU engages a Project Engineer, a CLO, a Social and Gender Specialist and an Environmental Specialist (see Draft TORs at Appendices 6.4.2, 6.4.3, 6.4.4, 6.4.5). It will also be a condition of the Loan and Grant that GOBZ engages a Road Inspector and a Monitoring and Evaluation (M&E) Specialist (see Draft TORs at Appendices 6.4.6 and 6.4.7) by June 30, 2021, and provides adequate administrative support staff. The Social and Gender Specialist and Environmental Specialist will also support the CDB-funded Coastal Highway Upgrading (Sixth Road) Project (Paper BD 121/18). The Community and Schools Awareness Raising and Livelihoods Enhancement consultancies shall receive guidance from a Component Steering Committee (CSC) comprising representatives of key agencies (see duties at Appendix 6.4.8). It shall be a condition of the Grant that prior to disbursement in respect of those two consultancies that CSC be established. The project management

organisational chart is located at Appendix 6.5.1.

IMPLEMENTATION

6.5 The Project will be implemented over a 44-month period, commencing May 2021, and ending December 2024, with the major components substantially completed by August 2023. The proposed Project Implementation Schedule is presented in Appendix 6.1.

PARTICIPATION OF BENEFICIARIES AND STAKEHOLDERS

6.6 The preparation and appraisal of this project involved consultation with a wide range of stakeholders. Meetings were held with MED, Ministry of Finance, MOW, Ministry of Human Development, other Government representatives; and representatives from the Project Preparation Consultants, the Road Safety Unit, the Caribbean Community Climate Change Centre, the Women's Affairs Bureau, the Belize Association of People with Diverse Abilities, NGOs working in areas of GBV and human trafficking, and PAPs.

6.7 Primary stakeholders/beneficiaries were engaged using a range of differential participatory methodologies including individual and focus group meetings with men and women, transect and community walks, community mapping and public consultations. Such engagement provided opportunities for stakeholders' opinions and concerns to be expressed and to be considered in the design of the Project. Project stakeholders will be invited to participate in the Project Launch Workshop and stakeholders' meetings that will be convened during implementation. Multi-modal strategies, including community meetings, and messaging via various social media platforms, will be used to keep stakeholders abreast of progress and maintain buy-in.

6.8 An SEP inclusive of a GRM will be developed to support participation and to keep all affected or with a stake/interest in the Project informed. SEP will provide opportunities for affected communities or parties to register project-related concerns and facilitate the timely resolution of any issues that may arise during project implementation. SEP will be supported and implemented by CLO and updated as necessary.

DISBURSEMENT

6.9 Disbursement will be made in accordance with the Disbursement Guidelines for CDB-financed Projects (January 2019). It is expected that the first disbursement from the Loan and the Grant will be made by May 31, 2021. The Loan is expected to be fully disbursed by December 31, 2024. The Grant is expected to be fully disbursed by December 31, 2024. The Grant is expected to March 31, 2024. The Disbursement Schedule is provided at Appendix 6.2.

PROCUREMENT

6.10 Procurement will be in accordance with the Procurement Policies and Procedures for Projects financed by CDB (November 2019). The infrastructure works has been packaged in lots reflecting: their geographic locations; proximity to material sources such as borrow pits and quarries to ensure minimal interference in the execution of adjacent lots; the types of activities to be undertaken; and sizes likely to provide for competition from qualified bidders. Procurement of the Construction Supervision Consultant has been completed and procurement of the major works contractor(s) is ongoing. The Procurement Plan is provided at Appendix 6.3.

MONITORING AND REPORTING

6.11 **Generally:** It will be a condition of the Loan and Grant that PC shall furnish, or cause to be furnished, to CDB the reports listed in Appendix 6.7.1 to this Report, in such form or forms as CDB may require, not later than the times specified therein for so doing.

6.12 **Maintenance**: One of the aforementioned reports is an Annual Maintenance Plan, initially prepared by the CS Consultants. It will be a condition of the Loan and UKCIF Grant that GOBZ adequately maintain the infrastructure financed under the Project in accordance with the Annual Maintenance Plan.

7. <u>TERMS AND CONDITIONS</u>

No.	Subject	Terms and Conditions of the Loan		
1.	Parties	Bank: Caribbean Development Bank (CDB)		
		Borrower: Government of Belize (GOBZ)		
		Implementing Agency: Ministry of Works (MOW)		
2.	Amount of Loan	The Bank agrees to lend to the Borrower an amount not exceeding the equivalent of thirty-four million three hundred thousand United States dollars (USD34,300,000) (the Loan) comprising:		
		Ordinary Capital Resources (OCR):		
		 twenty-one million three hundred thousand United States dollars (USD21,300,000) Equity and Market Resources (the OCR Portion) 		
		Special Funds Resources (SFR):		
		 thirteen million United States dollars (USD13,000,000) Special Funds Resources (the SFR Portion) 		
3.	Purpose	The purpose for which the Loan is being made is to assist the Borrower in financing major road rehabilitation and upgrade work to approximately 125km of roadway, including project preparation, construction supervision services; minor works and design and construction supervision services to create safe school zones; other project support services; and project management (the Project).		
4.	Loan Accounts	The Bank shall open two (2) Loan Accounts in its books in the name of the Borrower and shall credit to one (1) such account the amount of the SFR Portion and to the other such account the amount of the OCR Portion. The amounts credited to the Loan Accounts may be withdrawn from the Loan Accounts as provided		

7.1 **Terms and Conditions of the Loan**

No.	Subject	Terms and Conditions of the Loan
		and are subject to the rights of cancellation and suspension set out in the Loan Agreement.
5.	Repayment	The Borrower shall repay the amount withdrawn from the OCR Portion in forty-eight (48) equal or approximately equal and consecutive quarterly instalments, commencing after the expiry of five (5) years following the date of the Loan Agreement or on such later date as the Bank may specify in writing.
		The Borrower shall repay the amount withdrawn from the SFR Loan Account in eighty (80) equal or approximately equal and consecutive quarterly instalments, commencing after the expiry of five (5) years following the date of the Loan Agreement or on such later date as the Bank may specify in writing.
6.	Interest	The Borrower shall pay to the Bank interest at the rate of three decimal seven five percent (3.75%) (variable) per annum on the amount of the OCR Portion withdrawn and outstanding from time to time. Such interest shall be payable quarterly.
		The Borrower shall pay to the Bank interest at the rate of one percent (1%) per annum on the amount of the SFR Portion withdrawn and outstanding from time to time. Such interest shall be payable quarterly.
		The Bank may increase or decrease the rate of interest payable on any amount of the OCR Portion to take effect on the day after March 31, June 30, September 30 and/or December 31 in any year.
7.	Commitment Fee	The Borrower shall pay to the Bank a commitment fee at the rate of one percent (1%) per annum on the amount of the OCR Portion that remains undrawn. Such charge shall accrue from the sixtieth (60 th) day after the date of the Loan Agreement and shall be payable within twenty-one (21) days from the end of each quarter.
8.	Withdrawal and Application of Loan	Except as the Bank may otherwise agree, withdrawals from the Loan Account(s) shall not exceed in the aggregate fifty-seven percent (57%) of the cost of the Project.
		Except as the Bank may otherwise agree, amounts withdrawn from the Loan Account(s) shall be used to finance the components of the Project allocated for financing by the Bank as shown in the Financing Plan up to the respective limits specified therein.
		The amounts withdrawn from the Loan Account(s) shall not be used to meet any part of the costs of the Project which consists of identifiable taxes imposed under the laws of Belize.

No.	Subject	Terms and Conditions of the Loan
		Except as the Bank may otherwise agree, disbursements from the Loan Account(s) shall be made rateably from the OCR Portion and the SFR Portion in accordance with the respective amounts thereof. The Borrower shall comply with the Bank's " <i>Disbursement Guidelines for CDB-Financed Projects</i> " published in January 2019 (the Guidelines), which publication is in effect at the date hereof and which may be amended from time to time by the Bank.
9.	Period of Disbursement	The first disbursement of the Loan shall be made by May 31, 2021, or such later date as may be specified in writing by the Bank.
		The Loan shall be disbursed up to December 31, 2024, or such later date as may be specified in writing by the Bank.
10.	Procurement	 Procurement of any goods, works and services shall be in accordance with the following procedures or such other procedures as the Bank may from time to time specify in writing: Procurement Policy for Projects Financed by CDB (November 2019); and Procurement Procedures for Projects Financed by CDB (November 2019) The Borrower shall comply with the procurement requirements set out in the Procurement Plan. Any revisions to the Procurement Plan shall require the Bank's prior approval in writing.
11.	Additional Conditions Precedent to First Disbursement	 The Bank shall not be obliged to make the first disbursement of the Loan until the Borrower has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank, that the following conditions have been satisfied: PEU has been assigned the implementation and management of the Project; PC has been assigned; and the approval of the House of Representatives of the Borrower has been obtained with respect to the Loan.

No.	Subject	Terms and Conditions of the Loan
12.	Conditions Precedent to Disbursement in respect of Infrastructure Works	The Bank shall not be obliged to disburse any amount in respect of Infrastructure Works until the Borrower has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following conditions have been satisfied: - the Construction Supervision of Major Works
		 Consultant has been engaged; the Project Engineer (PE) has been engaged;
		 the Community Liaison Officer has been engaged;
		- the Environmental Specialist has been engaged; and
		- the Social and Gender Specialist has been engaged.
13.	Condition(s) Precedent to Disbursement in respect of each Infrastructure Works contract	 The Bank shall not be obliged to disburse any amount in respect of each Infrastructure Works contract until the Borrower has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following conditions have been satisfied: the Borrower has received all requisite statutory, planning, building and environmental permits, licenses and/or other approvals in respect of the infrastructure works; and the lands required to carry out the infrastructure works are vested in the Borrower free from all encumbrances and without covenants, stipulations or conditions which may adversely affect the Project, or alternatively the Borrower has made arrangements satisfactory to the Bank to enter into possession of or acquire the relevant rights over such lands for the purposes of the Project.
14.	Project Implementation	Except as the Bank may otherwise agree, the Borrower shall: (i) implement the Project through the Implementing Agency; (ii) carry out the Project at all times with due diligence and efficiency, with management personnel whose qualifications and experience are acceptable to the Bank and in accordance with sound technical, environmental, administrative, financial and managerial standards and practices; and (iii) institute and maintain organisational, administrative, accounting and auditing arrangements for the Project, acceptable to the Bank.
15.	Project Management	The Borrower shall assign, and for the duration of the Project maintain, from among the staff of the Project Execution Unit (PEU), MOW, a Project Coordinator (PC), who shall carry out the duties of the PC set out in the Duties of the Project Coordinator .

No.	Subject	Terms and Conditions of the Loan
		The Borrower shall augment the existing PEU, MOW with the PE, the CLO, the Environmental Specialist, the Social and Gender Specialist, the Monitoring and Evaluation Specialist and the Road Inspector.
16.	Engagement of Consultant(s)	The Borrower shall, in accordance with the procurement procedures applicable to the Loan, select and engage consultants to provide the following consulting services and shall, within a timeframe acceptable to the Bank, implement such recommendations arising therefrom, as may be acceptable to the Bank:
		- Project Engineer
		- Construction Supervision of Major Works Consultant
		Community Liaison OfficerEnvironmental Specialist
		 Social and Gender Specialist
		The Borrower shall, in accordance with the procurement procedures applicable to the Loan, by June 30, 2021, or such later date as may be acceptable to the Bank, select and engage the Monitoring and Evaluation Specialist and the Road Inspector .
17.	Engagement of Contractors	The Borrower shall, in accordance with the procurement procedures applicable to the Loan, select and engage competent and experienced contractors to carry out the works to be financed by the Loan.
18.	Maintenance	The Borrower shall keep the infrastructure financed from the Loan, or cause the same to be kept, in good repair and condition and shall provide the financial and other resources required to adequately maintain the infrastructure financed from the Loan in accordance with the Annual Maintenance Plan.
19.	Other Conditions:	The Borrower shall by December 31, 2022, or such later date as may be acceptable to the Bank, implement the following recommendations of the Final Report of the CDB-financed Institutional Strengthening Study for Management and Maintenance of Public Roads in Belize (2019): (i) the approval of a Strategic Road Network, (ii) the establishment of a Road Maintenance Fund and (iii) the full implementation of the Vehicle Weight Control Programme.

No.	Subject	Terms and Conditions of the Loan
20.	Additional Funds	The Borrower shall be responsible for meeting any amount by which the total cost of the Project exceeds fifty-nine million, eight hundred and sixty-seven thousand, two hundred and fifty United States dollars (USD59,867,250).
21.	Counterpart Contribution to the Project	The Borrower shall contribute to the Project an amount of not less than thirteen million, seven hundred and eighty-three thousand, six hundred Belize dollars (BZD13,783,600). Except as the Bank may otherwise agree, the contribution which the Borrower is required to make to the Project shall be expended by the Borrower in a timely manner on the components of the Project designated for financing by the Borrower as shown in the Financing Plan , up to the respective limits specified therein.
22.	Reports and Information	Except as the Bank may otherwise agree, the Borrower and/or the PC shall furnish or cause to be furnished to the Bank the reports and information set out in the Reporting Requirements in the form specified therein, or in such form or forms as the Bank may require, not later than the times specified therein for so doing.
23.	Events of Default, Suspension and Cancellation	The Bank may by notice to the Borrower suspend, cancel, or call in the whole or any part of the Loan if: the whole or any part of the FCDO Resources or the SDF Resources (together 'the Grant') is suspended, cancelled, or required to be refunded.

7.2 **Terms and Conditions of the Grant**

No.	Subject	Terms and Conditions of the Grant
1.	Parties	Bank: Caribbean Development Bank (CDB)
		Beneficiary: Government of Belize (GOBZ)
		Implementing Agency: Ministry of Works (MOW)
2.	Amount of Grant	The Bank agrees to make available to the Beneficiary by way of grant (the Grant) an amount not exceeding the equivalent of eighteen million, six hundred and seventy-five thousand, four hundred and fifty United States dollars (USD18,675,450) (the Grant) comprising:
		Special Funds Resources (SFR):

No.	Subject	Terms and Conditions of the Grant
		 fourteen million two hundred and eighty-eight thousand, eight hundred and seven Pounds Sterling (GBP14,288,807) (approximately USD 18,575,450) allocated from UKCIF Resources (the FCDO Resources) one hundred thousand United States dollars (USD100,000) allocated from SDF Resources (the SDF Resources).
3.	Purpose	The purpose for which the Grant is being made is to assist the Borrower in financing major road rehabilitation and upgrade work to approximately 125km of roadway, including project preparation, construction supervision services; minor works and design and construction supervision services to create safe school zones; other project support services; and project management (the Project).
4.	Payment of Grant	Except as the Bank may otherwise agree, the Grant shall be made to the Beneficiary as follows:
		The Grant shall be paid to the Beneficiary periodically after receipt by the Bank of (i) a request in writing from the Beneficiary for such funds; and (ii) an account and documentation, satisfactory to the Bank in support of expenditures incurred by the Beneficiary in respect of, and in connection with, the Project.
		The Bank shall not be under any obligation to make the first payment of the Grant until the Bank shall have received evidence, acceptable to the Bank, that the conditions precedent to first disbursement of the Grant have been satisfied.
		The Bank shall not be under any obligation to make any payments following the first payment until the Bank shall have received the requisite number of copies of the reports or other deliverables, in form and substance acceptable to the Bank, to be submitted by the Beneficiary to the Bank in accordance with the Reporting Requirements .
		Except as the Bank may otherwise agree, total disbursements of the Grant shall not exceed in the aggregate thirty percent (30%) of the cost of the Project.
		Except as the Bank may otherwise agree, the Grant shall be used to finance the components of the Project allocated for financing by the Bank as shown in the Financing Plan up to the respective limits specified therein.

No.	Subject	Terms and Conditions of the Grant
		Except as the Bank may otherwise agree, in respect of the components of the Project allocated for financing by the Bank using both Loan resources and Grant resources as shown in the Financing Plan , disbursements shall be made rateably from the Loan and the Grant in accordance with the respective amounts thereof, subject to the period of disbursement for the Grant specified below.
		The Grant shall not be used to meet any part of the costs of the Project which consists of identifiable taxes imposed under the laws of the Project Country.
		The Beneficiary shall comply with the Bank's "Disbursement Guidelines for CDB-Financed Projects" published in January 2019 (the Guidelines), which publication is in effect at the date hereof and which may be amended from time to time by the Bank.
5.	Period of Disbursement	The first disbursement of the Grant shall be made by May 31, 2021, or such later date as the Bank may specify in writing.
		The amount of the Grant may be disbursed up to December 31, 2023 or such later date as may be specified in writing by the Bank.
6.	Procurement	Procurement of any goods, works and services shall be in accordance with the following procedures or such other procedures as the Bank may from time to time specify in writing:
		- Procurement Policy for Projects Financed by CDB (November 2019); and
		- Procurement Procedures for Projects Financed by CDB (November 2019)
		The Beneficiary shall comply with the procurement requirements set out in the Procurement Plan . Any revisions to the Procurement Plan shall require the Bank's prior approval in writing.
7.	Additional Condition(s) Precedent to First Disbursement	The Bank shall, not be obliged to make the first disbursement of the Grant until the Beneficiary has furnished or caused to be

No.	Subject	Terms and Conditions of the Grant
		furnished to the Bank, evidence acceptable to the Bank, that the following condition has been satisfied:
		 The conditions precedent to first disbursement of the Loan have been satisfied.
8.	Condition(s) Precedent to Disbursement in respect of Infrastructure Works	The Bank shall not be obliged to disburse any amount in respect of Infrastructure Works until the Beneficiary has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following condition has been satisfied:
		 The conditions precedent to disbursement of the Loan in respect of Infrastructure Works have been satisfied.
9.	Condition(s) Precedent to Disbursement in respect of each Infrastructure Works contract	The Bank shall not be obliged to disburse any amount in respect of each Infrastructure Works contract until the Beneficiary has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following conditions have been satisfied:
		 The conditions precedent to disbursement of the Loan in respect of each Infrastructure Works contract have been satisfied.
10.	Condition(s) Precedent to Disbursement in respect of the Minor Works	The Bank shall not be obliged to disburse any amount in respect of the Minor Works until the Beneficiary has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following condition has been satisfied:
		- the Design and Construction Supervision of Minor Works Consultant has been engaged.
11.	Condition(s) Precedent to Disbursement in respect of the Other Project Support Services	The Bank shall not be obliged to disburse any amount in respect of the Other Project Support Services until the Beneficiary has furnished or caused to be furnished to the Bank, evidence acceptable to the Bank that the following condition has been satisfied:
		 the Component Steering Committee (CSC) has been established with the composition and functions set out in the Duties of the Component Steering Committee.
12.	Project Implementation	Except as the Bank may otherwise agree, the Beneficiary shall: (i) implement the Project through the Implementing Agency; (ii) carry out the Project at all times with due diligence and efficiency, with management personnel whose qualifications

No.	Subject	Terms and Conditions of the Grant
		and experience are acceptable to the Bank and in accordance with sound technical, environmental, administrative, financial and managerial standards and practices; and (iii) institute and maintain organisational, administrative, accounting and auditing arrangements for the Project, acceptable to the Bank.
13.	Engagement of Consultant(s)	The Beneficiary shall, in accordance with the procurement procedures applicable to the Grant, select and engage consultants to provide the following consulting services and shall, within a timeframe acceptable to the Bank, implement such recommendations arising therefrom, as may be acceptable to the Bank:
		- Development and Implementation of a Community and Schools Public Education Programme to Increase Awareness and Outreach on Gender-Based Violence and Transmission of Sexually Transmitted Diseases
		 Development and Implementation of a Livelihood Capacity Development Strategy and Action Plan
		- Design and Construction Supervision of Minor Works
		- Preparation of Feasibility Study and Detailed Designs
14.	Engagement of Contractors	The Beneficiary shall, in accordance with the procurement procedures applicable to the Grant, select and engage contractors to carry out the works to be financed by the Grant.
15.	Maintenance	The Beneficiary shall keep the infrastructure financed from the Grant, or cause the same to be kept, in good repair and condition and shall provide the financial and other resources required to adequately maintain the infrastructure financed from the Grant in accordance with the Annual Maintenance Plan.
16.	Other Conditions:	The Beneficiary shall by December 31, 2022, or such later date as may be acceptable to the Bank, implement the following recommendations of the Final Report of the CDB-financed Institutional Strengthening Study for Management and Maintenance of Public Roads in Belize (2019): (i) the approval of a Strategic Road Network, (ii) the establishment of a Road Maintenance Fund and (iii) the full implementation of the Vehicle Weight Control Programme.

No.	Subject	Terms and Conditions of the Grant
17.	UKCIF Conditions	The Beneficiary shall: (i) ensure that the contract(s) under the Project provide for the acknowledgement of, and that each deliverable produced under the Project contains, a visibility statement acknowledging that the FCDO Resources have been provided by the Foreign, Commonwealth and Development Office (FCDO) through UKCIF, and that the UKaid logo is utilised in accordance with FCDO standards for use of the UKaid logo; (ii) facilitate and permit, during implementation of the Project, and up five (5) years after the end of UKCIF, any authorised representative of the Bank or FCDO to conduct investigations of credible suspicion of or actual fraud, corruption or any other financial irregularity, impropriety or wrong doing and, if necessary, provide an appropriate refund in accordance the refund provisions herein; and (iii) permit the Bank, or FCDO, or any person appointed thereby, to audit the expenditures financed by the Grant, and to provide the Bank, or the appointed person with all reasonably required assistance, documents and information.
18.	Reports and Information	Except as the Bank may otherwise agree, the Beneficiary shall furnish or cause to be furnished to the Bank the reports and information set out in the Reporting Requirements in the form specified therein, or in such form or forms as the Bank may require, not later than the times specified therein for so doing.
19.	Counterpart Contribution to the Project	Except as the Bank may otherwise agree, the Beneficiary shall meet or cause to be met: (i) the cost of the items designated for financing by the Beneficiary in the Financing Plan ; (ii) any amount by which the cost of the Project exceeds the estimated cost set out in the Financing Plan ; and (iii) the cost of any other items needed for the purpose of, or in connection with, the Project. Except as the Bank may otherwise agree, the Beneficiary shall provide or cause to be provided, all other inputs required for the punctual and efficient carrying out of the Project which are not being financed by the Bank.

No.	Subject	Terms and Conditions of the Grant
20.	Suspension, Cancellation and Refund	The Bank shall be entitled to suspend, cancel or require a refund of the Grant, or any part thereof, if:
		 the Loan, or any part thereof is suspended, cancelled, or called in; or
		 the whole or any part of the Grant is suspended, cancelled, or required to be refunded.
		The Beneficiary shall not be required to refund any amount of the Grant already expended by the Beneficiary on the components of the Project to be financed from the Grant and not recoverable by the Beneficiary, unless that amount already expended was misappropriated due to proven fraudulent, unethical or other activity of wrong doing.

APPENDICES TO CHAPTER 1 - STRATEGIC CONTEXT AND RATIONALE

APPENDIX 1.1 MACROECONOMIC CONTEXT DETAILS

(Unless stated, amounts are in United States Dollars (\$))

OVERVIEW

1. The Belizean economy is contracting in 2020. The COVID-19 pandemic has devastated tourism, the major source of foreign currency earnings. Unemployment rates for both men and women are likely to have increased significantly. 40,000 persons have been approved for unemployment relief.

2. The Government of Belize's (GOBZ) fiscal accounts are under severe pressure, since revenues have fallen significantly since April. Debt is likely to jump to over 120% of Gross Domestic Product (GDP), and debt service payments as a share of government revenue are likely to double. GOBZ has reached agreement to capitalise the next three interest payments on its commercial debt. As a result, its credit rating has been lowered.

3. The economy should start to recover in 2021 but getting back to pre-pandemic levels of tourism activity could take two to three years, depending on how the coronavirus is managed. Debt sustainability will be a concern during those years. GOBZ needs to put in place a macroeconomic framework that allows debt as a share of GDP to come down. A further growth shock, such as an extreme weather event, would have significant social and economic consequences.

REAL SECTOR

4. Economic growth slowed to just 0.3% in 2019, mainly due to the severe drought that affected primary and secondary industries. Agriculture was significantly affected, and the lower water levels meant less hydroelectricity generation. From the middle of March 2020, things got much worse. The COVID-19 pandemic meant that the tourism industry, which contributes over 40% to GDP, was effectively shut down. Hotels were empty and there were no cruise ship calls. This had knock-on effects on many sectors with linkages to tourism, including agriculture, fishing, wholesale and retail, and manufacturing. The strict social distancing protocols adversely impacted construction activity. Assuming that no tourists return to Belize before October 2020, and even then, only in small numbers, the economy could contract by nearly 20% in 2020.

5. Inflation slowed to 0.1% in the year to May 2020, from 0.5% the previous year. This reflected a fall in the cost of housing and of healthcare. However, the cost of food and non-alcoholic beverages increased, having fallen in the previous year. This was mainly because of the drought conditions.

6. No official unemployment data are yet available in 2020. According to the most recent Labour Force Survey, for September 2019, the rate of unemployment was 10.4%. The rate for women (15.7%) was more than twice the rate for men (6.6%). However, following the Covid-19 outbreak these rates will have risen. So far over 40,000 persons have been approved for unemployment relief – about 24% of the workforce.

EXTERNAL SECTOR

7. Foreign exchange reserves are under pressure, as the current account deficit must be financed. The visible trade deficit narrowed to 540mn Belize Dollars (BZD) in the first five months of 2020, compared to BZD594mn a year earlier. Imports and exports both fell. The drop in imports (11% to

BZD690mn) reflected the effect of COVID-19 on incomes, and the increasing difficulties of accessing foreign exchange. The fall in exports (16% to BZD149mn) was mainly due to the effect of the drought on agriculture. No trade in services data are available yet for 2020, but the current account deficit will have worsened, because of the sharp reduction in foreign income earned by tourism, and the probable fall in remittances from Belizeans overseas.

8. No data are yet available for capital and financial account transactions. Previously current account deficits have been financed by foreign investments in Belize, or by disbursement of external debt. Both of these have been lower in 2020, reflecting weak economic sentiment. This will put further pressure on Belize's external reserves, which were worth three months of imports at the end of 2019. Banks have introduced foreign currency controls, and in June GOBZ announced it was issuing its first USD-denominated bond, in an attempt to attract foreign exchange.

FINANCIAL SECTOR

9. The restrictions on travel meant that the growth in net foreign assets in the banking system started to reverse after April, with a dramatic decline in tourism earnings. In June, banks started to put limits on foreign currency transactions, including credit cards. The Central Bank's holdings of foreign currency fell, mainly to pay GOBZ's external debt.

10. Concerns about businesses and individuals not being able to service their loan obligations, and the knock- on effects on the banking system, led to the CBB implementing new measures in March. Such measures included: reducing the statutory cash reserve requirements; extending the time period to classify loans as non-performing; encouraging banks and credit unions to provide more generous grace periods for loan servicing; reducing risk weights for banks on tourism sector loans; and reviewing banks' plans to ensure that an adequate level of financial services will be made available to the public.

11. The pressure on Correspondent Banking Relationships (CBRs) continued to ease. All banks previously affected by the loss of CBRs have found alternative arrangements to process cross-border transactions. However, the situation is still fragile since most of the banks rely on the same overseas correspondent bank. In June, Scotia Bank announced its intention to pull out of Belize. Its operations will be sold to Belize Bank, subject to CBB approval.

CENTRAL GOVERNMENT OPERATIONS AND DEBT

12. Following the last commercial bond restructuring in early 2017, GOBZ made efforts to improve its fiscal position. Tax measures implemented in the 2017 and 2018 budgets enabled GOBZ's primary balance to improve from -1.2% of GDP in fiscal year 2016/17 to 2.1% in 2018/19, therefore meeting the 2.0% target as required by the restructuring agreement. However, the improvement did not last. In 2019 tax revenue increased, but there were declines in non-tax revenue and grants, such that total revenues fell by 2.2%. In the same period expenditure increased. Spending on wages, salaries and pensions (48.2% of primary expenditure) rose by 3.6%, while capital expenditure jumped by 34.1%. GOBZ missed the 2.0% primary balance target in 2019/20, recording a deficit of -1.3% of GDP.

The restructuring meant only interest payments until 2032. Between 2032 and 2034 the principal (USD 526mn) is to be paid.

Under the terms of the debt restructuring agreement, not meeting the 2% target should have meant GOBZ would pay interest on the commercial bond quarterly rather than semi-annually. In addition, GOBZ would invite the IMF to conduct a mission to ascertain why the primary balance target was not met, and what measures should be implemented to achieve it. The findings would be published.

13. Debt as a share of GDP continued to increase after the 2017 debt restructuring. Much of this was attributable to payment for previous nationalisations of two utilities. GOBZ borrowed BZD90 mn following a 2017 Caribbean Court of Justice ruling that it should pay a local bank in relation to a government guarantee provided for a healthcare company in the 1990s. In addition, GOBZ is contesting legacy claims, such as over an international business companies registry, worth about \$115 mn or BZD 230 mn.

14. Since March 2020, Government finances have come under enormous pressure as the authorities have worked to contain the spread of COVID-19, and manage the social and economic fallout. Monthly revenues are significantly less than what they were in 2019. The main losses have been in taxes on goods and services, and in taxes on international trade. With increased expenditure on healthcare and on social support for the newly unemployed and the most vulnerable, GOBZ has made some efforts to control the rise in expenditure elsewhere. GOBZ reached agreement with the unions representing teachers and civil servants to forego salary increments³; and the Ministry of Finance mandated some cuts in expenditure on goods and services⁴.

OUTLOOK AND DEBT SUSTAINABILITY

3

15. Including this loan and the five-year USD-denominated bond, GOBZ will disburse \$61mn from new loans in 2020 and \$43mn in 2021. In addition, the World Bank is working on a social inclusion project that was due to be approved in September, but which might now wait until after the general election. The fall in GDP in 2020 means that the debt-to-GDP ratio will increase significantly to 125.0% by yearend.

16. Assuming that the economy recovers in line with Central Bank forecasts, then the debt-to-GDP ratio will start falling slowly from 2021. Growth forecasts are based on a recovery in tourism arrivals, and tourism- related foreign direct investment, such as port development. Agricultural output will also improve if weather conditions are favourable. However, GDP might not get back above its 2019 level until 2025. Despite all of GOBZ's new external disbursements being concessional, external debt financing will remain around 20% of government revenue. Therefore ,fiscal space will be tight. GOBZ will continue to operate primary deficits unless it can increase revenues and reduce expenditure.

17. GOBZ was sufficiently concerned about the economy in 2020 that it requested access to the International Monetary Fund's Rapid Financing Instrument (RFI), a short-term credit instrument with very limited conditionality. However, possibly taking into consideration GOBZ's fiscal position before COVID-19, the IMF was only prepared to offer the RFI if Belize would agree to enter into a full IMF programme, which would come with conditions attached. The Prime Minister announced that he was not prepared to accept this decision. Separately, the Ministry of Finance announced its own Economic Recovery Programme. In July the Financial Secretary began negotiations to capitalise the next three interest payments on the commercial bond. In August agreement was reached by GOBZ and the bondholders, and a credit rating downgrade followed⁵.

The unions had hoped to defer rather than forego. There is an agreement to re-examine the arguments when the economy recovers.

From May 2020, monthly departmental budgets are reduced from 1/12 to 1/20 of their annual allocations.

In June, on the expectation that GOBZ would not be able to meet the interest payment due in August, Moody's downgraded to Caal from B3, and changed the outlook to negative from stable. S&P downgraded to CC from CCC, with a negative outlook. On August 12, following agreement to capitalize, S&P further downgraded to SD.

18. On June 26, 2020, the Ministry of Finance released a statement, which said:

"The Government of Belize is implementing a domestic relief, consolidation and revival plan, anticipating that in the coming months, the shape of Belize's economic recovery will crystallize. Given the current stage of Belize's political cycle, the Government of Belize believes that the decision whether to negotiate any long-term IFI support programs, including with the IMF, and the potential restructuring of the Bonds that a broader revitalization plan would entail, is one that would have to be made no earlier than the end of 2020."

19. GOBZ needs to produce consistent primary surpluses to start bringing debt down. Such measures include widening the tax base, improving tax administration, controlling expenditure, and pension reform. In addition, business reforms are needed to enhance growth and increase foreign exchange earnings. Belize ranks a lowly 135th in the Ease of Doing Business index. While some progress has been made in getting electricity faster and in trading across borders, further reforms are needed to put growth on a higher and more sustainable trajectory. These include: starting a business; issuing construction permits; and getting credit.

20. With the exception of a contribution to CCRIF SPC, there is little fiscal provision for extreme weather events, especially hurricanes and flooding. An average of 3.3% of GDP was lost annually between 2003 and 2012. An influential world study⁶ on climate change predicts a loss of 75–100% of GDP for Belize by 2100, with high probability relative to a no climate-change scenario. In addition, GOBZ needs to start setting funds aside for settling its \$526 mn commercial debt, which is due in five bullet payments between 2030 and 2034. GOBZ also needs to consider fiscal mechanisms to improve climate resiliency, for example self-insurance or increasing fiscal buffers.

21. Belize's current trajectory is dependent on CBB's growth expectations and on fiscal forecasts being robust. A further shock to growth, or even a slower than expected recovery, will increase the debt-to-GDP ratio and compromise further GOBZ's ability to service its debt. The table below summarises debt-GDP forecasts for the next few years.

	2020	2021	2022	2023	2024	2025	
CBB base case							
GDP growth (%)	-19.7	6.0	6.0	5.8	3.6	2.3	
Debt/GDP (%)	125.3	126.0	126.5	126.3	125.4	125.6	
Slower GDP recovery							
GDP growth (%)	-19.7	3.0	3.0	2.9	5.0	5.0	
Debt/GDP (%)	125.0	128.8	132.1	134.8	133.7	131.7	

TABLE 1: DEBT-GDP FORECASTS

Burke, Hsiang, and Miguel, 2015, "Global Non-linear Effect of Temperature on Economic Production," Nature.

APPENDIX 1.2

MACROSOCIAL CONTEXT DETAILS

Population and Demographics

1. According to the Statistical Institute of Belize, the northern districts of Corozal and Orange Walk (significant districts in the Project Area) recorded populations of 49,446, and 52,550 respectively, with approximately 74% living in rural areas and the remainder living in the urban towns. At 718 square miles, Corozal is the country's second most densely populated district with 67 residents per square mile. This represents a 20% growth since the 2010 census and is consistent with the growth rate during 2000-2010. Statistics show that Orange Walk has the second smallest population density, at 29 inhabitants per square mile. The average household size in the Corozal and Orange Walk districts is slightly larger than the national average with 4.4 members per household. The male to female ratio in the Corozal District is similar to the rest of the country at 1:1, while Orange Walk's ratio is 1:0.98.

2. Twelve small villages are directly in the Project Area and several others are in close proximity. Villages that are directly in the Project Area are located in Belize District (Biscayne), Orange Walk District (Carmelita, San Jose, San Pablo) and Corozal District (Buena Vista, Santa Clara, San Roman) and Corozal District, Remate Bypass (San Pedro, Cristo Rey, Yo Chen, Patchakan and Chan Chen). San Jose is the largest with almost 3,000 residents, Carmelita and San Pablo in Orange Walk District have approximately 1,000, while Buena Vista, in Corozal District is the smallest with less than 500 residents.

Labour Force

3. There are 32,845 people who comprise the working age population of the Corozal district. Of this, 21,770 people are actually in the labour force -13,341 males and 8,429 females [Statistical Institute of Belize (SIB), 2019]. The 25-34 age group make up 26.2% of the labour force, followed by the 14-24 age group (23%) and 35-44 age group (22.1%). The remainder of the labour force is over 45 years of age. In the Orange Walk district, the labour force participation rate is 61.3%, with 21,115 actively engaging in the labour market. Women, however, make up less than half (32.9%) of the labour force.

4. The employed population in Corozal is 20,694, with the majority, 73.5%, employed in rural areas. Orange Walk is similar, with 71.8% of the population, 13,938 people, working in rural jobs. In the Belize district, the picture shows the reverse with 69.9% of the population working in urban jobs. The majority of the Corozal district's employed labour has only a primary school education (48.7%), followed by those with no education (19.9%), while 15.6% and 15% have a secondary or tertiary education, respectively. In Corozal, one-third of the working population is involved in agriculture, mainly sugar cane cultivation, which also dominates in Orange Walk. In Corozal, women's labour force participation was 50% compared with Belize District at 63%. High unemployment within occupational groups including agricultural workers and women in particular (who are lower wage earners) has contributed to maintaining the high poverty levels of the northern districts. Corozal and Orange Walk have historically featured among Belize's poorest districts.

5. The unemployment rate in the Corozal district is the 5.9%, while in the Orange Walk district it is 7%. Unemployment in the Belize district is 6.75%. As with most other districts in the country, the majority of the unemployed in the Corozal and Orange Walk districts anticipate future employment in the services industry (clerical, services and sales), followed by other elementary occupations. In the Belize district, this trend is similar, where a majority of the unemployed are tending towards the service industry. This is followed however, by an interest in the technical field (skilled agriculture, craft, plant and machinery), where 29% of the unemployed indicated they would like to work (SIB, 2019).

Housing

6. In the Corozal district, the houses are almost all concrete (64.8%), while 16.1% are made of wood. Another 11.4% are made with stucco finished palmetto. Most households live in private, undivided residences (81.5%). Seventy-eight percent of Corozal residents either own or are in a hire purchase arrangement, 11.6% are renting from a private individual, and 10% are living rent free. The Orange Walk district is similar to the Corozal district, where most houses (52.8%) are concrete. Other popular building materials are wood (24.2%) and sticks or palmetto, finished with stucco (9.4%). As with Corozal, the majority of households occupy private, undivided residences (84.7%). Most households also own or are in the process of purchasing their homes (73.6%). The remaining residents are renters (SIB, 2018).

7. Houses in the Belize district are also primarily concrete (52%), followed by wood (28.5%) and plywood (10.6%). Here 60% of households own their homes or have a mortgage, 30% are renting from a private individual and another 9% are living rent free (SIB, 2018).

Water

8. The Belize Water Services Limited (BWS) supplies potable water to urban areas in the Corozal and Orange Walk districts. Rural areas receive water from community reservoirs that are managed by a local Water Board. Many of the residents in the rural area also get their water supply from nearby rivers or they have their own rainwater vats (Table 1 shows the main water sources). CDB continues to finance a number of social infrastructure projects through the Basic Needs Trust Fund and Belize Social Investment Fund, intended to improve quality of life and well-being of beneficiary households.

	Corozal	Orange Walk	Belize
Improved Water Source	8,625	8,938	31,720
Unimproved Water	2,002	2,257	568
Don't Know/Not Stated	-	-	131

TABLE 2: HOUSEHOLDS MAIN WATER SOURCE

Source: SIB, Abstract of Statistics, 2018.

Governance Structures

9. All villages within the project area have village councils that fall under the Local Government structure, which along with Central Government; make up the overall governance structure of Belize. There is no provision for local government in the Constitution of Belize, however, the Village Council Act, CAP. 88 (Rev. ed., 2011), sets out the powers of the council and responsibilities of its members. Ministerial oversight for village councils is by way of the Department of Rural Development, in the Ministry of Labour, Local Government, and Rural Development. In 2009, GOBZ approved a national policy on local governance with the aim of enshrining local governance in the constitution of Belize, revising local government, formally demarcating boundary lines across all municipalities and villages, and building capacity for leaders.

Crime and Violence – Human Trafficking and Smuggling

10. There are a number of crimes perpetuated against women, men, girls and boys in the districts of the Project area. These range from personal crimes, such as rape and unlawful sexual intercourse, to summary jurisdiction offences such as abduction and kidnapping. The Environmental and Social Impact Assessment (ESIA, 2020: 188) highlighted that an infrastructurally improved Philip Goldson Highway (PGH) is likely to increase activity along the route. This may create the environment for increased criminal activity, particularly since outsiders would now be able to quickly access some of the remote villages, especially those in the vicinity of the Remate Bypass (ESIA, 2020:170). The ESIA highlighted the issue of human trafficking/smuggling and pointed out that communities along PGH may be at risk of being trafficked/smuggled. Vulnerability to trafficking/smuggling may be increased as a result of increased unemployment and economic hardship brought about by the impacts of COVID-19 in the northern communities that have historically been overly represented in the poverty statistics.

11. In Belize, as in most Caribbean countries, although there is legislation in place to combat trafficking, the current prevention efforts are not sufficiently tailored to address this social malady in an effective way. This is partly the result of a lack of understanding of what factors cause people to be vulnerable to human trafficking as well as smuggling. There is a significant gap in the ability of communities, and frontline workers to identify the indicators of trafficking and smuggling and there is lack of technical capacity and skills to assist survivors. Human trafficking is one dimension of gender- based violence (GBV) which according to the Country Gender Assessment for Belize (2016) continues to be one of the gravest manifestations of gender inequality in Belize. GBV covers domestic violence, incidents of rape, indecent assault, unlawful carnal knowledge (sex with a person under the statutory age of consent), commercial sexual exploitation of children and adolescents, and crimes of human trafficking/smuggling.

12. At the national level, in 2016 and 2017, authorities identified 12 and 17 victims, respectively⁷. In 2018, 17 potential victims were identified - at least 12 foreign nationals and three Belizeans, including one adult female and five minors. In addition, authorities confirmed eight forced labour victims and one sex trafficking victim. This situation is underscored by the United States Trafficking in Persons Report (2020), in which Belize ranked in Tier 2 of the Watch List. This means, *inter alia* that the absolute number of victims of severe forms of trafficking is very significant and/or is likely to increase significantly. GOBZ has a 2018-2020 National Anti-Trafficking Action Plan in place, which focuses on prevention, outreach, and public awareness-raising. However, consistent outreach to rural districts is challenged given the inadequacy of the physical presence by Government agencies and other entities in those areas.

⁷ <u>https://www.state.gov/reports/2019-trafficking in persons report 2/belize/</u>

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APPENDICES TO CHAPTER 2 - PROJECT DESCRIPTION

APPENDIX 2.1.1

COMPONENT DETAILED DESCRIPTION

Project Preparation

1. This component represents the completed multi-disciplinary consultancy that undertook the feasibility study, and prepared the detailed designs, that informed the preparation of the Project, as well as project management by MOW to manage those services. The final portion of the consultancy will be retroactively financed from the UKCIF Capital Grant.

Land

2. This component comprises the acquisition of approximately 6.15 hectares of land. Acquisition is required on all Lots for road widening and re-alignment purposes to improve road safety. GOBZ has commenced the process, which is expected to be completed by January 2021, and is being financed from GOBZ's resources.

Infrastructure Works

3. This component comprises two sub-components.

4. The first sub-component involves the upgrading of approximately 109km of existing paved road between Mile 24.5 and 92 (the Mexican border) on the Philip S. W. Goldson Highway as well as the unpaved Remate Bypass (16km). This sub-component is to be financed with the OCR and SFR Loan resources as well as the UKCIF Grant. The works were designed in five sections (A, B, C, D and E) to be undertaken in four lots. They include upgrading the drainage system by constructing new higher capacity culverts. Climate adaption features include higher capacity drainage and the raising of the road elevation at certain locations. Countermeasures to improve road safety will be incorporated and measures to increase the accessibility, mobility, security and safety of all users, especially pedestrians, people with disabilities and non-motorised vehicles. More specifically:

- (i) Works Lot 1 comprises Section A (Mile 24.5 to Orange Walk Town Roundabout) and Section D (Remate Junction North to Mexican Border).
- (ii) Works Lot 2 and Section B (Orange Walk Roundabout to Remate Junction South).
- (iii) Works Lot 3 comprises Section C (Remate Bypass).
- (iv) Works Lot 4 comprises Section E (Remate Junction South to Remate Junction North through Corozal Town.

5. The second sub-component involves Minor Works for the creation of Safe School Zones. At least four schools not benefitting directly/fully from the major works improvements will benefit from small works packages to provide for safe school routes, at schools at high risk of Road traffic Incidents as assessed by the school users, who are being trained under the Second Road Safety Project. To be funded with UKCIF grant resources.

Engineering and construction-related services

- 6. This component includes:
 - (i) the engagement of consultancy services for construction supervision pre-, post and during construction of the Major Works. A contract has already been awarded for this consultancy, to be funded with SFR loan resources.
 - (ii) the engagement of consultancy services to provide assessment, design and construction supervision for minor works to create Safe School Zones. This component will expand on work proposed under the CDB-funded 2nd Road Safety Programme. To be funded with SFR grant resources.

Other Project Support Services

- 7. This component comprises UKCIF grant funded Technical Assistance to:
 - develop and implement a gender sensitive Community and Schools Public Education Programme to increase awareness and outreach on Gender-based Violence (GBV) including Human Trafficking and Smuggling, and Transmission of Sexually Transmitted Diseases (STD), including HIV/AIDS; and
 - (ii) develop and implement a Livelihoods Capacity Development Strategy and Action Plan for communities along PGH and the Remate Bypass.

Project Management

8. The Project will be implemented by MOW through its PEU. MOW will assign a PC along with Project Support staff to be funded as counterpart. PEU will be augmented with the following:

- (i) Personnel: a Project Engineer, a Community Liaison Officer, a Social and Gender Specialist, an Environmental Officer, a Monitoring and Evaluation Specialist, and a Road Inspector. To be funded with SFR loan resources.
- (ii) Vehicles: Two four-wheel drive utility vehicles. To be funded with OCR loan resources.
- (iii) Furniture and equipment: Desks, chairs & filing cabinets for the PE, CLO & RI; laptops for PC, PE, CLO and RI; mobile phones for PE, CLO and RI; and a photocopier and two printers for the PEU. To be funded with OCR loan resources.

APPENDIX 2.2.1

CONTRACT TERMS OF REFERENCE

PREPARATION OF A FEASIBILITY STUDY AND DETAILED DESIGNS

1. BACKGROUND

1.1 The country of Belize is the only official English-speaking country in Central America. With a population of 377,9682 and an area of approximately 2.3 million hectares, Belize has the lowest population density in Central America. The climate is tropical, very hot and humid, with a dry season running from February to May, a rainy season from May to November and a cool transitional period between November and February.

1.2 Belize's road network is divided into 603 kilometres (km) of arterial roads (mainly consisting of the Hummingbird, Southern, Philip S. W. Goldson and George Price Highways); 783 km of distributor roads; 2,160 km of feeder roads (also called Farm or Sugar Roads); and 970 km of village streets. Approximately 18% of the total network is paved, of which 65% is in good and 35% in fair condition. The road network includes a total of 313 bridges. Large sections of the road network are subject to flooding during the rainy season. This is as a result of the country's low-lying topography together with inadequate maintenance and rehabilitation works, limited land use planning and insufficient drainage infrastructure. Moreover, until recently, road designs have not taken into account the increasing impacts of natural hazards and climate change variability, as well as road safety.

1.3 Much of the highway requires resurfacing; reconstruction in some area; and drainage improvements, with several sections particularly vulnerable to climate change. Road safety along the corridor is very poor, with it registering some of the highest fatality rates in the country and translates into significant economic losses to the country. A safety assessment has been completed on the entire corridor and an investment plan developed which identifies countermeasures to improve the safety of the infrastructure³. A further issue in the Corozal area is the movement of heavy goods vehicles (HGV) through the town of Corozal. A bypass via the villages of Remate and San Pedro is often utilised by HGV, but is unpaved and its usage raises health and safety concerns associated with the generation of dust and the lack of adequate facilities for vulnerable road users.

2. <u>OBJECTIVE</u>

2.1 The objective of this technical assistance is to prepare a feasibility study and preliminary and detailed designs to upgrade the Philip S. W. Goldson Highway incorporating climate change, social inclusion, gender and safety considerations. This will be achieved through the identification of climate change vulnerabilities, assessment of hydrological and hydraulic conditions, identification of least-cost civil works, and the preparation of detailed designs.

3. <u>SCOPE OF WORK</u>

3.1 The scope of services includes, but is not limited to:

1 Corridor Characterisation and Data Collection

(a) researching, collecting and analysing existing topographic, land use, hydrological, meteorological, geological, aerial imagery, and hazard event data and studies to characterise the corridor;

- (b) determination of existing traffic volumes on the road;
- (c) defining principal hydrological attributes along the corridor;
- (d) inventory and mapping of critical infrastructure and key land uses and economic activities along the corridor; and
- (e) site visits and field data collection, for data collection and for validation of existing topographic and socio-economic information, as required.

2 Stakeholder Consultations

- (a) conducting consultative and participatory stakeholder meetings periodically at appropriate points of the Project with community leaders, community groups, residents, ministerial departments and agencies and any other relevant parties;
- (b) conducting separate meetings for women and men in the communities, as necessary, and their representatives at the community and national level; and
- (c) consultations should be undertaken with these entities regarding their perspectives, concerns, perceived current needs and priorities, as well as their input to and feedback on proposed designs and implementation.

3 Feasibility Study

- 1. preparing feasibility level cost estimates;
- 2. conducting traffic counts and origin and destination surveys and prepare projections to the year 2037. Review development plans and assess their impact on future traffic volumes and overall economic impact; and
- 3. using the Highway Development and Management (HDM) IV Model to evaluate improvement and maintenance options. Options to be evaluated should include a bypass of the town of Corozal, either via the existing route through the villages of Remate and San Pedro, or an alternative greenfield alignment. Identify the relevant economic costs and benefits and determine the Net Present Value (NPV) for alternatives. An analysis period of 20 years and a discount rate of 12% are required, and should consider multi-criteria considerations.

4. Climate Vulnerability Assessment and Hydrological Modelling

- (a) Identify and evaluate the potential effects of climate change on the road and the surrounding watersheds and recommend resilience measures to address the identified vulnerabilities. The consultant should undertake a quantitative analysis that includes the following:
 - (i) characterisation of relevant climate variables and establishment of climate baseline. The consultant is expected to apply hydrologic tools to describe the behaviour of the drainage systems along the corridor. The consultant will also define the hydraulic and hydrologic variables for

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road and drainage design, based on expected climate conditions by midcentury. Mid-century climate change scenarios should be used to define road and hydraulic structure design parameters. Climate variables could include temperature and precipitation changes (and for design purposes maximum 24-hour daily precipitation could be used as the basis for assessing the risk of floods from surface runoff); incidence of hurricanes and tropical storms. Both historical data and future scenarios will be required. The consultant will be expected to provide advice on the appropriate recurrence intervals for meteorological events impacting the proposed design of the infrastructure;

- (ii) considering and factoring available historic precipitation data, climate model forecasts and scenarios assessed above, catchment surface area, topography, soil conditions, develop hydraulic and roadway design options for the upgrading of the road based on the climate change scenarios identified above, including various storm event scenarios (1-in-10, 50, 100 and 150-year events);
- (iii) using the predicted water levels and other criteria developed at (i) above, prepare a simple flood vulnerability map for the roadway, at minimum 1:5000 scale, or of a useful size relative to the study catchment, as determined with the Ministry of Works (MOW) and end-users, showing projected water levels for mid- century (2050) expected climate conditions identified above (and for return periods of 1-in-10, 50, 100 and 150-year flood events), current development activities, critical infrastructure and population at risk in the flood zones; and
- (iv) using this analysis, identify key vulnerable hotspots and potential climate adaptation measures. The consultant will prioritise the identified adaptation measures, conducting an economic analysis of each technically feasible option, showing the costs and benefits, or a cost-effectiveness analysis if the measures are expected to deliver the same benefits.

5. **Preliminary Design**

- (a) based on hydrological modelling, taking account of potential climate change impacts, and in consultation with MOW, recommend optimal options for upgrading the road and its drainage features. The consultant must also demonstrate how climate change risk and associated capital costs considerations have altered the proposed design (i.e. the specific changes in design in order to take account of climate change);
- (b) the International Road Assessment Programme recommendations should inform preliminary design activities;
- (c) preparing cost and quantity estimates for MOW agreed preferred design. The consultant should also perform a least-cost analysis and consult with MOW to determine the event horizon to be utilised in the design criteria; and
- (d) updating financial and economic analysis prepared for the feasibility assessment.

6. Environmental and Social Impact Assessment (ESIA)

- (a) conduct an ESIA of the proposed works. ESIA should involve broad stakeholder consultation as per item (b) above. It should include:
 - (i) conduct an Environmental Impact Assessment (EIA) inclusive of the consideration of natural hazards of proposed works. The assessment will consider potential significant environmental impacts (including ecological, archaeological, historic and cultural heritage resources). Specific requirements of the relevant policies, legislation, and regulations which have implications for the project activities, should be identified. Distinguish construction and post-construction phase impacts, short-term and long-term impacts, positive and negative impacts, and direct and indirect impacts. Identify the significant impacts and those that are cumulative, unavoidable, or irreversible. Consultants will be required to provide specific feasible and cost-effective mitigation measures for all significant negative environmental impacts identified for both the construction and operational phases of the Project;
 - (ii) preparation of a draft Extreme Weather Management Plan (EWMP) for inclusion in the tender documents. EWMP should provide recommendations on management practices to minimise the impacts of extreme weather on the construction phase of the Project.
 - (iii) producing a sex-disaggregated demographic profile of communities along the corridor including socio-economic, poverty status, individual and community characteristics including disability status, crime, gender-based violence, and health issues;
 - (iv) identification of key employers and livelihood activities in the communities with clear identification of opportunities to reduce poverty and promote equitable, inclusive employment through the implementation and operational phases of the Project and attention paid to identifying safety risks to road-side vending with recommendations to maximise benefits derived from livelihood activities;
 - (v) clear identification of any potential adverse social impacts of the Project (both main route and by-pass routes);
 - (vi) identification of risks and vulnerabilities during implementation and operation, including those linked to projected climate change, in the following areas including *inter alia*: housing; economic activities; employment opportunities; livelihoods; labour force participation; shelter management; natural hazards; security and violence (including genderbased); education; health; transportation; cultural and archeologically heritage; wildlife habitat; and water, sanitation, and drainage;
 - (vii) investigating gender-specific risks and vulnerabilities and gender-specific coping mechanisms, including those linked to projected climate change;
 - (viii) analysing of both qualitative and quantitative socio-economic benefits;

- (ix) prioritising community risks and vulnerabilities and community priorities for potential investments. Include women and men equally in public consultations as well as stakeholders representing the various groups including youth and persons with disabilities (PWDs).
- (x) preparation of an Environmental and Social Management Plan (ESMP) including recommended mitigation measures, recommended measures to facilitate social benefits, stakeholder engagement plan and grievance mechanisms.
- 7. **Preparation of Detailed Designs -** Based on MOW agreed preferred option, prepare detailed designs for the works. The scope of work shall include, but not be limited to, the following main activities:
 - (a) developing design criteria for the carriageway, its geometry, drainage and structural elements. The criteria should consider the recommendations of the Vehicle Weight Control Study (March 2014); as well as the findings of the Climate Vulnerability Assessment and ESIA to ensure that designs are climate resilient, gender inclusive and socially responsible;
 - (b) obtaining subsurface soils and topographical information;
 - (c) preparing designs of works to be incorporated into the Project;
 - (d) design activities which should incorporate a Stage 2 road safety audit and in particular, incorporate considerations for vulnerable road users (pedestrians, PWDs, disabilities, bicyclists, and motorcyclists) and security features along the road and at bus shelters;
 - (e) environmental, social and natural hazard management parameters, which are to be defined during the engineering studies, shall be highlighted, identified and incorporated into the final designs;
 - (f) preparing construction specifications for all the works shown on the drawings for which the consultant is responsible. The specifications shall be clear and concise with a statement setting forth the general scope of work, followed by a description of the various classes of work, under appropriate sections and headings. The quality control requirements required of the contractor, will be described in detail, including identifying standards or codes that are to apply;
 - (g) pre-qualification and bid documents will be prepared in accordance with the standard bid documents of the Caribbean Development Bank (CDB). These documents should be adapted to reflect the requirement to select a qualified and experienced contractor with regards to Environmental, Social, Health and Safety (ESHS) worksite management, provide for comprehensive ESHS Specifications for worksites, provide specifications for HIV/AIDS and gender-based violence awareness training for the contractor's and sub-contractors' personnel, and associated cost schedules;
 - (h) providing the client with an engineer's cost estimate based on the final design. This should indicate the anticipated division between local and foreign costs, and

identify the incremental costs associated with climate adaption; and

(i) submitting the plans and specifications, for approval to the client and the appropriate authorities, as required. Attend meetings at the offices of the Government of Belize (GOBZ) and authorities to discuss the designs and provide explanations for the purpose of furthering approvals.

4. IMPLEMENTATION ARRANGEMENTS

- 4.1 MOW will appoint a Project Coordinator (PC). PC will facilitate the work of the consultants and make available all studies, reports and data relevant to the completion of the exercise and will act as liaison between the consultants and GOBZ officials and stakeholders.
- 4.2 The consulting team should consist of the following key experts:
 - (a) **Key Expert 1: Team Leader/Highway Engineer** with preferably ten (10) years' experience of carrying out feasibility studies, detailed design, conducting road safety audits, and in the preparation of procurement documents for road projects. The Highway Engineer would preferably have a Bachelor's degree with professional qualifications. The candidate must have performed the function of Team Leader on at least two (2) similar projects within the past five (5) years.
 - (b) **Key Expert 2: Drainage Engineer/Hydrologist:** with preferably seven (7) years' experience of carrying out hydrological modelling of drainage basins, preparation of feasibility studies and the detailed hydraulic design of bridges, drainage structures and river training works. The Drainage Engineer would preferably have a Bachelor's degree with professional qualifications.
 - (c) **Key Expert 3: Structural/Bridge Engineer:** with preferably ten (10) years' experience of carrying out the structural design of bridges, drainage structures, and river defence infrastructure. The Structural Engineer would preferably have a Master's degree with professional qualifications.
 - (d) Key Expert 4: Geotechnical Engineer: with preferably ten (10) years' experience in road design and road construction with five (5) years' experience in countries similar to Belize, Caribbean Region or other Developing Region. The Geotechnical Engineer would require a BSc. in Civil Engineering with a Master's degree in Geotechnical Engineering with professional qualifications.
 - (e) **Key Expert 5: Transport Economist:** with preferably ten (10) years' experience of carrying out the financial and economic analysis and evaluation of road development project proposals. The Transport Economist would preferably have a Master's Degree in Economics, Civil Engineering or related discipline. Experience with HDM-IV and/or RED is considered essential.
 - (f) Key Expert 6: Environmental Specialist: with preferably seven (7) years' experience of carrying out EIAs, climate change impact assessments, and the development of Environmental Management Plans for road projects. The Environmental Specialist would preferably have a Master's degree in Environmental Sciences, Environmental Engineering, Environmental Management or related discipline, experience in disaster risk mitigation and in carrying out EIAs in accordance with the policy, guidelines and requirements of

International Financing Institutions (IFIs);

(g) **Key Expert 7: Social and Gender Impact Specialist:** with preferably seven (7) years' experience of carrying out social and gender impact assessments of transport infrastructure projects. The Social and Gender Impact Specialist would preferably have a Master's Degree in Social Sciences, Gender Studies or related discipline, experience in gender analysis, experience utilising participatory approaches to perform social and gender analysis, and experience in preparing associated social impact assessments in accordance with the policy, guidelines and requirements of major IFIs.

4.3 It is the consultant's responsibility to ensure that the team has an appropriate mix of key and nonkey experts required to satisfy the requirements of the terms of reference (TOR).

6. <u>REPORTING ARRANGEMENTS/OUTPUTS</u>

6.1 The consultant will be required to submit the following number of reports to GOBZ/MOW and CDB, respectively:

- (a) **Inception Report:** the report should describe the approaches proposed to be taken to prepare and deliver the scope of works outlined.
- (b) **Feasibility Study Report:** The report will update the previous feasibility study and include the revised traffic, updated financial and economic analysis, show potential economic benefits and revised costs to validate the continued feasibility.
- (c) **Climate Vulnerability Assessment Report:** It should include the site characterisation, climate change scenarios, hydraulic modelling, and the vulnerability analysis. It should include an analysis of drainage, hydraulic structures and roadway design options for the upgrading of the road based on various event scenarios.
- (d) **Design Reports:** the draft Preliminary Design Report should consist of a preliminary design, cost and quantity estimates for the preferred option. The draft Final Design Report should consist of agreed detailed designs, revised cost and quantity estimates and bid documents.
- (e) **ESIA Report:** the draft report should be submitted for prior review.

6.2 Comments on the Reports should be anticipated within four weeks of receipt and the consultant(s) will adjust the ongoing work according to the comments received. The consultants will revise the draft reports within one month of receipt and in accordance with the comments received. Reports should be submitted in three hard copies and electronically. The HDM IV data input files should also be provided.

6.3 Each deliverable produced by the consultant must contain, a visibility statement acknowledging that TA has been provided by UKaid and the UKaid logo must be utilised.

7. <u>DURATION</u>

- 7.1 Firms are to generate a time frame for the consultancy services considering the following:
 - (a) reporting outputs;

- (b) (c)
- duration of consultancy will be a graded factor; and striking a balance between the duration of consultancy and cost of the project.

ANNEX TO APPENDIX 2.2.1

SOCIAL ASSESSMENT AND GENDER ANALYSIS

1. The Social Assessment and Gender Analysis (SAGA) will investigate risks related to the execution of a road construction project and inform possible mitigating measures to safeguard against social and gender risks. It will be conducted in a highly participatory, gender-inclusive manner engaging the communities, in particular representatives of women and men separately, and as necessary, so that both voices can be heard. SAGA will also investigate key opportunities relating to the road project for positive social impact (e.g. poverty reduction, inclusive employment, safety and gender equality) and help inform measures to maximise such impacts. The issues to be considered/reported upon in the social and gender assessment should include, but not necessarily be limited to the following:

- (a) description of the project area including demographic, economic, topographical and sociocultural data, disaggregated by sex;
- (b) assessing the different economic and social activities of men and women in the communities adjacent to the Project and assess the effect of the Project on the economic and social activities (effect of increased access to transport, effect of construction phase);
- (c) reviewing secondary data including reports, studies, Country Gender Assessment, and relevant policy and legal documents including poverty assessments, census reports, labour force surveys, multi-indicator cluster surveys, and episodic hazard reports. Subnational secondary data will include population by sex and name of community, population density by community, school population by sex and name of school, livelihood opportunities by sex, and critical economic linkages in project areas;
- (d) collecting primary data through participatory consultations with all categories of stakeholders in order to introduce the Project, facilitate feedback, and gauge perception of the Project in order to gain and/or strengthen buy-in. Interviews, focus groups and other appropriate differential participatory methodologies may be employed for state and non- state stakeholders directly impacted by the works such as Community-Based Organisations, Non-Governmental Organisations, vulnerable groups, school personnel, private sector entities and relevant public agencies. Where applicable, focus groups may be convened for males and females, respectively. Facilitation of participation through the provision of transportation and child care as well as appropriate timing should be ensured;
- (e) conducting site visit exercises to verify, update and fill gaps using community maps, transect walks, snowballing, as well as photographic documentation, and other appropriate participatory approaches;
- (f) enhancing public participation by identifying appropriate gender-sensitive public education communication strategies for providing information on project activities and progress to stakeholders and for receiving timely feedback (pre-project, during implementation and post-implementation);
- (g) identifying outstanding social issues and concerns in the project area, including current

deficiencies in the transport arrangements – whether with respect to public transportation systems, or to the design of the infrastructure – that hinder women, children, persons with disabilities and the elderly to fully access services and markets. Assess the different transport patterns and modes of transportation used by women and men due to their different reproductive and productive tasks in the household and the economy;

- (h) assessing location for pedestrian crossings and need for cross-walks as well as the necessity of bicycle lanes;
- (i) assessing current public transportation services covering the area, the impacts of the design of the project infrastructure on the public transportation network, and the potential needs of the population, including frequency and safety – disaggregated by sex and vulnerable groups like the elderly, disabled and children – with respect to transport services during works and after the works are completed, taking into account in particular the differing needs of women and men with regards to public transportation;
- (j) assessing the need and placement of bus stops from the perspectives of different population groups women, men, the elderly, children;
- (k) assessing accessibility of the project area in keeping with universal design standards required for use by Persons with Disabilities (PWDs), and seek direct feedback from them on their requirements;
- (l) identifying any activity related to transactional and commercial sex in the project area and the possible effect of the construction work on transactional and commercial sex;
- (m) describing how the Project improves access to services and markets as well as enhances economic opportunities for women, men and vulnerable groups like the elderly and PWDs;
- (n) identifying time savings due to improved access to services and markets by sex and investigate how time would be used differently by women and men.
- (o) public illumination needs and the potential for preventing crime, including gender-based violence and sexual assault. Identify hot spots together with the police and the communities engaging women and men as they have different perspectives and advice on the placement of street lights;
- (p) description of the potential impacts of the Project at its various stages (preparation, construction, and operation) on the social context in the immediate surrounding communities. Identify any issues pertaining to the design of the Project which may have social impacts (gender, livelihood or other dimensions);
- (q) assessing whether resettlement/replacement is necessary as an effect of the Project and identify possible gender effects taking into account the distribution of male- and female-headed households in the area and the distribution of land titles by sex. Identify possible

gender-responsive resettlement and mitigation mechanisms;

- (r) analysis of the local labour force and the potential of engaging communities, in particular women, in the construction and maintenance of the Project;
- (s) assess economic activities or potential future economic activity by sex at the road and propose areas and costs for layby areas for road vendors.
- (t) analysing attitudes towards safe driving, drinking and driving, messaging and driving, speeding and driving disaggregated by sex and feed the results into the Road Safety Audit to derive possible measures of mitigation;
- (u) discussing the adequacy of proposed mitigation measures and measures to enhance social and economic development and gender equality and/or proposed alternative designs for the project; and
 - (i) estimate the cost of these measures and justify their suitability; and
 - (ii) consider measures such as public education in the area of road safety or gender- based violence/HIV/AIDS awareness training; training opportunities for vulnerable people to take part in project activities; timing, frequency and safety of public transportation; workers code of conduct and grievance mechanisms; and public illumination.
- (v) preparation of a detailed monitoring and evaluation plan for monitoring the implementation and evaluating the measures proposed to enhance social and gender outcomes of the Project. Identify gender-responsive outputs and outcomes of the project activities to facilitate genderresponsive results monitoring and evaluation and develop a gender action plan with actions, indicators, costs of implementation; and
- (w) convening a stakeholders' validation workshop to discuss the findings of the consultancy and to seek consensus and clarification on issues from participants for incorporation in the draft final and final reports.

APPENDIX 2.2.2

CONTRACT TERMS OF REFERENCE

CONSULTANCY SERVICES FOR CONSTRUCTION SUPERVISION OF MAJOR WORKS

1. BACKGROUND

1.1 The country of Belize is the only official English-speaking country in Central America. With a population of 377,968 and an area of approximately 2.3 million hectares, Belize has the lowest population density in Central America. The climate is tropical, very hot and humid, with a dry season running from February to May, a rainy season from May to November and a cool transitional period between November and February.

1.2 Belize's road network is divided into 603 kilometres (km) of arterial roads (mainly consisting of the Hummingbird, Southern, Philip S. W. Goldson and George Price Highways); 783 km of distributor roads; 2,160 km of feeder roads (also called Farm or Sugar Roads); and 970 km of village streets. Approximately 18% of the total network is paved, of which 65% is in good and 35% in fair condition. The road network includes a total of 313 bridges. Large sections of the road network are subject to flooding during the rainy season. This is as a result of the country's low-lying topography together with inadequate maintenance and rehabilitation works, limited land use planning and insufficient drainage infrastructure. Moreover, until recently, road designs have not taken into account the increasing impacts of natural hazards and climate change variability, as well as road safety.

1.3 The Philip S. W. Goldson Highway is one of Belize's most important and serves as the main trade route to and from Mexico. In 2019, a feasibility study, detailed designs and bid documentation were completed to upgrade the Philip S. W. Goldson Highway (from Mile 24.5 to 92) and the Remate Bypass incorporating climate change and safety considerations. Much of the highway requires resurfacing; reconstruction in some areas; and drainage improvements, with several sections particularly vulnerable to climate change. Road safety along the corridor is very poor, with it registering some of the highest fatality rates in the country and translates into significant economic losses to the country.

1.4 The proposed works have been packaged as four lots each for a distinct section of the highway. The project also includes upgrading the drainage system by constructing new higher capacity culverts and repairs to two existing bridges.

2. <u>OBJECTIVE</u>

2.1 The objective of this consultancy is to assist the Government of Belize (GOBZ) in the bidding process necessary for the procurement of contractors, contract management of the road works, inclusive of contractor supervision and contract administration throughout the project implementation process, inclusive of the defects liability period. The consultancy would also be responsible for post-construction reporting.

3. <u>SCOPE OF WORK</u>

3.1 The Consultant shall be solely responsible for the timely completion of reports and the effectiveness of contractor supervision. The tasks will include, but not be limited to:

(a) assisting GOBZ during the Bid Period. This includes conducting a site visit with Bidders, responding through the Ministry of Works (MOW) to queries raised by Bidders during the Bid Period, evaluating submissions and presenting a comprehensive Bid Evaluation Report

with recommendations to MOW (who will lead the negotiation process with the first-ranked contractors) and providing assistance with establishing individual contracts with the contractors.

- (b) carrying out the construction supervision services related to the upgrading Philip S. W. Goldson Highway (from Mile 24.5 to 92) and the Remate Bypass.
- (c) assigning an experienced Resident Engineer, acceptable to the MOW, together with the necessary site staff as shall be approved in writing by the Employer. The Resident Engineer will be responsible for reporting directly to, and coordinating with, the Project Execution Unit, MOW;
- (d) representing the interest of GOBZ *vis-à-vis* the contractors in any matter related to the construction contract and the proper execution thereof;
- (e) furnishing for the use of the Contractors, all necessary ground and topographic controls for the establishment of road alignments and grades;
- (f) reviewing and recommending for approval, the contractors' work schedule or revisions thereto including a critical path diagram for the construction of the Project and any such plans or programmes that the contractors are obliged to furnish for the Engineer's approval. The consultant shall also prepare an initial disbursement schedules based on the approved work schedules;
- (g) assessing the adequacy of all inputs such as materials and labour provided by the contractor and his methods of work in relation to the required rate of progress and, when required, take appropriate action in order to expedite progress. The Consultant shall also keep and regularly update a list of the contractors' equipment (and its condition) to ensure compliance with the list of equipment which the contractors pledged in their bids;
- (h) inspecting and evaluating all contractor installations, accommodation (if applicable), shops and warehouses, and other accommodations to ensure compliance with the terms and conditions of contract documents;
- (i) examining and making recommendations on all claims from the Contractors for time extension, extra compensations, work or expenses, or other similar matters;
- (j) negotiating new rates with the contractors for additional work and making requisite recommendations for approval, should the rates set out in the contract not be applicable;
- (k) certifying work done for payment and determining the amount to be added to, or deducted from, payments to the Contractors for any additional work or work omitted;
- (l) computing quantities of approved and accepted work and materials, and checking and certifying the Contractors' monthly and final payment certificates. The Consultant shall also maintain up-to-date records of remaining quantities to be incorporated in the work, and the cost estimates relating thereto, broken down into local and foreign components;
- (m) arranging the execution of works related to the provisional sums in the construction contracts and determining the value of such works within the scope of the said contracts;

- (o) proposing and presenting for approval any changes in the plans deemed necessary for the completion of works including information or any effect the changes may have on the contract amount and the time of completion of the Works, and prepare all necessary Variation Orders including altering plans and specifications and other details. Inform the employer of problems or potential problems which might arise in connection with any construction contract and make recommendations for possible solutions;
- (p) maintaining an approved representative at the site during all times the contractors are working, to supervise the work and to issue instructions, as required;
- (q) furnishing timely assistance and direction to contractors in all matters related to interpretation of the contract documents, ground survey controls, quality control testing, and other matters relating to contract and progress of the project;
- (r) organising the supervision of the works with proper allocation of responsibilities to the individual inspectors and supervise their work in order to ensure that it is effectively executed;
- (s) compiling systematic records of the inspectors' findings and what actions have been implemented as a result thereof;
- (t) preparing and maintaining inspection and engineering reports and records to adequately document the progress and performance of the works;
- (u) reviewing all contractors working drawings, shop drawings, erection drawings, and drawings for temporary works, and act as appropriate thereon;
- (v) performing verification surveys of the contractors initial stake-out surveys for centreline alignment, structures location surveys and vertical control benchmarks; performing initial cross-section and periodic and final survey measurements of completed and accepted works or partial works to determine quantities; and performing settlement control;
- (w) ensuring the receipt of, and maintaining as permanent records, all warranties required under terms of the contract documents for materials and equipment accepted and incorporated in the project. All local materials incorporated in the Project, and their source, are also to be recommended for approval. Ensure that as-built drawings shall be prepared for all works as the work progresses;
- (x) The Consultant shall take the necessary steps to oversee that all test samplings are carried out in the field and perform such tests as can be made in the field laboratory arranged by the contractors, to maintain quality control based on the specified standards. The Consultants shall be responsible for all testing and shall notify the contractors of any

defects in his work and stop operations connected with the defective works until the defects are rectified;

- (y) inspecting the so ci al, safety and environmental protection aspects of construction works and methods to ensure that every reasonable measure has been taken to protect life, environment and property, and ensure that traffic circulation and proper detours are provided by the contractors at all times;
- (z) participating in an inspection of the works, made jointly by representatives of GOBZ and the contractors, upon 97% completion of the works and following a written request of the contractors. Should the works prove to be substantially complete, the consultant will assist in preparing the Certificate of Substantial Completion to be signed by the members of the inspection team. Should the works not be acceptable, the contractors shall be informed in writing of the items that need to be rectified;
- (aa) when in the opinion of the inspection team, works are considered substantially complete but there remain outstanding works to be completed by the contractor, the Consultant will assist in ensuring that the contractors sign a Certificate of Outstanding Work, before the Recommendation of Substantial Completion becomes effective;
- (bb) performing any and all other items of works not specifically mentioned above, but which are necessary and essential to successfully supervise and control the construction activities in accordance with the plans, specifications and terms of contract. The Consultant's responsibility for the site supervision of the works shall continue until the contractor has completed all outstanding works to the satisfaction of GOBZ; and
- (cc) carrying out the necessary inspection, specifying and supervising any remedial works to be carried out as well as participating in the final inspection and preparing the Recommendation of Final Acceptance with its effective date, to be signed by all members of the inspecting team.

4. <u>REPORTING REOUIREMENTS AND DELIVERABLES</u>

- 4.1 The Consultant(s) shall provide the following documents and reports to MOW:
 - (a) **Inception Report**: the report should describe the approaches proposed to be taken to prepare and deliver the scope of works outlined.
 - (b) Bid Evaluation Report: Within three weeks of receipt of the bids forwarded by MOW, the Consultant shall present a Bid Evaluation Report on each contract or contract package, to include but not be limited to, an assessment of the bidder's compliance with the instructions to bidders, their bid sums, any corrections to the bid sums, individual rates, and proposed timeframes. A recommendation for award shall be given;
 - (c) Pre-construction Report: Within four weeks of award, the Consultant shall present a Preconstruction Report, to include but not be limited to, the minutes of the pre-construction meeting, the contract price, proposed start date, proposed completion date, the contractor's work schedule and the construction drawings and specifications to include any alterations to the scheme arising out of the bid process;
 - (d) **Construction Progress Reports:** Within one week after the due date of the Contractor's

Monthly Progress Report, but no later than the 10th day of each month, submit a Monthly Progress Report, briefly and concisely summarising construction activities and progress for the previous month, and reporting on the implementation of Environmental and Social Management Plan (ESMP). Problems encountered, and/or problems anticipated, shall be clearly stated, together with steps taken or recommendations for their correction/mitigation. These reports shall also list the contractors' equipment and work force (disaggregated by sex). It will also indicate the work to be performed during the coming month, expenditure record, and current estimates of final cost and completion date. A copy of the Contractor's Monthly Progress Report shall form an Appendix to the Consultant's report;

- (e) **Works Completion Report**: Within one month of the issue of the Taking-Over Certificate, provide a Works Completion Report, summarising the construction activities, contract changes, claims or disputes or any other substantive matters having an effect on the amount, cost and progress of the work, the current status of the works and contract, reporting on expected outcomes at the end of the Defects Notification Period and including as-built drawings. The as-built drawings shall be provided in electronic (pdf) format as well as in full size (A1) hardcopy sets. All data, records, field books, manuals, and warranties, properly indexed and catalogued, shall also be provided. Manuals and warranties shall also be provided in electronic (pdf) format;
- (f) **Contract Completion Report**: Within two months of the issue of the Performance Certificate, prepare a Contract Completion Report on the Works Contract(s), summarising the construction activities, contract changes, claims or disputes or any other substantive matters which had an effect on the quality, cost and progress of the work.

4.2 Reports and drawings should be submitted in three hard copies and electronically in the original editable formats where requested.

5. IMPLEMENTATION ARRANGEMENTS

5.1 GOBZ will appoint a Project Coordinator (PC). The PC will facilitate the work of the Consultant and make available all relevant studies, reports and data, relevant to the completion of the exercise and will act as liaison between the consultant, GOBZ officials, and stakeholders.

6. <u>OUALIFICATIONS AND EXPERIENCE</u>

6.1 The consulting team should consist of persons having the appropriate professional and academic qualifications and a minimum of 10 years' relevant experience in the areas of transportation engineering, structural engineering, geotechnical engineering, environmental specialisation, social specialisation and construction supervision. Post Graduate qualifications in the required fields as well as specific experience in the Caribbean will be considered an asset.

7. **DURATION**

7.1 The planned completion period for the construction works is 27 months, commencing January 2021, followed by a Defects Liability Period of 12 months which will require part time input from the Consultant, with approximately 2 months at the end for works contract closure. The Consultant will also be required to assist GOBZ in the Bidding process for procurement of the contractor -4 months are anticipated. The total duration of the consultancy service is therefore not expected to exceed 45 months.

BUDGET (USD)

Item	CDB
Professional Fees	
Pre-construction, Construction and Post-construction phases	2,530,000
Total	2,530,000

APPENDIX 2.2.3

DRAFT TERMS OF REFERENCE

<u>CONSULTANCY SERVICES FOR DESIGN AND CONSTRUCTION SUPERVISION OF</u> <u>MINOR WORKS TO CREATE SAFE SCHOOL ZONES</u>

1. BACKGROUND

1.1 The Government of Belize (GOBZ) has approached the Caribbean Development Bank (CDB) for financing to assist with the upgrade of the Philip S. W. Goldson Highway (PGH), from Mile 24.5 to 92, and the Remate Bypass, together the project corridor. PGH has a poor road safety record, with that section of the corridor containing several accident hotspots, and assessed to have a poor International Road Assessment Programme (iRAP) star rating of 1. The upgrades will incorporate road safety improvements designed to increase that rating to 3, which is considered the minimum acceptable level. Those improvements will consist of widening, realignments, resurfacing, drainage improvements, sidewalks, lighted bus shelters, raised pedestrian crossings and road marking.

1.2 Under the ongoing CDB-funded Second Road Safety Project, being implemented by the Ministry of Finance through its Road Safety Unit (RSU), a Safe Schools Zone Assessment is being conducted. The assessment will recommend, for select pilot schools, minor infrastructural improvements around these schools to improve road safety. Some of the pilot schools are expected to be within the project corridor.

1.3 It is proposed to support the implementation of the recommendations from the Second Road Safety Project under the PGH and Remate Bypass Upgrading Project (the Project). The Project is being implemented by the Ministry of Works (MOW) through its Project Execution Unit (PEU)

2. <u>OBJECTIVE</u>

2.1 The objective of this consultancy is to assist MOW in the identification, design and construction supervision of appropriate, proven-effective infrastructure improvements such as speed bumps, zebra crossings, sidewalks, bollards, and signage for selected schools along PGH Miles 24.5 to 92 and the Remate Bypass.

3. <u>SCOPE OF WORK</u>

3.1 The Consultant shall be solely responsible for the timely completion of reports and the effectiveness of contractor supervision. The tasks will include, but not be limited to:

- (a) reviewing the recommendations of the RSU for infrastructural improvements to create Safe School Zones. The review should occur in the context in light of the major infrastructural improvements to occur along the project corridor, specifically with respect to signage, sidewalks, speed bumps, bus shelters etc.
- (b) designing and detailing the proposed improvements,
- (c) developing cost estimates and draft Environmental and Social Management Plans (ESMPs).
- (d) developing bid documentation utilising approved templates to include invitations to bidders, instructions to bidder, bidding forms, form of contract, drawings, specifications, ESMPs, bill of quantities etc.

- (e) assisting MOW during the Bid Period. This includes conducting a site visit with Bidders, responding through the MOW to queries raised by Bidders during the Bid Period, evaluating submissions and presenting a comprehensive Bid Evaluation Report with recommendations to MOW (who will lead the negotiation process with the first-ranked contractors) and providing assistance with establishing individual contracts with the contractors.
- (f) carrying out supervision services related to the upgrading of the school zones, during the construction and post-construction phases including:
 - (i) representing the interest of GOBZ *vis-à-vis* the contractors in any matter related to the construction contract and the proper execution thereof;
 - (ii) reporting periodically on the progress of works, the Contractors' performance, quality of works and the Works' financial status and forecasts;
 - (iii) ensuring that relevant accessibility provisions are incorporated in the Minor Works; and
 - (iv) inspecting the safety and environmental protection aspects of construction works and methods to ensure that every reasonable measure has been taken to protect life, environment and property, and ensure that traffic circulation and proper detours are provided by the contractors at all times.
- (g) performing any and all other items of works not specifically mentioned above, but which are necessary and essential to successfully design and supervise the works. The Consultant's responsibility for the supervision of the works shall continue until the Contractor has completed all outstanding works identified at substantial completion to the satisfaction of MOW.

4. <u>REPORTING REOUIREMENTS AND DELIVERABLES</u>

- 4.1 The Consultant(s) shall provide the following documents and reports to MOW:
 - (a) **Preliminary Design Report**: Within three weeks of receipt of the RSU recommendations, prepare a preliminary design report to include a review of the recommendations and preliminary drawings, specifications, ESMP and a cost estimate for the works;
 - (b) **Final Design Report**: Within three weeks of receipt of comment from MOW on the Preliminary Design Report, submit a final design report comprising a report on the proposed improvements with a cost estimate and a draft bid document, all in agreed formats;
 - (c) Bid Evaluation Report: Within three weeks of receipt of the bids forwarded by MOW, the Consultant shall present a Bid Evaluation Report on each contract or contract package, to include but not be limited to, an assessment of the bidder's compliance with the instructions to bidders, their bid sums, any corrections to the bid sums, individual rates, and proposed timeframes. A recommendation for award shall be given;
 - (d) **Pre-construction Report**: Within four weeks of award, the Consultant shall present a Preconstruction Report, to include but not be limited to, the minutes of the pre-construction

meeting, the contract price, proposed start date, proposed completion date, the contractor's work schedule and the construction drawings and specifications to include any alterations to the scheme arising out of the bid process;

- (e) **Construction Progress Reports:** No later than the 10th day of each month, submit a Monthly Progress Report, briefly and concisely summarising construction activities and progress for the previous month, and reporting on the implementation of Environmental and Social Management Plan (ESMP). Problems encountered, and/or problems anticipated, shall be clearly stated, together with steps taken or recommendations for their correction/mitigation. These reports shall also list the contractors' equipment and work force (disaggregated by sex). It will also indicate the work to be performed during the coming month, expenditure record, and current estimates of final cost and completion date;
- (f) Works Completion Report: Within one month of the issue of the Taking-Over Certificate, provide a Works Completion Report, summarising the construction activities, contract changes, claims or disputes or any other substantive matters having an effect on the amount, cost and progress of the work, the current status of the works and contract, reporting on expected outcomes at the end of the Defects Notification Period and including as-built drawings. The as-built drawings shall be provided in electronic (pdf) format as well as in full size (A1) hardcopy sets. All data, records, field books, manuals, and warranties, properly indexed and catalogued, shall also be provided. Manuals and warranties shall also be provided in electronic (pdf) format;

4.2 Reports and drawings should be submitted in three hard copies and electronically in pdf as well as the original editable formats where requested.

5. IMPLEMENTATION ARRANGEMENTS

5.1 GOBZ will appoint a Project Coordinator (PC). The PC will facilitate the work of the Consultant and make available all relevant studies, reports and data, relevant to the completion of the exercise and will act as liaison between the consultant, GOBZ officials, and stakeholders.

6. **OUALIFICATIONS AND EXPERIENCE**

6.1 The Individual Consultant should have the appropriate professional and academic qualifications and a minimum of 10 years' relevant experience in the areas of civil engineering design and construction supervision. Post Graduate qualifications will be considered an asset.

7. **DURATION**

7.1 The planned completion period for the construction works is 4 months, commencing September 2022, with approximately 1 month at the end for contract closure. The Consultant will also be required to assist GOBZ in the procurement of the contractor -2 months are anticipated. The total duration of the consultancy service is therefore not expected to exceed 10 months.

BUDGET (USD)

Item	CDB
Professional Fees	
Design phase and Construction phase:	86,000
	07.000
Total	86,000

APPENDIX 2.2.4

DRAFT TERMS OF REFERENCE

CONSULTANCY SERVICES FOR THE DEVELOPMENT AND IMPLEMENTATION OF A LIVELIHOODS CAPACITY DEVELOPMENT STRATEGY AND ACTION PLAN FOR SMALL BUSINESSES AND COMMUNITIES IN THE TOWNS. DISTRICTS AND COMMUNITIES ALONG THE PHILIP GOLDSON HIGHWAY (MILES 24.5 TO 92) AND THE REMATE BYPASS

1. BACKGROUND

The Government of Belize (GOBZ) is undertaking the upgrading of the Philip Goldson Highway 1.1 (PGH) Miles 24.5 to 92 and the Remate Bypass with resources from the Caribbean Development Bank (CDB) and the United Kingdom Caribbean Infrastructure Fund (UKCIF). The road upgrade focuses on the north of Belize from the northern tip of the Belize District through the Orange Walk district, terminating in the Corozal district. The Right of Way (ROW) allows the existing highway with section beginning at Mile 24.5 in the village of Biscayne and continuing northward until immediately before the southern entrance to Orange Walk. At that point, the ROW proceeds through Section B, the Orange Walk Town Bypass (OWTB) and reconnects with the PGH at the northern entrance of Orange Walk Town at Mile 56.3. The proposed upgrading works then continue northwards until Mile 74.3 or just before the Village of Concepcion. There it proceeds through Section C, the Remate Bypass, intersecting the PGH at Mile 89.4 and then Section D, continuing on to the Belize – Mexico Border at Mile 92. Section E comprises the section that passes through Corozal Town from the south of the Remate Bypass to the north. The primary geographical areas of impact include towns and villages through which the PGH upgrading project passes directly including inter alia, Biscayne Village in Belize district, Carmelita Village and San Pablo Village - Orange Walk District, Buena Vista Village and Louisville - Corozal District, San Pedro Village, and Cristo Rey Village -Remate Bypass. Several other towns and villages, such as Tower Hill Village, San Jose Palmar, Orange Walk Town, San Narciso Village and Santa Rita Village are sufficiently close to the highway to also be indirectly impacted by the upgrading works.

1.2 Upgrading the road will improve rural farmers' access to markets for sale of produce and purchase of agricultural inputs. It will also improve connectivity to urban centres where significant numbers of people commute to work daily. Improvements to the PGH and Remate Bypass will also assist cane farmers in the northern districts who must deliver their products to the Tower Hill Sugar Factory for processing by making the road safer and more resilient to inclement weather conditions. The improved infrastructure would also increase access to schools, health facilities and administrative services, necessary elements in enhancing the socio-economic status of rural communities and contribute to poverty reduction.

1.3 GOBZ, CDB and UKCIF are committed to ensuring that the road investment benefits the communities affected, and contributes to the economic empowerment of the residents, including women and youth. The northern districts of Corozal and Orange Walk have historically been over represented in the poverty statistics in Belize. The Environmental and Social Impact Assessment (2020) indicated that economic activity in the Corozal and Orange Walk areas is centred on agricultural activity with the Corozal Free Zone providing employment opportunities in wholesale and retailing merchandising. However, there is significant entrepreneurial activity in the form of small business operators in the villages along the highway and in the main towns. In addition, there are numerous vendors, mainly women, who ply their trade along the Highway in close proximity to the villages and other strategic locations, where motorists and pedestrians can access products and produce for sale.

1.4 Currently, tourism is Belize's biggest industry. However, it does not have a stronghold in the

northern districts. Of the 890 hotels in Belize, 3.5% are in Corozal and even fewer, 2.4% are in Orange Walk, which together account for 7.3% of hotel rooms in the country. Tourist arrivals through the Santa Elena, Corozal Border made up 9.1% of tourist arrivals in 2018. These dismal statistics have not contributed to stimulating economic activity in the northern districts and towns including the many villages along the Highway. GOBZ has sought to address this situation through several initiatives aimed at enhancing the tourism product to include enhancement of its archeological sites, restoration of downtown Corozal and the enhancement of its waterfront. A major initiative includes the upgrading of the PGH which is intended to increase and diversify livelihood opportunities. While potential exists, there are limited resources within the communities to capitalise on these opportunities including the chance to participate in the creative economy and other activities that may facilitate diversity and increase income-earning potential. Furthermore, the current COVID-19 pandemic has curtailed business activity and increased poverty of vulnerable households. It is therefore recommended that resources are focused on exploring the potential economic development opportunities available for Project-impacted communities especially small businesses and entrepreneurs, including vendors, many of whom are women. This approach is intended to assist them to strategically develop an appropriate plan to take advantage of the economic development opportunities that the upgrading of the road is intended to bring.

2. <u>OUTCOME</u>

2.1 The primary outcome of the consultancy is enhanced capacity of micro and small business operators and entrepreneurs in the towns, districts, and communities along the PGH and Remate Bypass to improve livelihoods and economic empowerment through strengthened and diversified livelihood sources over the short, medium and longer-term.

3. <u>METHODOLOGY</u>

3.1 The Consultants are expected to utilise mixed methods of both quantitative and qualitative approaches to successfully undertake the assignment. The consultants should conduct the capacitybuilding assessment using differential participatory methodologies developed in consultation with Belize Social Investment Fund (BSIF), Beltraide, Ministry of Human Development, Social Transformation and Poverty Alleviation (MOHDSTPA), village councils, and other key stakeholders in Belize with experience in developing and/or implementing entrepreneurship programmes, including tourism-based incomegeneration projects, CDB's Technical Cooperation Division including Caribbean Technological Consultancy Services and Cultural and Creative Industries Innovation Fund.

4. <u>SCOPE OF SERVICES</u>

4.1 The consultants will be required to perform the following tasks in two phases:

Phase 1

- (a) undertake a baseline study of existing businesses and develop a profile of micro and small business operators and entrepreneurs identifying economic activity for people in locations that will be impacted by the project with a particular focus on women and youth;
- (b) identify potential economic development and livelihood opportunities arising from the upgrading of the PGH, based on review of available information supplemented with additional research, including consultation *inter alia*, with the Ministries of Economic Development, Belize Social Investment Fund, small business groups, Ministries of Tourism, and Agriculture, and village council representatives;

- (c) conduct an assessment and provide an overview and analysis of the capacity strengths and weaknesses across small business operators, community stakeholders in a cross section of the villages to identify the main capacity gaps and opportunities for improving livelihoods given the PGH Upgrade Project. The capacity assessment framework should recognise the multiple dimensions of capacity needed to effectively achieve economic empowerment and poverty reduction. It should go beyond individual capacity (relevant skills and abilities) to include organisational capacity (governance, structure, processes, etc.) as well as the broader context and environment within which ongoing entrepreneurial activities may be enhanced and new opportunities are created in non-traditional but high-value areas;
- (d) based on (a), (b), and (c) identify opportunities to increase participation of community residents in income-generating activities, including innovative entrepreneurial activities with a particular focus on women, youth and any other relevant disadvantaged groups;
- (e) outline a gender-sensitive, medium-term and sustainable Income-generation and Livelihoods Capacity Development Strategy and Action Plan (LSAP) for Project-affected communities and businesses, identifying potential areas of investment in capacity-building as well as opportunities, programmes and products that will enhance small business and entrepreneurs' abilities to meet their identified economic development objectives. For recommended actions and areas of investment, the LSAP should outline existing or potential programmes or agencies which can provide the support, and where additional or programmes may need to be put in place. The LSAP should also be costed;
- (f) embed a Monitoring and Evaluation (M&E) Framework within the Action Plan to include *inter alia*, the following information: activities, timelines, outcomes, outputs, and responsibilities to facilitate M&E;
- (g) undertake gender sensitisation sessions with community members (women, men and youth separately or as required) about the benefits of economic empowerment. The sessions should be designed to raise awareness about underlying norms shaping behaviours and belief systems, the legal context for gender equality and sensitivity of the local context;
- (h) conduct a natural resource inventory (NRI) of Corozal (and surrounding areas) and assess their potential contribution to the development of sustainable livelihoods in tourism and any other appropriate sector/s. The NRI will inform the development of the LSAP;
- (i) undertake a validation workshop with key stakeholders including *inter alia*, community members, BSIF, MOHDSTPA, Ministries of Economic Development; Tourism; Department of Natural Resources; Department of Environment; and the Women's Department to review the findings of the capacity assessment and the LSAP and NRI; and
- (j) revise and finalise the LSAP to incorporate the discussions and agreements made at the workshop.

Phase 2

(k) during Phase Two, the Consultants will provide support to Project-Affected communities and small businesses/entrepreneurs and BSIF for implementing priority actions identified and agreed in the LSAP over an eight-month period. In some cases, the consultants will be coordinating/monitoring implementation activities of other actors, while in others they may have a more direct, hands-on role. The LSAP should have clearly identified where actions should be implemented by others and where some direct implementation will be needed. TCD, through CTCS will seek opportunities to also support BSIF during project implementation in order to embed greater sustainability of intended outcomes; and

(1) the Consultants will review progress made on the M&E Framework and make recommendations for enhancing its use, as necessary.

5. <u>TIMING AND OUALIFICATIONS</u>

5.1 The consultancy team will deliver the services for Phase One in 30 days over a four-month period. The services for Phase Two will be delivered in 45 days over an eight-month period.

5.2 The consultancy team should possess appropriate qualifications in Sociology, Community Development, Gender Studies or a related field, as well as expertise in management or business or a related field; and Natural Resources Management with a minimum of 10 years' practical experience in applying community development and small business/livelihoods development, and natural resource management in rural communities, as well as skills in social research and analysis. Experience in working with indigenous communities would be an asset. Fluency in English is required and knowledge of Spanish and indigenous language(s) would be an asset.

6. <u>REPORTING REOUIREMENTS</u>

6.1 The consultants will report to the BSIF Executive Director or his designate.

6.2 The Technical Proposal of the selected Team of Consultants shall outline a work plan and approach to the assignment, the scope and methodology, the tasks and responsibilities and a time schedule for the completion of the assignment. The following reports, one hard copy each, along with an electronic copy either by electronic mail, on flash drive, shall be submitted to CDB and BSIF at the times indicated below.

Phase 1

- (a) Inception Report within four weeks of commencement of the assignment including the capacity assessment of the communities and business operators, a schedule for visits to Belize and to the communities, and a workplan.
- (b) Draft Report on the development of the gender-sensitive, medium-term capacity development strategy and natural resource inventory within 16 weeks of commencement of the assignment.
- (c) Draft Report on the Validation Workshop with key stakeholders, to be held within two weeks of the submission of the Draft Report.
- (d) Interim Reports within two weeks after completion outlining methods used and findings of the missions and next steps to support the objectives of the consultancy.
- (e) Final Sustainable Income-generation and Livelihoods Capacity Development Strategy and Action Plan within 20 weeks of commencement of the assignment.

Phase 2 - Implementation

- (a) Inception Report within three weeks of commencement of the assignment including the Framework for delivering implementation support to Project-Affected Businesses and Communities;
- (b) Interim reports on activities to be submitted after month 3 and month 6 of the consultancy, outlining key activities, key methods and key results and next steps to support the objectives of the consultancy.
- (c) Draft Report within six months of commencement of the assignment. The Report should outline all of the outputs identified in the scope of services section of this Terms of Reference, and will clearly identify the priority actions implemented, the beneficiaries of these actions (disaggregated by sex and age), the results of these actions, feedback from beneficiaries and any recommendations going forward.
- (d) Final Report within two (2) weeks after receipt of comments from BSIF and CDB. The Report will incorporate the comments on the Draft Report provided by BSIF and CDB.

<u>PHASE 1 – ASSESSMENT AND PLANNING BUDGET</u> (USD)

Item	TOTAL
<u>Consultants</u>	
Professional Fees Reimbursables	36,500
Stakeholder Consultations	4,000
Report Writing Communications	3,000
Sub-total	43,500
Contingencies 10%	4,350
Total	47,850

PHASE 2 - IMPLEMENTATION BUDGET (USD)

Item	TOTAL
Consultants	
Professional Fees Reimbursables	52,020
StakeholderMeetings	4,000
Report Writing }	3,000
Communication	
Sub-total	59,020
Contingencies 10%	5,902
Total	64,922

APPENDIX 2.2.5

DRAFT TERMS OF REFERENCE

CONSULTANCY SERVICES FOR THE DEVELOPMENT AND IMPLEMENTATION OF A GENDER-SENSITIVE COMMUNITY AND SCHOOLS PUBLIC EDUCATION PROGRAMME TO INCREASE AWARENESS AND OUTREACH ON GENDER-BASED VIOLENCE (INCLUDING HUMAN TRAFFICKING/SMUGGLING). AND TRANSMISSION OF SEXUALLY-TRANSMITTED DISEASES (STD) (INCLUDING HIV/AIDS) ALONG PHILIP GOLDSON HIGHWAY AND REMATE BYPASS

1. <u>BACKGROUND</u>

1.1 The Government of Belize (GOBZ) will upgrade the Philip Goldson Highway (PGH) and the Remate Bypass (the Project) with funding from the United Kingdom Caribbean Infrastructure Partnership Fund (UKCIF) and the Caribbean Development Bank (CDB). GOBZ recognises the importance of integrating social and gender considerations into the Project to mitigate against social risks and to improve the quality of life and well-being of communities within the footprint of the Project.

1.2 The Project's Environmental and Social Impact Assessment (ESIA, 2020) highlighted that an upgraded Philip Goldson Highway (PGH) and Remate Bypass will deliver significant development benefits to communities in the north of Belize as well as the country. However, during project implementation, the ingress of workers and establishment of workers camps has the potential to contribute to instances of Gender Based Violence (GBV), and the transmission of Sexually Transmitted Diseases. Of particular concern is the risk of human trafficking/smuggling given the proximity to the northern border. The contractors' contracts will include provisions to raise awareness of staff as well as enforce a standard of behaviour. However, activities to raise the awareness of the communities within which the contractors will operate are also needed in order to mitigate the risk. The benefits of undertaking such activity will redound beyond implementation, as the improved infrastructure also has the potential to unintentionally increase risks and vulnerability of remote communities including remote villages on the Remate Bypass to human trafficking³/smuggling⁴. These issues may be exacerbated by the newly improved highway through which traffickers can move more quickly (ESIA 2020:170).

1.3 During stakeholder consultations at appraisal, and in sync with the findings of the ESIA, participants articulated that human trafficking/smuggling is of concern to GOBZ and communities along PGH are potentially at increased risk of being trafficked/smuggled. This vulnerability may have been exacerbated as a result of increased unemployment and economic hardship brought about by the impacts of COVID-19 in the northern communities that have historically been overly represented in the poverty statistics. At the national level, in 2016 and 2017, authorities identified 12 and 17 victims, respectively⁵. In 2018, 17 potential victims were identified - at least 12 foreign nationals and three Belizeans, including one adult female and five minors. In addition, authorities confirmed eight forced labour victims and one sex trafficking victim. This situation was underscored by the United States Trafficking in Persons Report

³ Human trafficking is a crime against the person as it violates the victim's rights of movement through coercion, typically for the purposes of forced labour or sexual exploitation. Human trafficking is the practice of illegally taking people from one country or one area to another and can occur within a country or transnationally. It generally involves the trade in women and children.

⁴ Human smuggling is the illegal importation of people into a country via the deliberate evasion of immigration laws. Unlike human trafficking, the act of smuggling arises where the commodity being traded is the service of moving people, by consent. Persons who are smuggled, however, are at increased risk of being trafficked.

⁵ https://www.state.gov/reports/2019-trafficking in persons report 2/belize/

(2020), in which Belize ranked in Tier 2 of the Watch List. This indicates that the absolute number of victims of severe forms of trafficking is very significant and/or is likely to increase significantly.

1.4 GOBZ has a National Anti-Trafficking Action Plan (2018-2020) in place, which focuses on prevention, outreach and public awareness-raising. Stakeholder consultations revealed that "international" human trafficking occurred more so within the western and southern corridors of Belize with people being trafficked from countries such as El Salvador, Guatemala and Honduras. Consultations also confirmed that outreach to rural districts is very challenging as the physical presence of Government agencies and partner organisations in those areas is inadequate. In this regard, key stakeholders recommended the inclusion of technical assistance to increase awareness of human trafficking/smuggling within schools and communities that will be impacted by the PGH upgrade to reduce the potential and mitigate the impacts of these dehumanising, illegal and anti-social activities. This approach resonates with mitigation strategies proposed in the ESIA as well as the Bank's Performance Requirements established in its Environmental and Social Review Procedures (Safeguards) to reduce potential impacts on vulnerable groups and directly affected communities within the context of the *Do Good* development principle.

1.5 In Belize, as in most Caribbean countries, although there is legislation in place to combat trafficking/smuggling, the current prevention efforts are not sufficiently tailored to address these social maladies in an effective way. This is partly the result of a lack of understanding of what factors cause people to be vulnerable to these activities. There is a significant gap in the ability of communities, and frontline workers to identify the indicators of trafficking/smuggling and there is lack of technical capacity and skills to substantively assist survivors. Human trafficking is one dimension of gender-based violence (GBV) which according to the Country Gender Assessment for Belize (2016) continues to be one of the gravest manifestations of gender inequality in Belize. GBV covers domestic violence, incidents of rape, indecent assault, unlawful carnal knowledge (sex with a person under the statutory age of consent), commercial sexual exploitation of children and adolescents, and crimes of human trafficking/smuggling.

1.6 GOBZ wishes to undertake a consultancy to design and conduct outreach to and sensitisation/training of schools and communities in the Project area, about GBV and human trafficking/smuggling and transmission of Sexually Transmitted Diseases (STD) and HIV/AIDS.

2. <u>OBJECTIVES</u>

2.1 The aim of this consultancy is to develop and implement a Community and School training and public education/awareness programme for schools and communities along PGH and the Remate Bypass. Specifically, the consultancy will:

- (a) produce communication materials through consultation with stakeholders within the community and school via multiple media channels relating to GBV generally, human trafficking/smuggling specifically, as well as STD/HIV/AIDS prevention, including an Educational Toolkit to be used in schools; and
- (b) Conduct public gender education sessions on prevention and response to GBV including trafficking in persons/smuggling and sexual and reproductive health issues with Project-affected communities.

3. <u>SCOPE OF SERVICE</u>

3.1 The Consultants will perform all investigative work, and analyses to realise the abovementioned objectives. The consultants will undertake desk and fieldwork, and consultation with relevant persons within, as well as persons outside the sector. Specifically, the Consultants will:

- (a) review secondary data on GBV, human trafficking/smuggling and STD/HIV/AIDS in Belize, particularly along PGH and the Remate Bypass, and existing programmes to address these issues as conducted by stakeholders such as the Ministry of Human Development, Social Transformation and Poverty Alleviation (MHDSTPA), Ministry of Education, Youth, Sports and Culture (MOEYSC), Non-Governmental Organisations (NGOs), Community-Based Organisations (CBOs) and other partners who are providing support services in these areas;
- (b) prepare a Situational Analysis of GBV, human trafficking/smuggling and STD/HIV/AIDS in Belize, particularly along PGH. The analysis must identify and map, *inter alia*:
 - (i) existing and planned interventions, policies, procedures and action plans, including the gaps, and lessons learned from the Belizean experience as well as regionally and internationally. Lessons from the latter should be customised as far as possible to suit the local context and to inform the design of appropriate programmes and strategies in line with current good development practice;
 - (ii) at-risk groups and other vulnerable sub-populations and the appropriate communication strategies, media and language to reach out to them as well as the wider public;
 - (iii) key multi-sectoral stakeholders and partners including the Anti-Trafficking Committee (public, private, NGOs and CBOs) working in the sector, and
 - (iv) Opportunities to strengthen a coordinated prevention and response framework through cross-sectoral linkages with ministries and agencies such as the Trafficking in Persons Unit, the Police, Ministry of Health, Social Services, Department of Women's Affairs, Ministry of Labour, Public Safety and Immigration, Women's Groups and Civil Society in reporting and managing incidents of GBV and human trafficking/smuggling.
 - (v) Propose recommendations for closing identified gaps based on mapping, documented lessons and good practices on comprehensive referral pathways, policies, procedures and actions for addressing GBV, including TIP/smuggling.

3.2 The Consultant/s shall design a context-specific Community and School Public Education (CaSPE) Programme. The Programme must include, *inter alia*,

(a) The design of communication products and outreach packages in consultation with stakeholders, including banners, leaflets, brochures, templates, public service announcements and other knowledge products, in line with GOBZ's and CDB's branding and editorial guidelines, for multiple channels, including, print, radio, television, websites, and social media. Communication products shall target at-risk groups as identified by the Situation Analysis, among them youth and women, and information on prevention and identification, and where help for survivors may be accessed, must be developed and delivered in a culturally-appropriate, client centred and gender-sensitive manner. Two-way sharing of information should take place with government agencies and other key stakeholders that are providing services to survivors. The communication products should be disseminated in print and electronic format, as required. All templates/materials/files must be provided in "editable" formats.

- (b) Field test communications materials and review draft outputs via Stakeholders' Validation Workshop(s) with key stakeholders in the public, private and NGO sectors in the Project Area and incorporate feedback into the Final Communication Programme;
- (c) Liaise with MHDSTPA, and MOEYSC in producing an Educational Toolkit for use at schools and by teachers, students, Parent Teachers' Associations particularly in the Project Area;
- (d) Set out an implementation framework for rolling out the CaSPE Programme;
- (e) Implement the CaSPE Programme within targeted communities along the PGH using gender-sensitive and culturally-appropriate modalities that incorporate community/local, NGO, CBO, and institutional knowledge in Belize, and messages developed by sub-population groups including women, youth and men to increase buy-in for implementation; and
- (f) Identify a framework and referral pathway to link affected persons to appropriate services to receive support for the problems identified.

3.3 The Consultants shall develop a framework to measure implementation of the Programme. The Consultants shall prepare an Implementation Report for the Programme which outlines the achievements/success of the implementation, lessons learned, gaps identified and recommendations.

4. <u>REPORTING</u>

- 4.1 The following deliverables shall be submitted at the times indicated below:
 - (a) Inception Report within two weeks of commencement of the assignment.
 - (b) Situation Analysis, within five weeks of commencement of the assignment.
 - (c) *Draft* CaSPE Programme and related products for field-testing and validation with, within three months of commencement of the assignment.
 - (d) *Final* CaSPE Programme and implementation framework, within five months of commencement of the assignment.
 - (e) *Interim Report* on implementation of the CaSPE Programme, within 10 months of commencement of the assignment.
 - (f) Implementation Report for the Programme, within 15 months of commencement of the assignment.

4.2 GOBZ will provide feedback for each of the deliverables identified. All submissions shall contain sex, disability and age cohort disaggregated data and critical gender analysis.

5. IMPLEMENTATION ARRANGEMENTS

5.1 GOBZ will appoint a Project Coordinator (PC). The PC will facilitate the work of the Consultants and make available all relevant project-related reports and data relevant to completion of the assignment, and will act as liaison between the consultants, CDB and GOBZ officials and stakeholders.

6. <u>OUALIFICATIONS AND EXPERIENCE</u>

6.1 The firm must have experience in communication, social marketing and public education in the traditional and new media industry, including experience in communications for promoting gender equality

and social inclusion of vulnerable groups. Experience in messaging around GBV, human trafficking/smuggling and STD/HIV/AIDS prevention would be an asset.

6.2 The firm shall have a combination of experience and/or formal training in communications, public relations, digital and social media strategy, graphic design and video production.

7. **DURATION**

7.1 It is expected that the assignment will require a maximum of 100 days over a 15-month period.

ITEM	Cost
Consultancy fees	50,000
Media Buys/Production/Communication	82,000
Local Transportation/Venues and	
Refreshments for public education sessions	13,000
Sub-Total	145,000
Contingencies	15,000
Total	160,000

BUDGET (USD)

APPENDIX 2.3

RESULTS MONITORING PLAN

Outcome Indicator	Baseline	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Responsibility for Data Collection
1.1 Elements of the Action Plan programmed for implementation by Ministry of Human Development (Yes/No)	No; 12/31/2020	No	No	No	No	Yes	PS, MOHD
1.2 Percentage of beneficiaries who report improved livelihoods as a result of the pilot interventions [disaggregated by intervention, age, sex and disability] (%)	0; 12/31/2020	0	0	0	0	70	PEU PC, BSIF Head
2.1 Annual RTF on PGH due to automobile accidents (#)	15; 12/31/2019	15	15	15	12	12	PC then CEO
2.2 International Road Assessment Programme (iRAP) Star Rating for the Safety of Road Users (#)	1; 8/31/2020	1	1	1	3	3	PC
2.3 Road scour and flooding for 1:20 year event (Yes/No)	Yes; 8/31/2020	Yes	Yes	Yes	Yes	No	MOW CEO
2.4 Percentage of road users and community rating the project corridor as accessible and safe [disaggregated by age, sex and disability] (%)	0; 12/31/2019	0	0	0	75	75	PC
2.5 HGV as a percentage of AADT on Remate Bypass (%)	7; 8/31/2020	7	7	7	7	35	MOW conducts Post Project Traffic Surveys
2.6 Annual average road user cost (RUC) savings (\$ mn)	0; 8/31/2020	0	0	0	12.8	12.8	MOW conducts traffic surveys for all road sections to inform HDM-4 analysis.

Output Indicator	Baseline	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Responsibility for Data Collection
1.1 Minor works to school zones completed (#)	0; 12/31/2020	0	0	2	3	0	РС
2.1 Primary, secondary and other roads built or upgraded (km)	0; 12/31/2020	0	0	0	125	0	РС
2.2 Universal access provisions included [disaggregated by contract and provision] (Yes/No)	No; 12/31/2020	No	No	No	Yes	Yes	РС
2.3 Climate resilience elements included [disaggregated by contract and element] (Yes/No)	No; 12/31/2020	No	No	No	Yes	Yes	РС
2.4 ESHSMPs effectively implemented [disaggregated by contract, plan, activity] (Yes/No)	No; 12/31/2020	No	No	No	Yes	Yes	PC
2.5 Road safety features included [disaggregated by contract and type] (Yes/No)	No; 12/31/2020	No	No	No	Yes	Yes	РС
3.1 Percentage of beneficiaries reporting satisfaction with the livelihood development support received [disaggregated by sex] (%)	0; 12/31/2020	0	0	0	70	70	РС
3.2 Livelihoods Strategy and Action Plan accepted by Ministry of Human Development (Yes/No)	No; 12/31/2020	No	No	No	Yes	Yes	РС
3.3 Number of communities benefitting from livelihood development support (#)	0; 12/31/2020	0	0	0	1	0	РС

APPENDICES TO CHAPTER 3 - FINANCING PLAN

APPENDIX 3.1 PROJECT COSTS AND PHASING PLAN

	OCR-USD	OSF-GBP	SD	F 9		COUNT	ERPART	
	Equity and		SDF	SDF				
	Market	UK CIF	Resources	Resources	Total		Executing	
Components	Resources	Resources	(Grant)	(Loan)	Financing	GOBZ	Agency	Total
<u>2021 TOTAL</u>)						
Project Preparation			-					
Land			-					
Infrastructure Works			-					
Engineering and Construction-	> 5,610,000	4,878,699	-	> 3,110,85	} 13,599,555	> 1,621,778	2,570,099	19,697,232
related Services								
Other Project Support Services			-					
Project Management	J	J	-)))	J
Base Cost	5,610,000	4,878,699	-	3,110,856	13,599,555	1,621,778	2,570,099	19,697,232
Physical Contingency	561,000	485,369	-	311,066	1,357,435	6,216	3,194	1,366,845
Price Contingency	278,748	188,6882	1,348	144,506	613,274	23,300	15,764	652,338
Total Project Cost	6,449,748	5,552,756	1,348	3,566,428	15,570,264	1,651,294	2,589,057	21,716,415
Interest During Implementation	-	-	-	-	-	436,348	-	436,348
Commitment Fees	-	-	-	-	-	93,724	-	93,724
Total Financing	6,449,748	5,552,756	1,348	3,566,428	15,570,264	2,181,366	2,589,057	22,246,487
Percentage Financing	28.99	24.96	0.01%	16.03	69.99%	9.81	11.64	100.00
2022 TOTAL)	٠ ١	h	\)))
Infrastructure Works								
Engineering and Construction-	7,280,000	6,584,201	64,500	4,153,967	18,084,518	82,906	42,532	18,209,956
related Services	}	}	}	}	>	}	>	}
Other Project Support Services								
Project Management	J)	J			J		
Base Cost	7,280,000	6,584,201	64,500	4,153,967	18,084,518	82,906	42,532	18,209,956
Physical Contingency	728,000	658,42106	6,450	415,404	1,808,460	8,290	4,252	1,821,002
Price Contingency	278,748	188,6886	1,348	144,508	613,280	23,300	15,764	652,344
Total Project Cost	8,286,748	7,431,310	72,298	4,713,879	20,506,258	114,496	62,548	20,683,302
Interest During Implementation	-	-	-	-	-	436,348	-	436,348
Commitment Fees	-	-	-	-	-	93,724	-	93,724
Total Financing	8,286,748	7,431,310	72,298	4,713,879	20,506,258	644,568	62,548	21,213,374
Percentage Financing	39.07	35.03	0.34	22.22	96.67	3.04	0.29	100.00

	OCR-USD	OSF-GBP	SD	F 9		COUNTE	ERPART	
Components	Equity and Market Resources	UK CIF Resources	SDF Resources (Grant)	SDF Resources (Loan)	Total Financing	GOBZ	Executing Agency	Total
2023 TOTAL))))	g)))
Infrastructure Works								
Engineering and Construction-	5,460,000	4,740,000	21,500	\$ 3,343,977	13,562,727	82,908	42,533	13,688,168
related Services		[
Project Management	J)	J	J	J			
Base Cost	5,460,000	4,740,000	21,500	3,343,977	13,562,727	82,908	42,533	13,688,168
Physical Contingency	546,000	474,000	2,150	334,404	1,356,279	8,292	4,252	1,368,823
Price Contingency	278,752	188,692	1,352	144,508	613,288	23,300	15,764	652,352
Total Project Cost	6,284,752	5,402,692	25,002	3,822,889	15,532,294	114,500	62,549	15,709,343
Interest During Implementation	-	-	-	-	-	436,352	-	436,352
Commitment Fees	-	-	-	-	-	93,724	-	93,724
Total Financing	6,284,752	5,402,692	25,002	3,822,889	15,532,294	644,576	62,549	16,239,419
Percentage Financing	38.69	33.26	0.15	23.54	95.65	3.97	0.39	100.00
2024 TOTAL Engineering and Construction- related Services Project Management	-	-	-	683,900	683,900	82,908	42,536	809,344
Base Cost	-	-	-	683,900	683,900	82,908	42,536	809,344
Physical Contingency	-	-	-	68,396	68,396	8,292	4,252	80,940
Price Contingency	278,752	188,692	1,352	144,508	613,288	23,304	15,764	652,356
Total Project Cost	278,752	188,692	1,352	896,804	1,365,584	114,504	62,552	1,542,640
Interest During Implementation Commitment Fees	-	-	-	-	-	436,352 93,728	-	436,352 93,728
Total Financing	278,752	188,6926	1,352	896,804	1,365,584	644,584	62,552	2,072,720
Percentage Financing	13.45%	9.10%	0.07%	43.27%	65.88%	31.10%	3.02%	100.00%

	OCR-USD	OSF-GBP	SD	F 9		COUNTE	CRPART	
TOTALS	Equity and Market Resources	UK CIF Resources	SDF Resources (Grant)	SDF Resources (Loan)	Total Financing	GOBZ	Executing Agency	Total
Project Preparation Land Infrastructure Works Engineering and Construction- related Services Other Project Support Services Project Management	}	16,202,900	86,000	11,292,700	45,931,600	1,870,500	2,697,700	50,499,800
Base Cost Physical Contingency Price Contingency	18,350,000 1,835,000 1,115,000	16,202,900 1,617,790 754,760	86,000 8,600 5,400	11,292,700 1,129,270 578,030		1,870,500 31,090 93,204	2,697,700 15,950 63,056	50,499,800 4,637,700 2,609,450
Total Project Cost Interest During Implementation Commitment Fees Total Financing	21,300,000	18,575,450	100,000	13,000,000	52,974,400 	3,900,594 1,745,400 374,900 6,020,894	2,776,706	57,746,950 1,745,400 374,900 59,867,250
Percentage Financing	35.58	31.03	0.17	21.71	88.49	6.87	4.64	100.00

APPENDICES TO CHAPTER 4 - PROJECT VIABILITY

APPENDIX 4.1 ECONOMIC ANALYSIS

APPENDIX 4.1.1 - NOTES AND ASSUMPTIONS TO THE ECONOMIC ANALYSIS

HIGHWAY DEVELOPMENT MANAGEMENT MODEL-4

1. Highway Development Management Model -4 (HDM-4) was used to calculate the benefits of the Project. The analytical framework for the model is based on the concept of pavement life cycle analysis and is used to predict the effects of road deterioration, road-works, socioeconomic, and environmental effects on road-user costs over the life of a road pavement.

2. Once constructed, road pavements deteriorate as a result of several factors such as traffic loading, environmental weathering and the effect of inadequate drainage systems. The rate of pavement deterioration is directly affected by the standards of maintenance applied to repair defects such as cracking, ravelling and potholes or to preserve the structural integrity of the pavement, thereby permitting the road to carry traffic in accordance with its design capability. The impacts of road condition, as well as the road design standards on road users, are measured in terms of road-user costs, and other social and environmental effects. Road-user costs include:

- (a) VOC fuel, tyres, oil, spare parts consumption, vehicle depreciation and utilisation;
- (b) costs of travel time for both passengers and cargo; and
- (c) costs to the economy of road accidents loss of life, injury to road users, damage to vehicles and other roadside objects.

HDM ASSUMPTIONS

3. The evaluation of the road construction project was based on a comparative analysis of the cost streams "with" and "without" the Project, respectively. The cost and benefits of the Project were determined based: (i) on time savings; (ii) VOC savings; and (iii) road accident cost savings as a result of road safety features included as part of the upgraded road infrastructure. This was compared to a base case where the road condition remains unchanged when only routine maintenance is carried out. Additionally, the Remate Bypass remains unpaved and AADT remains at the current level. An HDM analysis was conducted to select from a number of road characteristics and maintenance strategies, the ones most suited to meet the particular traffic profile expected. The analysis produced a flow of net benefits which were discounted at 12% over a 20-year period.

4. It is assumed that the upgraded project roads will be maintained in accordance with existing policies, i.e. annual maintenance (routine and patching), and periodic maintenance (edge break repair, crack resealing and surface dressing), when the total damaged area exceeds 15%.

5. The base traffic model was derived from the network of roads which currently take travellers along the PGH, and to the northern border either through the Remate Bypass or through the Orange Walk Bypass, and Corozal Town, approximately 125.1 km. For HDM-4 analysis, road was divided into five homogeneous sections, and these were further divided into subsections to take account of the number of adjacent roads leading from PGH, which would impact traffic on the highway. The main sections used in this analysis are defined in Table 1.

TABLE 1:ROAD ANALYSIS

Section	Name	Length (km)
А	Mile 24.5 (Biscayne) to Orange Walk Bypass Southern Roundabout	44.4
В	Orange Walk Bypass Southern Roundabout to Remate Bypass junction south	36.7
С	Remate Bypass junction south to Remate Bypass junction north	18.6
D	Remate Bypass junction north to Santa. Elena border post	4.3
Е	Remate Bypass junction south through Corozal Town to Remate Bypass junction north	21.1
Total		125.1

BASE YEAR TRAFFIC

Traffic Surveys

6. In order to establish daily traffic levels, base year traffic was developed from a traffic survey along the Project areas undertaken in August 2018. Four types of surveys were carried out:

- (a) Turning Movement Counts carried out from 6.00 a.m. to 6.00 p.m. at 9 intersections along the PSWG Highway using video cameras.
- (b) Classified Traffic Volume (CTV) counts at five locations within the study area using automatic traffic counters for 7 days, 24 hours per day.
- (c) Origin Destination (OD) surveys conducted for each direction on the PGH at Corozal.
- (d) Journey time surveys conducted along the highway through Corozal and the Remate Bypass. A total of six round-trip surveys were conducted along each route for each peak period of morning, lunch and evening.

Existing traffic

7. Based on the CTV counts AADT was estimated at 55,888 divided into the 5 sections as provided in Table 2.

Section	AADT 2018
А	13,100
В	22,666
С	1,085
D	3,306
Е	15,731
Total	55,888

TABLE 2: AADT IN 2018

Sugar Truck Traffic Volume

8. The traffic survey results are based on the surveys carried out as described in the previous section for all vehicle categories except for Sugar Trucks. This is due to the fact that the surveys were carried out outside the sugarcane season. Sugar Truck traffic volume calculation was based on information provided by Belize Sugar Industries Limited. The company provided data on sugar cane field locations and the sugar cane factory location, which is in the south of the area dealt with in this study. Based on information on number of sugar trucks and number of crop days (203 days) the sugar truck traffic volumes were calculated and expressed in AADT values.

TRAFFIC FORECASTS

Normal Traffic Forecast

9. Traffic volumes are based on the traffic survey described in traffic volumes are presented for all sections where the traffic survey was carried out. This part of the report is focused on the traffic volumes on the main sections included in the economic assessment. The economic evaluation incorporates those road sections where traffic volumes are expected to change due to Project Case compared to Base Case. Traffic volumes for different sections were calculated for two basic scenarios.

10. Traffic forecasts were determined utilising a model developed by the UK's Traffic Research Laboratory for forecasting traffic growth in developing countries. The method relates vehicle ownership and growth to the growth of incomes and population. The categories of vehicles are (i) Goods Vehicles [*sugar trucks, articulated trucks, heavy trucks, medium trucks and light trucks*]; (ii) buses; and (iii) Private Vehicles [*cars and pickup/vans*]. Based on forecasts of average GDP growth rate of 2.5% and population growth of 2.5%, vehicle ownership rate of 0.19, the model yielded average annual traffic growth outlined in Table 3 below.

	Growth Rates (%)					
Period	Goods Vehicles	Buses	Private Vehicles	Average		
2019-2024	2.93	3.09	3.34	1.7		
2025-2043	3.34	2.67	2.73	2.9		

TABLE 3: ANNUAL TRAFFIC GROWTH - (2019 - 2043)

11. The vehicle characteristics utilised in the model are summarised in Table 4.

Vehicle	Car	Delivery Vehicles /Pick up	Medium Bus	Light Truck	Medium Truck	Heavy Truck	Articulated Truck	Sugar Trucks
Gross Vehicle Weight (t)	1.6	2.2	12.1	6.9	10.0	18.6	27.7	27.7
Vehicle Axles Equivalent Standard	2	2	2	2	2	3	6	6
Axles/Vehicle	-	2.4	2.4	2.0	2.0	3.0	4.63	4.63
Passenger Car Equivalency	1.9	2	2	1.4	1.4	1.8	1.8	1.8
No. of Tyres	4	4	6	4	6	10	18	18
Utilisation:								
Annual Utilisation (km)	20,000	30,000	66,700	30,000	53,500	80,000	90,000	90,000
Hours Driven/Year	1,800	1,160	2,320	1,200	1,500	1,500	2,320	2,320
Average Service Life (Yrs)	10	10	10	10	10	12	12	12

TABLE 4: SUMMARY OF VEHICLE FLEET CHARACTERISTICS

12. The economic prices of the representative vehicles and tyres were calculated based on CIF values adjusted for dealers mark-up. These are shown in Table 5. As required by HDM, these costs are for an equivalent new vehicle.

TABLE 5: <u>VEHICLE AND TYRE COSTS</u> (USD)

Vehicle	Car	Delivery Vehicles /Pick up	Medium Bus	Light Truck	Medium Truck	Heavy Truck	Articulated Truck	Sugar Trucks
Vehicle Cost	21,500	26,700	28,500	28,500	57,000	90,000	150,000	150,000
Tyre Cost	110	220	260	260	260	260	260	260

Petrol and Lubricants

13. The economic cost was estimated at \$0.90 and \$0.86 per litre for gasoline and diesel, respectively. The cost for lubricants was estimated at \$2.70 per litre.

Maintenance Labour

14. Maintenance cost per hour is estimated at \$6.89 per hour.

TIME SAVINGS

15. Benefits from the reduction in travel time are based on an hourly time value, the proportion of productive trips (work related), and the number of travellers per vehicle category. This is based on the World Bank paper: *The Value of Time in Economic Evaluation of Transport Projects (Professor K. Gwilliam)*. For work related trips, the analysis estimates the value of time per hour by dividing GDP per capita by the estimated number of working hours per annum. For non-working trips, the time cost is considered to be 30% of working time cost. The calculation of travel time values is provided in Table 6 below.

Average working hours	2,242
Average wage US/hour	3.26
Employment overhead (%)	33%
Shadow wage rate factor (SWR)	0.85
Working VOT (USD)	4.3
Non-working VOT (USD)	1.3

TABLE 6: ESTIMATION OF TRAVEL TIME VALUES

TRAFFIC FATALITY AND INJURY RATE

16. The "without" project scenario assumes that only routine maintenance is done and the number of serious deaths and injuries along the PGH remain at the current level. The current level is based on the average road fatalities over the period 2013 - 2018. The "with" project scenario assumes that the annual road related fatalities will be reduced by at least 23% once the countermeasures are implemented. The number of injuries is based on a ratio of 10 injuries for each fatality (10:1). This ratio is based on the

findings reported in *The True Cost of Road Crashes: Valuing life and the cost of a serious injury*. Table 7 outlines the fatality and injury rates "with" and "without the project. These amounts were applied to all sections in HDM-4 analysis.

TABLE 7: ACCIDENT RATE WITH AND WITH THE PROJECT

Item	Without	With
Number of fatalities per 100 million vehicle kilometres	7.95	6.12
Number of injuries per 100 million vehicle kilometres	79.5	61.22
Number of material damage per 100 million vehicle kilometres	87.45	67.34

COSTS TO THE ECONOMY OF ROAD ACCIDENTS

17. A key outcome of the highway safety improvement interventions envisaged in the project is a reduction in the number of deaths and serious injuries. The economic benefit from the road safety improvements is based on methodology developed by McMahon and Dahdah in 2008, and applied by iRAP globally. iRAP assesses the benefit of implementing a range of infrastructure safety measures across a network of roads, in terms of deaths and serious injuries prevented, and the associated economic savings. The base information for this analysis is the number of deaths and serious injuries that currently occur on each 100 m section of the network.

¹⁴ The True Cost of Road Crashes: Valuing Life and the Cost of Serious Injury was written by Kate MacMahon (previously Head of the Road Safety Strategy Division in the Great Britain Department for Transport) and Said Dahdah (Road Safety Engineer at WB's Global Road Safety Facility.

18. Empirical estimation of the economic value of life and serious injury often involves costly survey methods and requires considerable care in order to avoid bias. In light of this, and recognising that there is often limited crash-cost data in many low and middle-income countries, research undertaken by Katie MacMahon and Said Dahdah investigated a practical and effective approach to valuing life across different countries. On the basis of this research, the following recommendations were made with respect to the economic cost of a road death and a serious injury:

- (a) based on a regression analysis on country crash-cost data, the 'rule-of-thumb' value of a statistical life was estimated at 70 x GDP per capita at current prices;
- (b) the economic cost of a serious injury was estimated at 0.25 x economic cost of deaths.
- 19. The economic benefits for the project were calculated as follows:

(a)	GDP Per capita	\$ 4,300 (2018)
(b)	Economic cost of a death and serious injury	\$301,000 and \$75,250

PROJECT LIFE

20. For the purpose of analysis, the economic life of the roads was assumed to be 20 years from completion of construction.

CONSTANT PRICES

21. ERR calculations are based on 2020 constant prices.

22. Traded items were converted to their border price, while non-traded items were expressed in their border price equivalents after adjusting for the distortion between international and domestic prices caused by import duties, tariffs, subsidies and other market distortions, by applying a Standard Conversion Factor (SCF) of 0.94.

23. Conversion factors used for the different cost components are provided in Tables 7 to 9.

Items For Crew	Shadow rate	SCF	Base Factor
1. Skilled Labour	1.00	0.94	0.94
2. Unskilled Labour	0.60	0.94	0.56
3. Equipment/Overheads	0.80	0.94	0.75
4. Imported Materials	1.00	0.94	0.94
5. Local Materials	0.80	0.94	0.75

TABLE 8: CONVERSION FACTORS FOR COST ADJUSTMENT

Items	Skilled Labour	Unskilled Labour	Equipment	Importe Material	Local Materia l	Land	SpCF
Base Factor	0.94	0.56	0.75	0.94	0.75		
1. Project Preparation	0.80		0.20				0.902
2. Land Acquisition						0.94	0.94
3. Infrastructure Works	0.20	0.10	0.35	0.25	0.10		0.82
4. Engineering Services	0.75	-	0.20	0.05	-	-	0.90
5. Other Project	0.50	-	0.3	0.20	-	-	0.88
Support Services			0.00				0.00
6. Project Management	0.70	-	0.30	-	-		0.88

TABLE 9: DERIVATION OF SPECIFIC CONVERSION FACTORS (SpCF) FOR WORKS

24. The overall conversion factor for the Project was estimated as 0.84 as shown in Table 10.

TABLE 10: OVERALL CONVERSION FACTOR FOR PROJECT

	Financial		Economic
Item	Cost	SpCF	Cost
1. Project Preparation	2,564	0.902	2,313
2. Land	3,465	1.00	3,465
3. Infrastructure Works	46,464	0.82	37,998
4. Engineering Services	2,866	0.90	2,586
5. Other Project Support Services	273	0.88	241
6. Project Management	1,411	0.88	1,247
Total Base Cost and Physical Contingencies	57,042		47,851
Overall Conversion Factor			0.84

25. Salvage values estimated at 10% of the investment capital.

APPENDIX 4.1.2

ECONOMIC RATE OF RETURN CALCULATIONS

<u>(\$ mn)</u>

CAPITAL	RECURRE	NT COSTS	SAVINGS IN VOC	TIME SAVINGS	ACCIDENTS	NET ECONOMIC
YEAR						BENEFITS
2020	-					-
2021	17.67					(17.67)
2022	16.97					(16.97)
2023	12.63					(12.63)
2024	0.58	0.06	5.93	6.18	2.62	14.10
2025		0.06	6.32	6.39	2.71	15.35
2026		0.06	6.72	6.57	2.78	16.01
2027		2.02	7.13	6.75	2.86	14.72
2028		0.06	7.55	6.94	2.94	17.37
2029		0.06	8.02	7.13	3.02	18.11
2030		0.06	8.50	7.33	3.10	18.88
2031		0.06	9.00	7.53	3.19	19.66
2032		0.06	9.53	7.74	3.28	20.49
2033		2.02	10.09	7.96	3.37	19.40
2034		0.06	10.70	8.18	3.46	22.28
2035		0.06	11.36	8.40	3.56	23.26
2036		0.07	12.05	8.64	3.66	24.27
2037		0.13	12.76	8.88	3.76	25.27
2038		0.06	13.59	9.13	3.86	26.51
2039		2.03	13.93	9.38	3.97	25.25
2040		0.07	15.01	9.64	4.08	28.66
2041		0.06	16.19	9.91	4.19	30.23
2042		0.06	17.34	10.64	4.25	32.17
2043		0.06	18.83	11.84	4.34	39.74
2044	-4.79	0.06	19.01	11.97	4.43	40.14
		1		NPV		\$58.89
				ERR		27%

APPENDIX 4.2

GENDER ACTION PLAN

Output	Activity	Responsibility	Time
Output 1: Community and School	1. Situation analysis available	Consultants	Q3, 2021
Public Awareness Programme on Human Trafficking/Smuggling,	 Draft Communications Programme developed 	Consultants	Q4, 2021
GBV and HIV/AIDS implemented.	3. Field Testing of the Communication Products in Schools and Communities in the Project Area	Consultants	Q4, 2021
	4. Implementation of the Communication Programme	Consultants	Q1-Q3, 2022
Output 2: Livelihoods	5. Baseline study of existing businesses undertaken with inputs from men women and youth	Consultants	Q2, 2021
Enhancement Strategy and Action Plan developed.	 Livelihood Capacity Development Strategy and Action Plan developed 	Consultants	Q2, 2021
T T T	7. M&E Framework developed	Consultants	Q2, 2021
	8. Gender sensitisation sessions undertaken with communities to discuss project benefits and to seek buy-in for the intervention.	Consultants and CLO	Q2-Q4, 2021

APPENDIX 4.3

GENDER MARKER ANALYSIS

Project		
Cycle Stage	Criteria	Score
Analysis 1	Consultations with relevant categories of males and females and relevant gender-related public/ private sector organisations and Non- Governmental/ Community-Based Organisations will take / have taken place	Yes
Analysis 2	Socioeconomic, Sector and/or Institutional analysis considers gender risks and/or gender disparities that impact the achievement of project outcomes.	Yes
Design 1	Project interventions / policies address existing gender disparities.	Yes
Design 2	Project objective / outcome includes the enhancement of gender equality or the design of gender-responsive policies or guidelines.	No
	Implementation arrangements include either: Capacity building initiatives to enhance gender mainstreaming of the executing and/or implementing agency. Or	
Implementation 1	Active participation of representatives of gender-relevant stakeholders in project execution.	No
Implementation 2	Terms of Reference of consultancy/project coordinating unit/project management unit includes responsibilities and resources, including budgets for gender mainstreaming.	Yes
	Sex-disaggregated data included in the baselines, indicators and targets of the RMF.	
Monitoring and	Or Collection of any disagreemented data is part of the project	Vog
Evaluation 1	Collection of sex-disaggregated data is part of the project.	Yes
Monitoring and Evaluation 2	At least one gender-specific indicator at the outcome and/or output level in the RMF or included in tranche releases of PBLs.	Yes

Analysis	Design	Implementation	Monitoring & Evaluation	Score	Code
1.0	0.5	0.5	1.0	3.0	Gender Mainstreamed (GM)

APPENDIX 4.4 CLIMATE CHANGE VULNERABILITY ASSESSMENT

APPENDIX 4.4.1

SUMMARY RESULTS OF CLIMATE VULNERABILITY RISK ASSESSMENT

TABLE 1: SPECIFIC ADAPTATION MEASURES TO INCREASE CLIMATE RESILIENCE

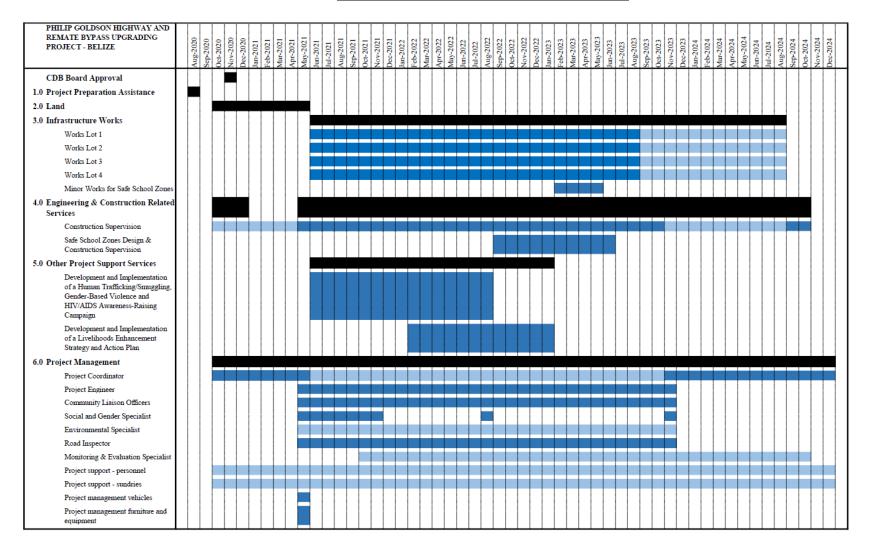
Location	Hotspot Description	Project Section	Remarks
PGH Mile 59	A tributary of the New River crosses the road at Mamayal. There is a poorly defined channel but apparent ponding of water upstream and downstream of the existing bridge. The road here is recommended for realignment to make it straighter.	В	Mamayal curve realignment including a new, larger bridge comprising double 1.2m dia. pipe culverts and a 6m wide box culvert. Existing culverts to be extended and cleaned or replaced as appropriate. Headwalls/wingwallsrepaired/replaced.
PGH Mile 59, 61, 65 and 69	Possible flow path of 8m surge event at Corozal Bay could pass across the road. These areas also suffer from fluvial and pluvial flooding.	В	Mamayal curve realignment including a new larger bridge comprising double 1.2m dia. pipe culverts and a 6m wide box culvert. Existing culverts to be extended and cleaned or replaced as appropriate.
Remate Bypass Mile 8	Remate Bypass traverses the same swamp that crosses the main road at Mile 87. This section of the road is prone to pluvial and fluvial flooding, and possibly 8m surge events at Corozal Bay.	С	Remate Bypass reconstructed on a raised embankment across the swamp. A minimum level of 4.0m above datum has been adopted for the upgraded bypass. This necessitates significant embankment construction of up to 3.4m above existing road level in this location.
Remate Bypass Mile 1.6 and 10.5	These two locations on the Remate Bypass are also prone to fluvial and pluvial flooding.	С	Remate Bypass reconstructed on a raised embankment. Existing culverts to be extended and cleaned or replaced as appropriate with 0.9m dia. concrete pipe culverts.
PGH Mile 87	Possible flow path from a swamp that drains into southern end of Sajomal Lagoon. It is possible the flow paths of the 3m and 8m surge events at Corozal Bay could pass across the road. This section is very prone to fluvial, pluvial, and coastal flooding.	E2	Tombito realignment including a new 6m wide bridge/box culvert. Existing culverts to be extended and cleaned or replaced as appropriate.

TABLE 2: BREAKDOWN OF TOTAL PROJECT COST ATTRIBUTED TO CLIMATE RESILIENCE (\$ mn)

Lot No.	Estimate	Section	Climate Resilience Intervention	Project Cost Attributed to Climate Resilience
1	5.681	А	Drainage work only	0.128
		D	Drainage works only	0.043
2	12.900	В	Drainage works throughout and Mamayal realignment embankment fill and bridge / box culvert	1.633
3	12.957	С	All works to Remate Bypass excluding signs and markings, bus stops and pedestriancrossings	15.660
4	10.367	E	Drainage works throughout and Tombito realignment embankment fill and bridge / box culvert	1.520
Total:	41.905		Total:	18.984

APPENDIX 6.1

PROJECT IMPLEMENTATION SCHEDULE



APPENDIX 6.2

ESTIMATED OUARTERLY DISBURSEMENT SCHEDULE (\$)

Year	Quarter	OCR-USD	OSF-USD	SDF 9	Finance	Total	Cumulative
2021	2021 01	(0, 607)	17,170	26.462	Charges	152.000	152.000
2021	2021 - Q1	69,687	47,172	36,463	-	153,322	153,322
	2021 - Q2	2,236,687	1,836,753	1,176,242	-	5,249,682	5,403,004
	2021 - Q3	2,071,687	1,834,415	1,176,268	-	5,082,370	10,485,374
	2021 - Q4	2,071,687	1,834,416	1,178,803	-	5,084,906	15,570,280
Sub-total		6,449,748	5,552,756	3,567,776	-	15,570,280	15,570,280
2022	2022 - Q1	2,071,687	1,834,416	1,178,806	-	5,084,909	20,655,189
	2022 - Q2	2,071,687	1,834,416	1,202,456	-	5,108,559	25,763,748
	2022 - Q3	2,071,687	1,905,861	1,202,457	-	5,180,005	30,943,753
	2022 - Q4	2,071,687	1,856,617	1,202,458	-	5,130,762	36,074,515
Sub-total		8,286,748	7,431,310	4,786,177	-	20,504,235	36,074,515
2023	2023 - Q1	2,071,688	1,785,173	1,202,460	-	5,059,321	41,133,836
	2023 - Q2	2,071,688	1,785,173	1,178,810	-	5,035,671	46,169,507
	2023 - Q3	2,071,688	1,785,173	1,178,810	-	5,035,671	51,205,178
	2023 - Q4	69,688	47,173	287,811	-	404,672	51,609,850
Sub-total		6,284,752	5,402,692	3,847,891	-	15,535,335	51,609,850
2024	2024 - Q1	69,688	47,173	224,539	-	341,400	51,951,250
	2024 - Q2	69,688	47,173	224,539	-	341,400	52,292,650
	2024 - Q3	69,688	47,173	224,539	-	341,400	52,634,050
	2024 - Q4	69,688	47,173	224,539	-	341,400	52,975,450
Sub-total		278,752	188,692	898,156	-	1,365,600	52,975,450
Total		21,300,000	18,575,450	13,100,000	-	52,975,450	52,975,450

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APPENDIX 6.3

PROCUREMENT PLAN

All Estimated Costs are in USD

A. <u>General</u>

1. **Project Information**

Country: Belize

Borrower: Government of Belize

Project Name: Philip Goldson Highway and Remate Bypass Upgrading Project

Implementing Agency: Ministry of Works

- 2. Bank's Approval Date of the Procurement Plan: December 10, 2020
- 3. **This Procurement Plan is valid until:** June 10, 2022
- 4. **Prior Review Thresholds:** Procurement decision subject to prior review by the Bank.

Procurement Method	Prior Review Threshold	Comments
ICB (Works)		
QCBS		
ICS		
LB (Goods and Works)		
NCB (Goods)		

5. **Reference to relevant Procurement Guidelines**

• Procurement Policy and Procedures for Projects Financed by CDB (2019)

6. Any Other Special Procurement Arrangements

• N/A

7. **Procurement Waivers**

• No Procurement Waivers were required as part of this Appraisal.

B. <u>Goods Works and Non-Consulting Services</u>

Ref No.	Contract (Description)	Estimated Cost	Procurement/ Selection Method	Prequalification (Yes/No)	Review by Bank (Prior/Post)	Expected Bid- Opening Date	Comments
73600-W-7	Works Lot 1		ICB	Yes	Prior	December 2020	
73600-W-8	Works Lot 2		ICB	Yes	Prior	December 2020	
73600-W-9	Works Lot 3		ICB	Yes	Prior	December 2020	
73600-W-19	Works Lot 4		ICB	Yes	Prior	December 2020	
73600-W-14	Minor Works for Safe School Zones		LB	No	Prior	July 2022	Various national contracts < USD 50,000.
73600-G-30	Project management vehicles		LB	No	Prior	January 2021	National contract
73600-G-31	Project management furniture and equipment		LB	No	Post	January 2021	Multiple national contracts

C. <u>Consulting Services</u>

Ref No.	Assignment (Description)	Estimated Cost	Selection Method	Review by Bank (Prior/Post)	Expected Proposal Submission Date	Comments
73600-C-1	Project Coordinator		NBF	n/a	April 2021	
73600-C-5	Construction Supervision of Major Works		QCBS	Prior	June 2020	Contract in place
73600-C-10	Preparation of a Feasibility Study and Detailed Designs		QCBS	Prior	n/a	Contract complete. Retroactive financing of portion
3600-C-18	Development and Implementation of a Community and Schools Public Education Programme		QCBS	Prior	April 2021	
73600-C-20	Design and Construction Supervision of Minor Works for Safe School Zones		ICS	Prior	January 2022	
73600-C-21	Development and Implementation of a Livelihoods Capacity Development Strategy and Action Plan		QCBS	Prior	March 2021	
73600-C-22	Project Engineer		ICS	Prior	January 2021	
73600-C-23	Community Liaison Officer		ICS	Prior	January 2021	
73600-C-25	Social and Gender Specialist	_	ICS	Prior	January 2021	
73600-C-26	Environmental Specialist		ICS	Prior	January 2021	
73600-C-27	Monitoring and Evaluation Specialist		ICS	Prior	February 2021	
73600-C-28	Road Inspector		ICS	Prior	April 2021	

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D. <u>Procurement Capacity Building activities for the Implementing/Executing Agency</u>

A procurement e-learning module has been prepared by CDB's Procurement Policy Unit and is accessible online to all BMCs.

E. <u>Summary of Proposed Procurement Arrangement</u>

Project Components / Contracts	CDB ('000)				NBF ('000)		Total Cost	
	ICB	IC	CS	LB	QCBS	Counterpart	Co-Financing	('000)
Project Preparation		-	-	-			-	
Preparation of a Feasibility Study and		-	-	-			-	
Detailed Designs								
Infrastructure Works			-		-	-	-	
Works Lot 2			-	-	-	-	-	
Works Lot 3			-	-	-	-	-	
Works Lot 4			-	-	-	-	-	
Works Lot 1			-	-	_	-	-	
Minor Works for Safe School Zones		-	-		_	-	-	
Engineering and Construction- related Services		-	-	-		-	-	
Construction Supervision of Major Works		-	-	-		-	-	
Design and Construction Supervision of Minor Works for Safe School Zones		-		-	-	-	-	
Other Project Support Services		-	-	-		-	-	
Development and Implementation of a Community and Schools Public Education Programme		-	-	-		-	-	_
Development and Implementation of a Livelihoods Capacity Development Strategy and Action Plan		-	-	-		-	-	
Project Management		-			-		-	
Social and Gender Specialist		-		-	-	-	-	
Project Engineer		-		-	-	-	-	
Community Liaison Officer		-		-	-	-	-	
Environmental Specialist		-		-	-	-	-	
Project management vehicles		-	-		-	-	-	
Road Inspector		-		-	-	-	-	
Project Coordinator		-	-	-	-		-	
Project management furniture and equipment		-	-		-	-	-	
Monitoring and Evaluation Specialist		-		-	-	-	-	
Summary Costs	6						-	

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Goods, Works and Non-Consultancy Services

- NCB National Competitive Bidding
- ICB International Competitive Bidding
- RCB Regional Competitive Bidding
- LB Limited Bidding
- DS Direct Selection
- FA Force Account
- CP Commercial Practices
- APA Alternative Procurement Arrangements
- NBF Non-Bank Financed
- Other

Consultancy Services:

- QCBS Quality and Cost-Based Selection
- QBS Quality-Based Selection
- FBS Fixed Budget Selection
- LCS Least-Cost Selection
- CQS Consultants' Qualification Selection
- DS Direct Selection
- CP Commercial Practices
- APA Alternative Procurement Arrangements
- ICS Individual Consultants Selection
- NBF Non-Bank Financed
- Other (as above)

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

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APPENDIX 6.4. PROJECT MANAGEMENT DUTIES AND RESPONSIBILITIES

APPENDIX 6.4.1

DRAFT DUTIES OF THE PROJECT COORDINATOR

1. The PC will be responsible for coordinating and monitoring all aspects of the implementation of the project. Additional administrative, technical and clerical support will be provided by the PEU of MOW. PC's duties will include, but will not be limited to:

- (a) preparation and submission to GOBZ and CDB of annual work plans for the project;
- (b) providing direction to, and supervision of, the day-to-day operations of the Project, guided by the project documents and the annual work plans;
- (c) monitoring and evaluation of the project, in a manner consistent with the Project's Monitoring & Evaluation Framework;
- (d) supervision of all components, including ensuring that activities and procurement schedules are carefully planned and executed;
- (e) developing close working relationships with all project participants and stakeholders (including NGOs, government departments, private sector, and Local Government officials) to achieve a shared vision of the Project and its objectives;
- (f) representation of GOBZ in all its dealings with consultants, suppliers, contractors and other stakeholders;
- (g) convening, at least monthly, meetings with the contractor(s) and engineering consultants, and with other consultants and/or supplier as required, for the purpose of coordinating activities;
- (h) liaising with CDB on all relevant technical, financial and administrative aspects of the Project;
- (i) submitting to CDB the required Project reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed;

Social and Environmental

- (j) participation in, and reporting on, formal community engagement including discussions at public meetings;
- (k) oversight of the integration of the social and gender elements of the Project, including incorporating and monitoring the social and gender aspects of the Project at strategic points during implementation;
- (1) ensuring that the mechanisms incorporated to meet CDB's Environmental and Social Safeguards are implemented;

Time Management

(m) establishing and updating on a monthly basis, a project implementation schedule (in Gantt chart format) showing progress against the baseline;

Financial Management

- (n) controlling the budget and introducing safeguards acceptable to CDB to prevent funds and assets misuse;
- (o) keeping accounts on project-related expenditure and disbursement activities;
- (p) expediting of the preparation and submission to CDB of claims for disbursement/reimbursement with regard to all components financed from the Loan/Grant;
- (q) submitting the required financial reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed;

Procurement

- (r) advertising for, and assisting, in the selection and engagement of the various consultants, contractors and suppliers;
- (s) ensuring that there is adherence to CDB's procurement procedures;

Contract Management

- (t) management and administration of the implementation of the Project's contracts;
- (u) ensuring that all contractual obligations as well as ESHS requirements are adhered to and make all necessary arrangements to ensure implementation meets projected targets; and
- (v) submitting the required Contract reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed.

2. Templates to guide the reporting requirements, including content and format, will be provided by CDB.

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APPENDIX 6.4.2

DRAFT TERMS OF REFERENCE

PROJECT ENGINEER

1. The Project Engineer (PE) will be responsible for coordinating and monitoring all aspects of the implementation of the infrastructural components of the project. Support will be provided by the Project Execution Unit's (PEU) Road Inspector. PE's duties will include, but will not be limited to:

- (a) preparation and submission to the Government of Belize (GOBZ) and the Caribbean Development Bank (CDB) of annual work plans for the project;
- (b) providing direction to, and supervision of, the day-to-day operations of the Project, guided by the project documents and the annual work plans;
- (c) monitoring and evaluation of the project, in a manner consistent with the Project's Monitoring & Evaluation Framework;
- (d) supervision of all components, including ensuring that activities and procurement schedules are carefully planned and executed;
- (e) developing close working relationships with all project participants and stakeholders (including NGOs, government departments, private sector, and Local Government officials) to achieve a shared vision of the Project and its objectives;
- (f) representation of GOBZ in all its dealings with consultants, suppliers, contractors and other stakeholders;
- (g) convening, at least monthly, meetings with the contractor(s) and engineering consultants, and with other consultants and/or supplier as required, for the purpose of coordinating activities;
- (h) liaising with CDB on all relevant technical, financial and administrative aspects of the Project;
- (i) submitting to CDB the required Project reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed;

Social and Environmental

- (j) participation in, and reporting on, formal community engagement including discussions at public meetings;
- (k) assisting in the oversight of the integration of the social and gender elements of the Project including incorporating and monitoring the social and gender aspects of the Project at strategic points during implementation;
- (1) ensuring that the mechanisms incorporated to meet CDB's Environmental and Social Safeguards are implemented;

Time Management

(m) establishing and updating on a monthly basis, a project implementation schedule (in Gantt chart format) showing progress against the baseline;

Financial Management

- (n) controlling the budget and introducing safeguards acceptable to CDB to prevent funds and assets misuse;
- (o) keeping accounts on project-related expenditure and disbursement activities;
- (p) expediting of the preparation and submission to CDB of claims for disbursement or reimbursement with regard to all components financed from the Loan/Grant;
- (q) submitting the required financial reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed;

Procurement

- (r) advertising for, and assisting, in the selection and engagement of the various consultants, contractors and suppliers;
- (s) ensuring that there is adherence to CDB's procurement procedures;

Contract Management

- (t) management and administration of the Project's infrastructural contracts;
- (u) ensuring that all contractual obligations including ESHS are adhered to and make all necessary arrangements to ensure implementation meets projected targets; and
- (v) submitting the required Contract reports outlined in the Reporting Requirements section of CDB's Appraisal Report in the time and manner prescribed.

2. Templates to guide the reporting requirements, including content and format, will be provided by CDB.

BUDGET

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

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APPENDIX 6.4.3

DRAFT TERMS OF REFERENCE

COMMUNITY LIAISON OFFICER

1. BACKGROUND

1.1 The Government of Belize has received financing from the Caribbean Development Bank for the upgrade of the Philip S. W. Goldson (PSWG) Highway. This highway is one of Belize's most important and serves as the main trade route to and from Mexico. In 2019, a feasibility study, detailed designs and bid documents were completed to upgrade PSWG Highway from Mile 24.5 to 92 and the Remate Bypass incorporating climate and safety considerations. Much of the highway requires resurfacing, reconstruction in some areas, drainage improvements, with several sections particularly vulnerable to climate change. Road safety along the corridor is very poor, with it registering some of the highest fatality rates in Belize and translates into significant economic losses to the country.

1.2 The Feasibility Study identified that upgrading the highway would generate significant economic benefits associated with reduced travel times and promotion of trade and regional integration. In addition, improved road design and incorporation of signage along the route will improve safety for motorists, cyclists and pedestrians.

1.3 Although there are significant benefits to be realised from the Project, there is also a range of social and environmental safeguard issues that were identified through the Environmental and Social Impact Assessment (ESIA) undertaken in 2019, which must be managed during implementation. In this regard, the engagement of a Community Liaison Officer (CLO) is imperative to support the Project Coordinator (PC) and the Project Execution Unit (PEU) in managing the safeguard aspects of the Project. This critical input is intended to increase the likelihood of realising the Project's intended outcomes.

2. <u>OBJECTIVE/OUTCOME</u>

2.1 The expected outcome of the Project is: increased accessibility, efficiency, resilience and improved road safety of PGH.

3. <u>SCOPE OF SERVICES</u>

3.1 The CLO will promote constructive partnerships and communication between the Ministry of Works (MOW) and the communities on issues relating to project implementation and will be responsible for implementing community engagement activities as set out in the Stakeholder Engagement Plan (SEP), as well as work closely with the Social and Gender Specialist. Among other activities, the CLO will:

- (a) Review SEP with a view to identifying and documenting any gaps in the (i) stakeholder identification and analysis that were undertaken; (ii) stakeholder engagement programme (e.g., information to be disclosed, format and communication methods; stakeholder consultation methods); and (iii) schedule for the various stakeholder engagement activities. Information in the ESIA should be used to support SEP review and implementation. The SEP must be updated to address any gaps identified. The SEP must be updated taking cognisance of the COVID-19 protocols issued by Government of Belize.
- (b) Maintain updates to the SEP as necessary, based on issues arising during implementation that may include *inter alia*, land acquisition, road safety designs and furniture to reduce

road fatalities. Any major changes to the Project activities and/or schedule will be duly reflected in the updated SEP.

- (c) Provide timely feedback to MOW on concerns raised by community leaders.
- (d) Provide timely feedback to community members on project implementation, concerns raised or important decisions taken by MOW in accordance with agreed protocols.
- (e) Develop public relations programmes along with MOW, Non-Governmental Organisations, and Community-based Organisations to educate community members about the Project and encourage their continuous buy-in and active participation throughout the project cycle.
- (f) Facilitate dialogue and sensitise Project-affected communities as necessary, with particular attention being paid to obtaining information from the less vocal persons in the communities and from identified vulnerable groups and from identified vulnerable groups through the use of differential participatory techniques.
- (g) Manage community members' expectations of the Project during scheduled meetings and ad-hoc interaction, as necessary.
- (h) Identify potential grievances or project risks and/or opportunities.
- (i) Raise awareness of employment opportunities for community members, especially vulnerable groups in the society and within the Project areas including women, youth and Persons with Disabilities (PWDs).
- (j) Assist MOW with management of, and timely responses to grievances lodged through the Grievance Redress Mechanism of the SEP.
- (k) Support MOW managers as needed (e.g. during the local labour recruitment process by assisting with drafting gender-responsive local hiring policies and procedures) especially where community requirements are being solicited.
- (1) Manage stakeholder engagement logistics such as soliciting suggestions/grievances from suggestion boxes, placing communication materials on notice boards and via social media, and arranging community meetings.
- (m) Facilitate stakeholder participation at all relevant levels in accordance with the identified needs of the different categories of stakeholders, particularly women. This may include other activities – participatory assessments and problem-solving of issues, concerns and opportunities, focus group discussions, information-sharing, and community meetings.
- (n) Assist in evaluating the social, environmental and economic impacts of Project activities on the well-being of community members using participatory approaches.
- (o) Assist in organising stakeholder meetings for the Team of Consultants who will be undertaking the Capacity Enhancement for Improved Livelihoods and Economic Empowerment of Small Businesses and Communities in the Towns, Districts, and Communities along the Philip Goldson Highway consultancy. The CLO will provide support to Belize Social Investment Fund (BSIF) in informing communities about the key

actions identified and agreed through the consultancy for implementation. In addition, the CLO will assist with facilitating stakeholder participation in the Gender-Based Violence/Human Trafficking/Smuggling Awareness Consultancy.

- (p) Assist the PC in ensuring that the implementation of project activities is in conformance with Belize's and CDB's environmental and social requirements, as articulated in the Bank's Environmental and Social Review Procedures.
- (q) Attend Project Steering Committee meetings as required and provide information on community discussions, highlighting any current and/or potential challenges likely to impact implementation progress.
- (r) Maintain comprehensive and updated minutes of meetings with the community and other stakeholders.
- (s) Prepare and submit to the PC, inputs on social aspects of the Project for incorporation into monthly progress reports to CDB.
- (t) Prepare and submit to the PC, inputs on social aspects of the Project for incorporation into a Project Completion Report, within three months after practical completion of the works.
- (u) Promote and monitor awareness training on health and safety risks directly associated with the Project. The training should include but not be limited to mitigating potential conflicts between foreign workers and local communities that may arise from an influx of workers to the various sites and/or workers' camps during construction, increased risks of harmful practices such as sex work, gender-based violence and the use of illegal drugs.

4. **DURATION**

4.1 The consultancy is expected to last no more than 35 months from the date of contract signing.

5. <u>REPORTS/DELIVERABLES</u>

5.1 CLO shall report to PC but SGS will provide training and oversight. CLO will furnish reports/deliverables on the assignment as set out below:

- (a) Prepare a final SEP before or in parallel with the Monitoring and Evaluation (M&E) Framework;
- (b) Prior to commencement of the works and in conjunction with MOW, develop and implement a results-based, gender-sensitive M&E framework/plan for the SEP that monitors the implementation of the SEP and includes the following indicators:
 - (i) Number of consultation meetings and other public discussions (forums, focus groups, etc.) conducted within a reporting period. The reporting period will be defined in the framework (e.g. monthly, quarterly, or annually).
 - (ii) Percentage of women, men, youth and Persons with Disabilities (disaggregated by age) participating in consultations by reporting period.
 - (iii) Number of grievances received within a reporting period, number of those resolved

within the prescribed timeline, disaggregated by sex of the complainant.

- (iv) Number of project-related press materials published /broadcasted in the national media.
- (c) Other information to be collected shall include:
 - (i) Geographic origin and type of grievances received, and reasons for non-resolution within the prescribed timeline including an analysis of trends.
 - (ii) Analysis of project-related press releases content: proportion that is favourable, unfavourable, neutral, and trends.
- (d) Provide a monthly (structured) field report to MOW including consultations undertaken, attendance registers (where applicable), concerns raised, requests raised, suggestions made, suggestions addressed, concerns resolved, potential risks, grievances or opportunities identified.
- (e) Assist in compiling a quarterly report for external stakeholders on stakeholder engagement activities undertaken during the previous quarter including the current status of M&E actions. The quarterly report shall include summarised information on participatory methods employed, grievances received from stakeholders (including information on incidents and events that resulted in grievances) and will be collated by the responsible staff and referred to the PC. These summaries will be accompanied by information on the implementation status of associated corrective and preventative actions and recommendations and cover suggestions received in the Quarterly Report. This report shall form part of the quarterly status reporting (provided by the PC) for the Project.
- (f) Assist in the compilation of relevant sections of the Project Completion Report.

6. **OUALIFICATIONS AND EXPERIENCE**

- 6.1 The CLO is expected to possess the following minimum qualifications:
 - (a) A minimum of five (5) years' relevant practical experience and demonstrated s k il ls encompassing stakeholder engagement practice, community development, and/or social research using participatory methodologies.
 - (b) Fluency in English and Spanish is required.
 - (c) Proficient computer skills and good written and oral communication skills are required.
 - (d) Administrative and management competence would be an asset.

BUDGET

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

APPENDIX 6.4.4

DRAFT TERMS OF REFERENCE

SOCIAL AND GENDER SPECIALIST

1. BACKGROUND

1.1 In 2019, Government of Belize (GOBZ) undertook a feasibility study to inform the upgrading of the Philip Goldson Highway (PGH) from Mile 24.5 to 92 and the Remate Bypass to improve road safety; support social inclusion and economic development; and promote greater climate change resilience along a section of the PGH between Mile 24.5 and Mile 92, linking Belize City to the Mexican Border and on the Remate Road Bypass (approximately 18 kilometres of existing gravel road).

1.2 The project includes the following components:

- Infrastructure works;
- Land acquisition;
- Engineering and construction-related services;
- Project support services; and
- Project management.

1.3 GOBZ is also implementing another road project –Sixth Road (Coastal Highway Upgrading) project, which was approved by the Board of the Caribbean Development Bank (CDB) in December 2018. The proposed objective of the project is increased climate resilience, access to services, and economic activity through improved connectivity between southern Belize and the northern districts, and enhanced income-generation capacity of communities.

1.4 This Project and the Coastal Highway Upgrading Project are funded by GOBZ utilising grant resources from the United Kingdom (UK) under the UK Caribbean Infrastructure Fund (UKCIF) and loan resources from CDB. Both projects have significant potential social and gender benefits and risks, which must be effectively managed for maximum development impact. GOBZ is therefore seeking to have the services of a Consultant Social and Gender Specialist (SGS) to work as part of the Project Execution Unit to strengthen implementation.

2. <u>OBJECTIVE</u>

2.1 The objective of this consultancy is social and gender considerations effectively and sustainably integrated into the implementation of the PGH Upgrading project and the Sixth Road (Coastal Highway) project in Belize, and effectively monitored.

3. <u>SCOPE OF SERVICES</u>

3.1 The primary role and responsibility of the Consultant SGS would be to ensure the effective and sustainable integration of social and gender considerations through the activities of the PGH Upgrading project as well as the Coastal Highway Upgrading project, ensuring that a good development practice approach is employed to manage key social and gender risks and issues; to promote social and gender benefits and to support stakeholder participation in decision-making regarding issues that affect them throughout project implementation. The Consultant SGS would be required to provide services to the Project on an intermittent basis; i.e. using a hybrid model (in-person/remote work) given the impacts of the

COVID-19 pandemic and the protocols associated with international travel and community interaction, and would substantively report to the Project Coordinator (PC).

- 3.2 The roles and responsibilities of the SGS will include, *inter alia*:
 - (a) Representing, facilitating and/or integrating social inclusion and gender equality considerations and safeguards across all proposed Project components, and actively mobilising the participation of men, women, youth, indigenous people and Persons with Disabilities (PWDs) in all implemented project components, encouraging more equitable access to project benefits by men, women, and vulnerable groups including *inter alia*, youth, PWDs, and indigenous people.
 - (b) Ensuring broad-based coordination and collaboration on the Project's social and gender impacts and resulting activities.
 - (c) Liaising with the Ministry of Works (MOW), Environmental Specialist, and Monitoring and Evaluation Specialist (hereafter referred to as the Project Consultants) to support the effective implementation of the two Belize UKCIF projects.
 - (d) Supervising the Community Liaison Officer (CLO) to ensure alignment of priorities, broad-based communication with primary and secondary stakeholders and appropriate management of key issues, risks and opportunities.
 - (e) Liaising with partners including those across Belize including, but not limited to: Ministries of Human Development, Social Transformation and Poverty Alleviation (MOHD) including the Department of Gender, Ministry of Economic Development, Ministry of Education, Youth and Sports, Environment; Belize Social Invest Fund, and BELtraide, in order to facilitate the effective implementation of the social and gender aspects of the two Belize UKCIF projects.
 - (f) Contributing to GOBZ's review and comments on the Supervision Consultant reports on both Belize UKCIF projects, with particular focus on the social, gender and health and safety aspects.
 - (g) Liaising as appropriate with the relevant members of the contractor's team and the Supervision Consultants team with regard to social and gender issues on the Project.
 - (h) Reviewing and validating both the products and actions proposed by associated Project Consultancies and including; *inter alia*:
 - The findings and recommendations proposed under the consultancy "Capacity Enhancement for Improved Livelihoods and Economic Empowerment of Small Businesses and Communities in the Towns, Districts and Communities along PGH;"
 - (ii) The findings and recommendations proposed under the consultancy "Community and Schools Public Education Programme to Increase Awareness and Outreach on Human Trafficking/Smuggling, Gender-Based Violence (GBV) and Transmission of Sexually Transmitted Diseases (STD/HIV AIDS along PGH;"
 - (iii) Any other studies that may be undertaken to support project implementation;

- (iv) Finalising the Environmental and Social Management Plan (ESMP) including the Stakeholder Engagement Plan and Grievance Redress Mechanism; and
- (v) Monitoring implementation of social mitigation measures during construction guided by the ESMP;
- (i) Helping to manage the implementation of the agreed actions from the above-mentioned consultancies and documents (including through developing time-bound, action-oriented and measurable plans in collaboration with the CLO, Project Coordinator, MOW, and other relevant GOB representatives.
- (j) Contributing to the collection and analysis of relevant social and gender data on the project.
- (k) Supporting the Project Consultants by providing relevant data and information to assist the establishment of a results management framework with realistic SMART indicators¹⁵ and targets, and implementation of the Monitoring and Evaluation Framework of the Project.
- (1) Designing and delivering gender sensitisation training to MOW staff and GOBZ relevant departments (to be determined through consultations).
- 3.3 Additional roles and responsibilities will include, *inter alia*:
 - (a) Project management, implementation and social/gender specialist support in specific areas of project implementation and as identified by the PC and/or MOW.
 - (b) Knowledge transfer and capacity-building of staff identified by GOBZ to support implementation of the two UKCIF Belize projects (and wider implementation of infrastructure projects as appropriate).

4. **DURATION**

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4.1 The consultancy is expected to last no more than thirty-six (36) months from the date of contract signing. The Consultant will be required to deliver most of the required services in person (at least 50% of time) but some services may be delivered remotely. The Consultant will dedicate 80 working days per calendar year to support both Projects, an average of 20 days per quarter to provide support to the CLOs, Project Coordinators and wider Project Teams. The scheduling of these days will be arranged taking cognisance of project needs and any relevant practical constraints around working in Belize (e.g. COVID-19 protocols).

SMART indicators: Specific, Measurable, Achievable/Attributable, Relevant, Timely/Time-Bound/Targeted (https://eca.state.gov/files/bureau/a_good_start_with_smart.pdf)

5. <u>REPORTS/DELIVERABLES</u>

5.1 The Consultant SGS would be expected to provide to the PC for approval, one hard copy and one electronic copy of the following Reports (by Project component where appropriate). Further, the SGS Consultant would be responsible for integrating their work into the PC's quarterly reporting and other requirements, ensuring a clear representation of the work undertaken to advance social-inclusion and gender equality through the project components:

- (a) Final project-level ESMP, inclusive of SEP and GRM, within three (3) months of signing the contract.
- (b) Summary reports on all Consultant SGS and CLO activities undertaken through the mandate of the SGS and CLO TORs on a quarterly basis or as appropriate (e.g. if incidents occur), in line with the PC's reporting requirements and the specific UKCIF monitoring and reporting requirements. These reports will outline progress in areas of responsibility and against the ESMP; identify and analyse relevant social and gender issues and risks; and present and analyse relevant monitoring data (including results).

6. <u>OUALIFICATIONS AND EXPERIENCE</u>

6.1 The Consultant <u>must possess</u> a strong awareness of and sensitivity to gender, disability, youth, labour, and the intersectionality of these issues and their impacts on poverty, and other social inclusion issues, and must possess the following minimum qualifications, skills and experience:

- (a) Master's level or Bachelor's Degree with equivalent experience, in social work, community development, social psychology, gender studies, sociology, international development, anthropology, social policy or other related field.
- (b) Minimum of seven (7) years' relevant practical experience working on social and gender issues in development programming (e.g. community development, livelihoods programming, economic development programming), with some experience of stakeholder engagement practice, social and gender analysis and/or social/gender research using participatory approaches including qualitative research techniques (surveys, focus groups, workshops, mediation, facilitation, etc.).
- (c) Minimum of seven (5) years' experience developing and delivering gender sensitisation training.
- (d) Minimum of five (5) years' experience in community research and participatory community development.
- (e) Excellent written and verbal communication skills in English.
- (f) Proven capacity to work as part of a team.
- 6.2 Assets for consideration would include:
 - (a) Specific experience working on social and gender issues in infrastructure projects, including social safeguard oversight.
 - (b) Experience or skills on monitoring and evaluating social and gender issues.

- (c) Knowledge of Spanish.
- (d) Experience working in Belize or other Borrowing Members of CDB and experience working with indigenous populations.

BUDGET (USD)

Item	CDB
Consultancy Services and Travel	177,000
Contingencies (10%)	17,700
Total	194,700

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APPENDIX 6.4.5

DRAFT TERMS OF REFERENCE

ENVIRONMENTAL SPECIALIST

1. <u>BACKGROUND</u>

1.1 The Government of Belize (GOBZ) wishes to engage the services of an Environmental Specialist (ES) to support the Project Execution Unit (PEU) of the Ministry of Works (MOW). The PEU is/will be responsible for the management and implementation of the Coastal Highway (CH) Upgrade Project and the Philip Goldson Highway (PGH) and Remate Bypass Upgrading Project – both financed by the Caribbean Development Bank (CDB).

1.2 The captioned projects overall objective is to contribute to increased resilience in the road sector of Belize. Expected outcomes include increased efficiency, resilience and improved road safety of PGH and CH. The Consultant shall report directly to the Project Coordinator, of the PEU or his/her designate.

2. JOB DESCRIPTION

General Accountabilities

2.1 The ES will report to Project Coordinator of the PEU and is responsible for ensuring that environmental requirements are adhered to during the construction phases of the two projects. His/her duties will include, but will not be limited to:

- (a) reviewing environmental mitigation measures in the contractors' Environmental, Social, Health and Safety Management Plan (ESHSMP) for suitability and appropriateness and likelihood of meeting performance requirements as stated in the bid documents/contract specifications and project design details including specific items such as responsibilities for environmental monitoring, health and safety, environmental, reporting, public information, consultations and grievance mechanisms;
- (b) monitoring the implementation of the ESHSMP ensuring proper implementation of the Environmental, Health and Safety mitigation measures;
- (c) liaising with the construction supervision consultants engaged by MOW to ensure effective and timely implementation of environmental management measures;
- (d) undertaking regular site visits to verify contractor compliance with ESHSMP implementation at each project site throughout project implementation;
- (e) participating in meetings to engage the appropriate community/stakeholders;
- (f) preparing monthly Environmental Monitoring Reports. The reports should identify any environmental and social issues or cases of incompliance, and make recommendations for corrective action in a corrective action plan, including specific steps and timing for any remediation/corrective actions to re-establish compliance;
- (g) monitoring the implementation of any Corrective Action Plan;

(h) reviewing Compliance Reports on EPPs submitted by the construction supervision engineers engaged under the project; and

Specific Accountability - Transfer of Knowledge

(i) MOW is desirous of enhancing the capacity of the officers assigned to the PEU. The Consultant will be responsible for the preparation of a training programme where the transfer of knowledge will be pivotal. A training programme with a clearly outlined methodology shall be submitted with the proposal.

3. <u>OUALIFICATIONS AND EXPERIENCE</u>

- 3.1 Prospective candidates should have a minimum of the following qualifications and experience:
 - (a) a Masters Degree in Environment Engineering/Environmental Sciences/Environmental Studies or related field with a minimum of eight years' demonstrated experience in environmental management and environmental sustainability and supervision of environmental aspects of infrastructure projects. He/she should have the ability to express and report results in a concise and clear manner; and
 - (b) demonstrate ability to work within a multi-disciplinary team environment, while demonstrating initiative and self-motivation.

4. <u>DURATION</u>

4.1 The consultancy is expected to be conducted intermittently over a period of approximately 32 months.

BUDGET

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

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APPENDIX 6.4.6

DRAFT TERMS OF REFERENCE

ROAD INSPECTOR

1. <u>BACKGROUND</u>

1.1 The Government of Belize (GOBZ) has applied to the Caribbean Development Bank for financing to assist with the upgrading of the Philip Goldson Highway (PGH) from Mile 24.5 to 92 and the Remate Bypass to improve road safety; climate resilience.

1.2 The project includes the following components:

- Infrastructure works;
- Land acquisition;
- Engineering and construction-related services;
- Other Project support services; and
- Project management.

1.3 This Project will be implemented by the Ministry of Works through its Project Execution Unit. Primary responsibility for the implementation of the works will lie with the assigned Project Engineer within the PEU. GOBZ requires a Road Inspector to assist the PE in the execution of his/her duties.

2. <u>OBJECTIVE</u>

2.1 The objective of this consultancy is support the Project Engineer within the PEU with monitoring the implementation of the PGH and Remate Bypass Upgrading Project.

3. <u>SCOPE OF SERVICES</u>

- 3.1 The roles and responsibilities of the RI will include, *inter alia*:
 - (a) Maintain a daily presence on the work sites;
 - (b) Assist PE with monitoring the Contractor's and any of his sub-contractor's work performance in consultation with the Construction Supervision Consultant to verify that the works are being executed in accordance with the Contract, and that the quality of materials and workmanship are in accordance with standard specifications and good engineering practices.
 - (c) Assist PEU and GOBZ personnel with monitoring of the ESMP
 - (d) Assist PE with the review of payment and completion certificates from the Construction Supervision Consultant.
 - (e) Note any delays which would affect the agreed completion date and make the necessary recommendations which would mitigate any request for extensions of time.

4. <u>DURATION</u>

4.1 The consultancy is expected to last no more than thirty-one (31) months from the date of contract signing. The Consultant will be required to deliver the required services in person but some services may be delivered remotely due to COVID-19 protocols.

5. <u>REPORTS/DELIVERABLES</u>

5.1 The Consultant RI would be expected to provide daily verbal reports to the PE and weekly written reports to the PE, in electronic form and in a format agreed with the PC.

6. <u>OUALIFICATIONS AND EXPERIENCE</u>

6.1 The Consultant must possess the following minimum qualifications, skills and experience:

- (a) Associate level Degree in engineering, construction, quantity surveying or other related field.
- (b) Minimum of five (5) years' relevant experience in road construction.
- (c) Good written and verbal communication skills in English.
- (d) Proven capacity to work as part of a team.
- (e) Knowledge of Spanish would be an asset.
- (f) Qualifications in Occupational Safety and Health would be an asset.
- (g) Experience working on projects funded by Multi-lateral Development Banks would be an asset.

BUDGET (USD)

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.

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APPENDIX 6.4.7

DRAFT TERMS OF REFERENCE

MONITORING AND EVALUATION SPECIALIST

1. <u>BACKGROUND</u>

1.1 The Government of Belize (GOBZ) wishes to engage the services of a Monitoring and Evaluation (M& E) Specialist to support the Project Execution Unit (PEU) of the Ministry of Works (MOW). The PEU is/will be responsible for the management and implementation of the Coastal Highway (CH) Upgrade Project and the Philip Goldson Highway and Remate Bypass (PGHRB) Upgrade Project – both financed by the Caribbean Development Bank (CDB).

1.2 The captioned projects' overall objective is to contribute to increased resilience in the road sector of Belize. Expected outcomes include increased efficiency, resilience and improved road safety of PGHRB and CH.

2. <u>OBJECTIVE</u>

2.1 This consultancy aims to (i) finalise the Monitoring and Evaluation Framework (MEF) and Implementation Plan to assess the progress of project outputs and outcomes; (ii) design an evaluation strategy to assess the project's contribution to socially inclusive sustainable economic development, the intended and unintended) impacts on project affected persons, and the results of the project; and establish baselines and conduct a mid-point evaluation.

3. <u>SCOPE OF SERVICES</u>

- 3.1 The Consultant will be expected to carry out and deliver on the following tasks:
 - (a) Review project documents including the log frame, targets and indicators, theory of change and existing monitoring tools.
 - (b) In collaboration with CDB's Monitoring and Results (M&R) Specialist for UKCIF projects, finalise MEF to track and analyse project performance. MEF should outline performance indicators (output and outcomes) with clear definitions, milestones, data collections strategies, and frequency of collection. It should include methodologies for measuring these and who is responsible for collection. It should also clearly demonstrate how the impacts outlined will be measured and evidence for the evaluations will be generated.
 - (c) Design an Evaluation Strategy that draws on the CDB evaluation criteria related to relevance, effectiveness, efficiency, impact and sustainability, coverage and coherence. Evaluation methods should be elaborated and should include quantitative and qualitative approaches. The evaluation design should facilitate the gathering of robust evidence about how, where and why (or why not) the Project was effective and achieved results.

3.2 Submit the baseline data and overall evaluation strategy and work plan for the evaluation process. Specifically:

(a) Identify the range of data and information required to appropriately monitor and evaluate

the Project.

- (b) Identify data disaggregated by sex and age to be collected, as well as other entry points for gender responsive M&E of the project.
- (c) Identify the relevant, measurable, appropriate, unambiguous gender-responsive indicators of Project outputs and outcomes, and impact on Project beneficiaries. Some of these may be proxy indicators.
- (d) Collaborate with CDB's Monitoring and Results Specialist for UKCIF projects, to ensure consistency and internal coherence with other M&E activities and processes. The M&E Specialist will also collaborate with relevant thematic experts within and beyond the PEU, as needed, to get the relevant specialist input (social, gender and environment) to inform their work.

3.3 Conduct a project mid-point process evaluation to assess whether project activities, including relocation of project-affected persons, have been implemented as intended and resulted in certain outputs.

3.4 Within three months of practical completion of the works, or completion of the capacity building activities, whichever is later, conduct a final outcome evaluation based on the methods and data defined at the outset. The final evaluation should also identify and spell out good practices, lessons, gaps, and recommendation of strategies for future replication and adaptation of the initiative.

4. <u>REPORTING</u>

- 4.1 The following deliverables shall be submitted at the times indicated below:
 - (a) A revised MEF, as described in Item 3.01 (b) above, within 60 days of commencement of the assignment.
 - (b) An Evaluation Strategy, as described in Items 3.01 (c) and 3.02, within 3 months of commencement of the assignment.
 - (c) A Baseline Assessment Report, as described in Item 3.02, within 6 months of commencement of the assignment.
 - (d) A Mid-term Process Evaluation Report, as described in Item 3.03, within 24 months of commencement of the assignment.
 - (e) A Final Evaluation Report, as described in Item 3.04, within 3 months of completion of the referenced activities (estimated at about 36 months after commencement of the assignment).

4.2 MOW, through PC, will provide feedback to each of the deliverables described in 4.01 above within 10 working days of receiving the Report. All Reports shall contain sex-disaggregated data and critical gender analysis of the information presented.

4.3 Deliverables will be reviewed and certified as satisfactory by the MOW. They must be submitted electronically in pdf format as well as in an original editable Microsoft Office format, and in hard/printed copy.

5. <u>IMPLEMENTATION ARRANGEMENTS</u>

5.1 MOW will appoint a Project Manager (PC). The PC will facilitate the work of the Consultant(s) and make available all relevant studies, reports and data, relevant to completion of the exercise and will act as liaison between the Consultant(s) and GOBZ officials and stakeholders.

5.2 It is expected that the Consultant(s) will conduct the research, develop the evaluation methodology and strategy, conduct the baseline, interim and final data collection, analyse the data, and produce the corresponding reports.

5.3 The Consultant will be responsible for arranging their own logistics, including meetings, transport and accommodation if required, but may be assisted by the PC as necessary.

6. <u>OUALIFICATIONS AND EXPERIENCE</u>

- 6.1 The Consultant(s) should have:
 - (a) specialist training and suitable qualifications and at least eight years of work experience in ongoing M&E, impact evaluation, social analysis, collection and analysis of sexdisaggregated data, and development of gender-responsive indicators;
 - (b) expertise and experience in:
 - (i) designing and applying robust and appropriate performance monitoring and results frameworks (including expertise and experience in indicator development, testing and data collection / analysis);
 - (ii) M&E of large, complex, long term projects and generating data to demonstrate project effectiveness;
 - (iii) experience in M&E social and gender results; and
 - (iv) Caribbean region and a demonstrated understanding of political economy issues in the Region; and
 - (c) Good communication skills, both orally and in writing, including fluency in written and spoken English.

7. <u>DURATION</u>

7.1 The services are expected to be delivered intermittently over a period of 32 months.

8. <u>COMMENTS BY THE CONSULTANT(S)</u>

8.1 The Consultant is requested to make comments on, and suggestions for, improvements to these Terms of Reference. The financial implications, if any, of these recommendations should be indicated separately in the Financial Proposal.

<u>BUDGET</u> (USD)

Item	CDB
Professional Fees/Airfare/Per Diem	30,000

APPENDIX 6.4.8

DRAFT DUTIES OF THE COMPONENT STEERING COMMITTEE

1. The Community and Schools Awareness-Raising Programme and the Livelihoods Capacity Development Strategy and Action Plan components of the Philip Goldson Highway and Remate Bypass Upgrading Project will require engagement by MOW with stakeholders outside of those typically engaged on a road project. A Component Steering Committee (CSC) will be established to provide managerial oversight, advice, guidance and direction on implementation those components. CSC will comprise:

- 1. Chief Executive Officer, Ministry of Works Chairperson (or designate);
- 2. Representative from the Ministry of Finance;
- 3. Representative from the Ministry of Economic Development and Petroleum, Investment, Trade and Commerce;
- 4. Representative from the Ministry of Human Development, Social Transformation and Poverty Alleviation
- 5. Representative from the Ministry of Transport and NEMO;
- 6. Representative from the Ministry of Health;
- 7. Representative from the Ministry of Education;
- 8. Representative from the Ministry of Natural Resources and Immigration (MNRI).
- 9. Representative from the Police Department;
- 10. Representative from the National Commission on Women;
- 11. Representative from the Belize Social Investment Fund (BSIF);
- 12. Representative from a nominated project community;
- 13. Representative from a nominated Non-Governmental Organisation;
- 14. The project's Community Liaison Officer (CLO)/Social and Gender Specialist (SGS);
- 15. The Project Coordinator.

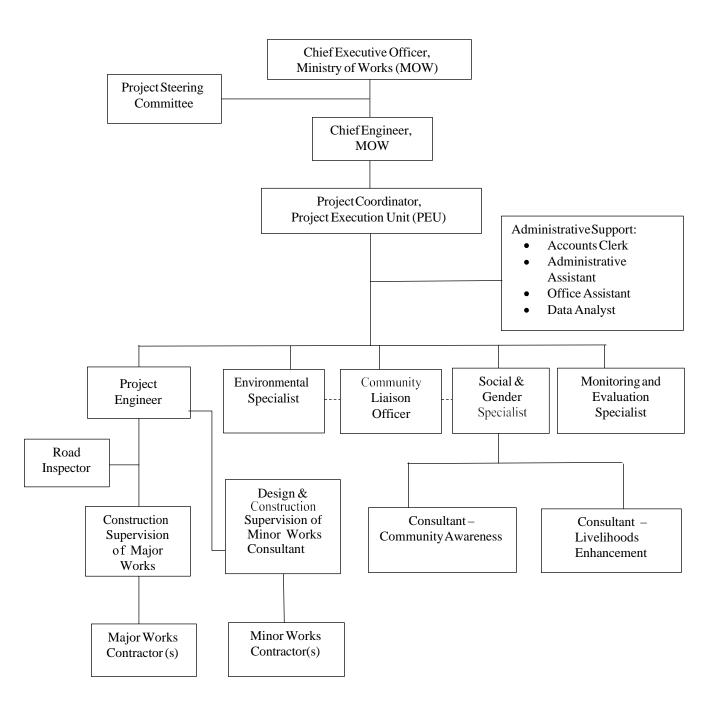
2. CSC will be responsible for facilitating the effective implementation of the two consultancies by promoting information-sharing and inter-agency cooperation among government departments and agencies, development partners and other stakeholders, reviewing project status and progress, and addressing issues that may arise.

3. CSC shall meet at least quarterly.

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APPENDIX 6.5.1

PROJECT ORGANISATION CHART



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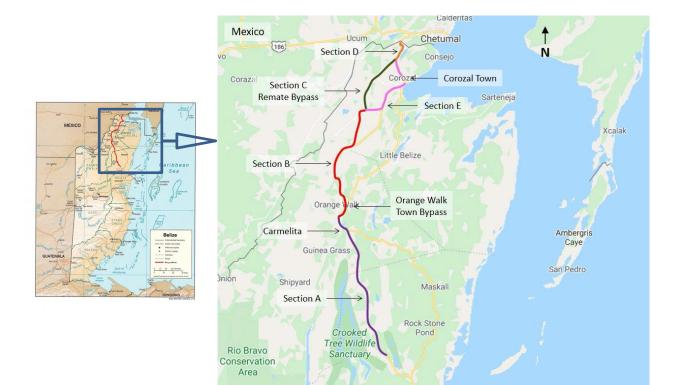
APPENDIX 6.7.1

REPORTING REOUIREMENTS

Reports	Frequency and responsibility	Deadline for Submission	
Implementation			
1. Monthly Progress Report on implementation status of project in relation to planned / actual schedule and objectives. Base format to be provided by CDB.	Monthly, PC	Within two weeks after the end of each calendar month until Project is completed, commencing one month after the PC's assignment.	
2. Procurement reports. Base format to be provided by CDB.	Varies, PC	Within two weeks of the proposal/bid submission deadlines.	
3. Quarterly Reports, inclusive of a report on the Investment Costs of the Project. Base format to be provided by CDB.	Quarterly, PC	Within two weeks of the end of each quarter until Project implementation is completed, commencing the 1st full quarter after PC is assigned.	
4. Consultant's Reports.	Varies, PC	Submitted to CDB two weeks following receipt by GOBZ (unless otherwise agreed) with an indication of GOBZ's acceptance, conditional acceptance or rejection of the deliverable.	
5. Project Completion Report. Base format to be provided by CDB.	One time, PC	Within four months of completion of the Project.	
Operation			
6. Maintenance Plan for the road infrastructure, including reports of condition assessments of road infrastructure.	Annually, Chief Engineer, MOW	By December 31, commencing first December after Practical Completion achieved.	

All implementation reports are to be in the formats required by UKCIF.

PROJECT LOCATION MAP



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