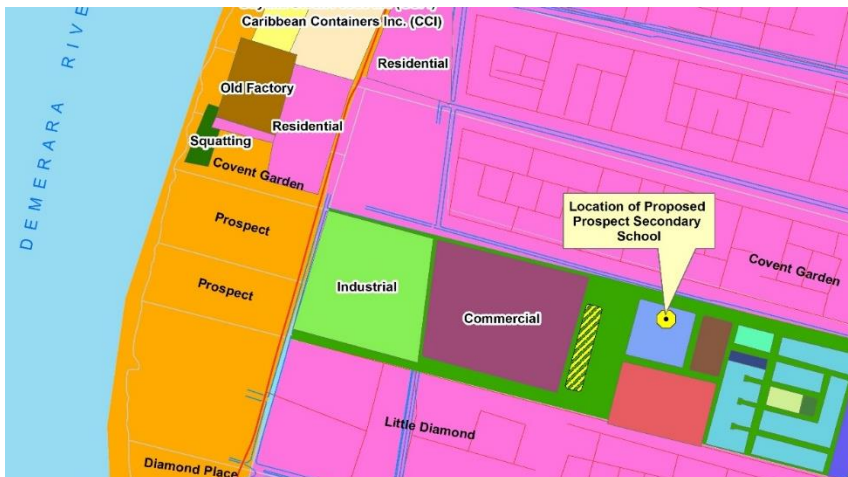


Environmental and Social Management Plan Construction of the Prospect Secondary School



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Acronyms

CHPA	Central Housing and Planning Authority
C-ESMP	Contractor Environmental and Social Management Plan
dB	Decibel
EPA	Environmental Protection Agency
ESMP	Environmental and Social Management Plan
ESP	Education Strategic Plan
GNBS	Guyana National Bureau of Standards
GSEIP	Guyana Secondary Education Improvement Project
GSS	Government Secondary Schools
HSSE	Health, Safety, Social and Environment
JHA	Job Hazard Analysis
MoE	Ministry of Education
NDC	Neighbourhood Democratic Council
PIU	Project Implementation Unit
RCA	Root Cause Analysis
SOPs	Standard Operating Procedures
USE	Universal Secondary Education
USEPA	United States Environmental Protection Agency
WHO	World Health Organisation

1.0 Introduction

The Ministry of Education (MoE) has set the attainment of quality Universal Secondary Education (USE) as a major objective in its current Education Strategic Plan (ESP). The MoE is currently implementing the Guyana Secondary Education Improvement Project (GSEIP) with support from the World Bank to assist in meeting this objective. The objective of the GSEIP is to increase the number of students with access to secondary school mathematics teachers benefitting from continuous professional development nationwide and, to increase the number of students in secondary schools with improved learning conditions in targeted regions. The Project comprises of three components. The second component focuses on expansion of general secondary school facilities in underserved areas of Regions 3 and 4 including the construction of new schools and provision of furniture and equipment for these schools. The works under this component comprised the construction of 2 new Government Secondary Schools (GSS) which are:

1. Westminster GSS, West Bank Demerara. In Region 3, a 1000 student school (Grade A+)
2. Good Hope/Lusignan GSS. In Region 4, an 800 student school (Grade A).

The Government of Guyana, through the MoE, has requested Additional Financing for the GSEIP from the World Bank. A portion of the Additional Financing is to be utilized for the construction of a third secondary school, proposed to be constructed at Prospect, East Bank Demerara, Region 4. Initially, a third school was envisioned under the original project, but was removed in a restructuring in March 2018, because of the cost overrun due to inflation, design variation and currency depreciation. However, the need still remains and the Government is now pursuing the construction of this school.

The World Bank, has requested that an Environmental and Social Management Plan (ESMP) be prepared for the construction of the school. This will complement the already prepared Environmental Assessment and Management Plan and the Environmental and Social Screening Report. The ESMP is required to be prepared prior to the initiation of the bidding process to procure the contractor for the school's construction and should incorporate specific environmental and social measures where applicable to address any site-specific problems, and, legal and institutional provisions. The measures outlined are to be incorporated in the bidding document which will be issued to the contractors who will be bidding for the construction of the new school. In this regard, this ESMP was prepared by the GSEIP Project Implementation Unit (PIU) outlining measures to mitigate the potential negative environmental and social impacts relating to the construction of the Prospect Secondary School.

The construction works proposed will generate environmental and social impacts common to this type of civil work, and which are localized, moderate, and possible to mitigate or prevent using standard methods. Anticipated potential impacts include dust and noise emissions, contamination from improper waste and hazardous material management, and risk of accidents. It is intended that these environmental and social impacts will be mitigated through the implementation of this ESMP. Additionally, the selected contractor will be required to prepare and implement a Contractor Environmental and Social Management Plan (C-ESMP). The C-ESMP will have to identify measures to be implemented by the Contractor to mitigate potential environmental and social impacts during construction. The C-ESMP will have to be approved by GSEIP and the World Bank prior to the commencement of construction.

The objectives of the ESMP include:

- To reduce environmental and social impacts associated with the school construction;
- To minimize risk to the community during the construction works; and
- To ensure Health, Safety, Security & Environmental (HSSE) obligations are implemented throughout project development and construction activities.

The ESMP consists of mitigation and prevention measures and programs considered necessary for implementation by the GSEIP, the Supervisory Consultants, and Contractor to ensure the proper environmental and social management of the school construction.

2.0 Project Overview

The proposed secondary school is to be located at Prospect, East Bank Demerara. The location of the school can be observed in Figure 1. The area reserved for the school construction is 6.12 acres.

Currently, there are 307 secondary school students are currently attending primary tops, and 450 learners who are being housed in the auditorium of secondary schools due to oversubscription. The population of the wider project area is increasing. New housing development lies adjacent to the school site, with subsequent additional student population expected. It is anticipated that the new school will have a capacity of 1000 students, to accommodate both current and future populations.

The design and architectural plans for the Prospect Secondary School will be similar to that of the two other schools constructed under the project, with minor modifications to incorporate lessons learnt and adjustments based on the project site. USD\$6.3 million will be utilized to construct and furnish the school. The construction period is expected to be a 15-month period, followed by a 12-month defects liability period.

The construction will be carried out by a general contractor under contract to the MoE. The contractor will be procured through a competitive bidding process. Once the contract has been signed and the contractor has been given possession of the site, the contractor will be legally responsible for the performance of the works in the manner required by the contract.

Currently the MoE is in the process of procuring consultancy services to oversee the designing of the school.

The school will include the following facilities:

- Information Technology Laboratory
- Industrial Technology Department (Metal Work and Wood Work)
- Agriculture Department
- Science Department
- Home Economics Department (Food & Nutrition, Clothing and Textile and Home Management)
- Library
- Sick Bay
- Guidance and Counseling Unit
- Classrooms
- Staff Room and Facilities
- Head Master's (HM) Office
- Deputy H.M Office
- Canteen
- Sanitary Facilities (Students & Staff)
- Assembly Area/All Weather Playing Area
- Playground

In addition, the following ancillary facilities will be constructed:

- Guard Huts
- Car Park and Cycle Shed
- Septic System
- Water Trestle & Reservoirs
- Auditorium
- Boundary Fence

- Bridge(s)
- Internal and External Drainage System
- Speed Bumps and Pedestrian Crossings

Once the contract has been awarded the site will be handed over to the contractor. In preparation for construction the site will be cleared/grubbed. Temporary facilities to be utilized by the contractor will also be established, including a site office, warehouse/stores, materials stockpiles, toilets, etc. The contractor will also be required to provide a site office for the consultants. The details on these facilities will only be determined when the contractor is procured. The site layout, including technical details and locations of temporary facilities will be included in the C-ESMP.

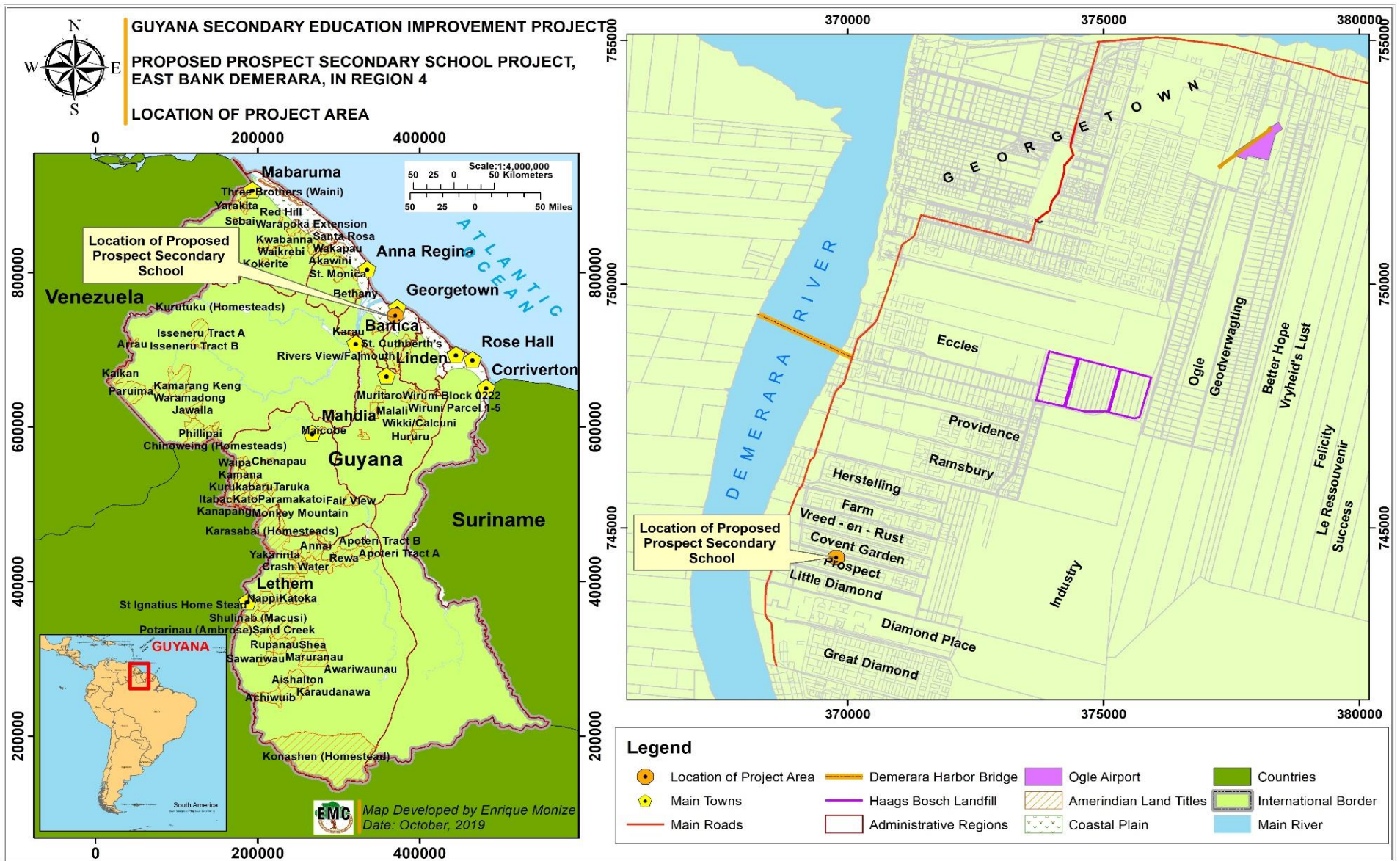


Figure 1: Proposed Location of Prospect Secondary School

3.0 Legal and Institutional Framework

This section describes the legal and institutional framework relevant to the project, including national requirements, and the World Bank environmental and social safeguards requirements.

3.1 The World Bank Safeguards Policies

The sub-component of Component 2 of the GSEIP, under which this project falls, has triggered only one Environmental Safeguard Policy of the World Bank, which is Environmental Assessment: OP/BP 4.01. The objective of this policy is to ensure that Bank-financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts on its area of influence. OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and trans-boundary and global environment concerns.

The Policy, when triggered, requires that an Environmental Assessment be conducted, at a level of detail commensurate with the projected negative impacts. This ESMP represents the appropriate level of analysis, and development of the corresponding mitigation measures, as determined by the World Bank Environmental Specialist and the GSEIP PIU. This ESMP follows Policy OP4.01 by providing a description of the project; basic information on existing environmental and social baseline conditions of the selected project sites; an assessment of the potential environmental and social effects likely to occur and generic mitigation measures to mitigate those impacts; specific environmental and social measures where applicable to address any site-specific problems; legal and institutional provisions; and, a grievance redress mechanism. In accordance with World Bank policy, the ESMP must be disclosed it is intended that this ESMP will be disclosed on the MoE and the World Bank websites.

Other components of the GSEIP has triggered another World Bank Safeguard Policy, OP 4.10, which covers effects on Indigenous Peoples.

It should also be noted that no private land acquisition will occur under this Project, so World Bank Policy OP 4.12 on Involuntary Resettlement is not triggered. All schools will be constructed on existing Government land designated for the school's construction, and is free of occupation and unused for any economic activity.

During the construction period the project will be expected to comply with the World Bank's Environmental, Health and Safety Guidelines (EHS Guidelines) The EHS Guidelines outline the performance levels and measures that are acceptable to the Bank, and contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors. However, Section 4 of the EHS Guidelines provides additional specific guidance for construction projects. The relevant measures outlined in the Guidelines will be applied to the project.

3.2 National Laws and Regulations

The construction works are expected to comply with the national legal framework. This section provides an overview of the principal environmental and health and safety legislation which forms the legal framework for the project.

3.2.1 Environmental Protection Act (1996 and 2005 Amendments)

The Environmental Protection Act establishes the basic institutional and regulatory framework within which all activities that may significantly impact the natural, social, and cultural environments are assessed. The Act provides for the management, conservation, protection and improvement of the

environment, the prevention or control of pollution, the assessment of the impact of economic development on the environment and the sustainable use of natural resources. The Act also provides that the Environmental Protection Agency (EPA) will be the central coordinating agency for environmental management in the relevant sectors in Guyana. The Act outlines the environmental authorisation process for new or existing projects being modified. The MoE will be required to obtain an environmental authorisation in the form of a Construction Permit from the EPA prior to the commencement of construction. Once the design/plan for the school is complemented the MoE will apply to the EPA for the environmental authorisation.

3.2.2 Environmental Protection Regulations

There are several subsidiary Environmental Protection Regulations to the Environmental Protection Act. These Regulations were developed to regulate and control the activities of development projects during construction and operation. The EPA has the responsibility to ensure the compliance of both new and existing activities to these Regulations by issuing the required authorizations and monitoring their operations.

Environmental Protection Authorizations Regulations (2000)

The Environmental Protection Regulations outline the requirements for applications for an environmental authorisation and the rules governing the issuance of such authorisation. Environmental authorisations typically have specified conditions that Permit Holders must comply with to avoid, minimise, and mitigate environmental impacts.

Environmental Protection Air Quality Regulations (2000)

The Air Quality Regulations apply to operations that emit any air contaminant in the construction, installation, operation, modification or extension of any facility related to the industry, commerce, agriculture or other institutional activity. Under these Regulations, such operations are required to apply to the EPA for an environmental authorization at least ninety days before the date on which the emission is to commence. Following the Regulations, the EPA shall establish the desirable air pollution limits. Currently, there are no nationally determined or established air quality standards. However, the Agency is guided by and utilises air quality guidelines reputable international organisations from the World Health Organisation (WHO) and the United States Environmental Protection Agency (USEPA) among others. Table 3-2 below shows the WHO Air Quality Guidelines.

Table 1: WHO Air Quality Standards

Element	Averaging Period	Acceptable Limit
Particulate Matter (PM 10)	24-hour	50 g/m ³
Particulate Matter (PM 2.5)	24-hour	25 g/m ³
Sulphur Dioxide	24-hour	20 g/m ³
Ozone (O ₃)	8-hour	100ug/m ³
Nitrogen Dioxide	1-hour	40ug/m ³

Environmental Protection Water Quality Regulations (2000)

The Water Quality Regulations require all operations that will discharge effluents during construction, installation, operation, modification or extensions to obtain environmental authorization. The Regulations also outline the requirements and guidelines on the discharge of effluents and disposal of sludge. Moreover, the Guyana National Bureau of Standards (GNBS), in collaboration with the EPA and other relevant stakeholders, have developed *Interim Guidelines for Industrial Effluent Discharges*

into the Environment¹. Currently, these Guidelines provide maximum allowable limits for 16 parameters and are used by the EPA to inform permissible limits for effluents discharged into the environment. These guidelines may be supplemented by additional surface water quality guidelines including Mining (Amendment) Regulation² and from reputable international agencies such as the USEPA. The maximum allowable limits for parameters outlined in the standards which are deemed relevant to the construction of the school are outlined in Table 2.

Table 2: Parameters and Maximum Allowable Limits

Parameters	Maximum Allowable Limits
pH	5.0 to 9.0
Temperature	<40°C
Dissolved Oxygen	>4 mg/L
Total Suspended Solids	<50 mg/L
Turbidity	<50 mg/L
Total Dissolved Solids	<250 mg/L
Chemical Oxygen Demand	<250 mg/L
Oil and Grease	<10 mg/L

Environmental Protection Noise Management Regulations (2000)

Under the Noise Management Regulations, operations that emit noise in the execution of various activities such as construction, transport, industry, commerce and any institution are required to apply to the Agency for an environmental authorization. The EPA is responsible for the establishment of standards for permissible noise levels in industry, construction and other areas. The EPA may grant authorization for noise emission unconditionally or subject to conditions and may require environmental audit procedures. The GNBS, in collaboration with the EPA and together with other relevant institutions, developed a standard that provides *Guidelines for Noise Emissions into the environment*³ as shown in Table 3. During the school construction the contractor will be required to comply with the Construction Limits.

Table 3: Decibel Limits for Various Activities

Type of Activity	Day Time Limit (dB)	Night Time Limit (dB)
Residential, Institutional, Educational	75	60
Industrial, Transportation	100	80
Commercial	80	65
Construction	90	75
Recreational	100 (18:00 to 01:00hrs)	75 (01:00 to 08:00hrs)

Environmental Protection (Litter Enforcement) Regulations (2013)

These Regulations provide for the enforcement against litter offences. It is an offence under these regulations to place litter in a public place, permit or cause another person to litter a public place or have litter on private premises that pose a health risk. The fine for an individual found littering in a public place is GYD 50,000, while for body corporate it is GYD 100,000. A fixed penalty of fifteen

¹ Guyana National Bureau of Standards, 2002. GYS 207:2002. Interim Guidelines for Industrial Effluent Discharge into the Environment.

² The Mining (Amendment) Regulation is the only national guideline that establish permissible effluent limits for Turbidity.

³ Guyana National Bureau of Standards, 2010. GYS 263:2010. Guyana Standard. Guidelines for Noise Emissions into the Environment.

thousand dollars (GYD 15,000) is offered to offenders who accept liability for the offence committed. Under the Litter Prevention Regulations, the Neighbourhood Democratic Councils (NDCs) and Regional Democratic Councils (RDCs) are to provide receptacles in public places. The Contractor will need to ensure all waste generated are collected and properly disposed.

3.2.3 Town and Country Planning Act (1946)

The Town and Country Planning Act provides for the (orderly and progressive) development of urban and rural lands and the preservation and improvement of amenities for such development. Development activities under the Act are related to the construction of buildings and road works subsidiary to buildings. The Act focuses on town planning schemes and regional schemes (out of urban areas). Such schemes comprise buildings, sanitation, and coordination of roads, facilities and public services, provision of amenities and the conservation and development of resources. Implementation and enforcement are vested in the Central Housing Planning Authority (CHPA). The Act provides for cooperation with local authorities, and permit processing for building operations. The Act also includes provisions for zoning and the regulation of buildings, site designs, roads, amenities, public services, transport and communications. The project site is zoned by the CHPA for educational purposes and the CHPA is in the process of formally handing over the site to the MoE for the construction of the school.

3.2.4 Education Act (1999)

The Education Act makes provisions for the promotion of education in Guyana. The Act establishes an Education Department and outlines functions of the Chief Education Officer and subordinate Education Officers who staff the Department. It also provides for the establishment of Government schools, the provision of an education system and the right of access of all children to schools. The Act established a National Council for Education to advise the Minister on matters relating to nursery, primary, secondary or further education and makes recommendations regarding these issues. The Act also empowers the Minister to declare educational districts and to establish regulations to support the provision of education in Guyana.

3.2.5 Occupational Safety and Health Act (1997)

The Occupational Safety and Health Act 1997 defines the responsibilities of management and workers concerning safety and health and applies to every workplace in Guyana. The Act makes provisions for the registration of industrial establishments, the establishment of an Occupational Safety and Health Authority, the establishment of a National Advisory Council on Occupational Safety and Health, the duties of employers, workers and other persons, treatments of accidents and occupational diseases, and occupational safety and health regulations. The Act authorises Occupational Health and Safety Inspectors to enter and inspect workplaces.

Under this Act, a joint workplace safety and health committee have to be established at operations where more than 20 persons are regularly employed. For workplaces with fewer than 50 persons, the committee should consist of at least four persons of which at least half the numbers should be workers who do not exercise managerial functions and should be selected by the workers themselves. Employers also have duties of providing protective devices for workers, providing instructions and supervision to ensure the safety of workers, maintaining a medicine chest and establishing an occupational health service for workers.

The Act requires all industrial establishments to keep a General Register containing the particulars of workers younger than the age of eighteen; particulars as to the washing, whitewashing or odour washing; painting or varnishing of the workplace; and particulars on every accident and industrial disease. Specifically, concerning the Accident Register, notice should be submitted using the form in

the First Schedule of the Act within four days of the Accident. If the accident results in death, a notice of death should be sent to the Authority, the joint workplace safety and health committee, and trade unions if applicable, as soon as the employer becomes knowledgeable of the death.

3.2.6 Labour Act (1942)

The Labour Act specifies the conditions that an employer must observe in the contracting of employees. Part V specifies that the entire wages of the employee must be paid as money and not otherwise. However, in occupations where it is customary to make a partial payment of allowances in the form of food, toiletries, housing etc. these are acceptable and not considered illegal if both the employer and employee are agreed on such terms. Within the framework of this Act, the contractor will be required to ensure workers are adequately paid as prescribed by the laws of Guyana and is also required to ensure the workers are not mistreated.

3.2.7 The Employment of Young Persons and Children Act 1938 (Amended 1999)

The Employment of Young Persons and Children Act 1938, amended 1999, is an Act relating to the employment of young person and children. It established that no child under the age of fifteen shall be employed, and no young person under the age of sixteen shall be employed at night in any industrial undertakings except to the extent to which and in the circumstances in which such employment is permitted under the International Labour Organisation (ILO) Convention. The Act outlines the offences and regulations as it relates to the employment of young person and children. This Act prohibits the contractor from employing persons below the age of fifteen.

3.2.8 Prevention of Discrimination Act 1997

The Prevention of Discrimination Act Chapter 99:08 of 1997 provides for the elimination of discrimination in employment, training, recruitment and membership of professional bodies and the promotion or equal remuneration to men and women in employment who perform work of equal value, and for matter connected therewith. The Act outlines the prohibited ground for discrimination, which includes race, sex, religion, colour, ethnic origin, indigenous population, national extraction, social origins, economic status, political opinions, disability, family responsibility, pregnancy, marital status, or age, except for purpose of retirement and restriction on work and employment on minors.

The 1997 Act further states that any act or omission, or any practice or policy that directly or indirectly result in discrimination against a person on the grounds stated is an act of discrimination regardless of whether the person the person responsible for the act or omission or the practice or policy intended to discriminate.

The Prevention of Discrimination Act 1997 advocates for the promotion of equal remuneration by stating that every employer and every person acting on behalf of such employer shall be obligated to pay equal remuneration to men and women performing work of equal value for such employer.

3.2.9 Guyana Equal Rights Act (1990)

The Guyana Equal Rights Act makes provision for the enforcement of the principles enshrined in article 29 of the Guyana Constitution so as to secure equality for women. Under the Act women and men have equal rights and the same legal status in all spheres of political, economic and social life. The Act also states that all forms of discrimination against women or men on the basis of their sex or marital status are illegal, and that women and men shall be paid equal remuneration for the same work or work of the same nature. The Act further states that no person shall be ineligible for, or discriminated against in respect of, any employment, appointment or promotion in, or to, any office or position on the ground only of sex.

3.2.10 Public Health Ordinance (1934)

The Public Health Ordinance makes provisions for promoting public health concerns in Guyana. The Ordinance is dated and was enacted during Guyana's colonial past. The Ordinance makes provisions for central and decentralised and local administration of health including the prevention of infectious, epidemic, endemic and venereal diseases, as well as management of public health facilities and services. The Ordinance also makes provisions for regulating 'offensive trades', that is, a trade that can be damaging to the health of the persons engaged in the trade. The Ministry of Health has convened a Committee for the management of offensive trades and this Committee is chaired by the Chief Medical Officer and is aimed at regulating activities that can damage the health of employees during their routine duties. The Government's COVID-19 measures introduce several social restrictions with which the project must comply while they remain in effect. These were made under this Ordinance and the Contractor will have to closely monitor revisions to the public health restrictions to ensure that project activities remain in compliance.

3.2.11 National Trust Act 1972

The National Trust Act of 1972 provides for the preservation of monuments, sites, places, and objects of historic interest or national importance. The National Trust is the body established under the Act and functions to promote the permanent preservation of buildings of national interest or architecture, archaeological and historic or artistic interest and places of national interest or national importance or beauty for the benefit of the nation. The Act mandates that should there be any cultural or archaeological finds during the implementation of the project, such finds are to be reported to the National Trust. If the National Trust have reason to believe that a site/ area contains a monument, it is in the power of the National Trust to enter the land for the purpose of excavation and assessment of the site (National Trust Act amendment 1997). The National Trust further reserves the right to prohibit or restrict any construction, erection or excavation. The Contractor will have to include as part of the C-ESMP a Chance Find Procedure consistent with Part 6 of the National Trust's Guidelines for the Protection of Monuments and Sites in the event of any artifact being encountered during construction.

3.3 Institutional Framework

Several national institutions have oversight of the project. In addition, as the funding agency, the World Bank also has oversight of the project. The institutions which have oversight of the project are described in this section.

It should be noted that there is no significant gap between the national requirements and those of the Bank as it relates to the environmental, health and safety requirements of the project. The legislative requirements and national guidelines will ensure compliance with the environmental, health and safety requirements of the Bank,

3.3.1 Environmental Protection Agency

The EPA oversees the effective management, conservation, protection and improvement of the environment and takes the necessary measures to ensure the prevention and control of pollution, assesses the impact of economic development on the environment and the sustainable use of natural resources. The Agency was established in 1996 by the Environmental Protection Act and is responsible for the enforcement of national environmental legislation and regulations as well as the development and implementation of environmental policies and standards. It also undertakes the inspection and enforcement of matters dealing with the environment, conservation and natural resources and administers the environmental permitting process in Guyana. The Agency is governed by a Board of Directors.

Under the Act, the EPA is mandated to “*take such steps as are necessary for the effective management of the natural environment to ensure the conservation, protection and sustainable use of its natural resources*” (section 4 (1) (a)). The Act also provides for the EPA to have overall responsibility to ensure management of the natural environment to ensure the conservation, protection and sustainable use of its natural resources; assess any developmental activity, which may harm the natural environment before such activity commences; and coordinate and maintain a programme for the conservation of biological diversity and its sustainable use. The EPA is mandated to ensure that any operation that may have a significant impact on the environment must acquire Environmental Authorisation from the EPA. Projects are considered to have an environmental impact when they threaten the health, safety and natural life-supporting systems of humans and other living things.

The EPA will be responsible for the issuance of Environmental Authorisation to the MoE for the construction of the school and the agency is expected to monitor the operation to ensure compliance with the environmental requirements once construction commences.

3.3.2 Ministry of Education

The vision of the MoE is that education should be the main and most effective contributor to the development of the citizenry to be able to modernize Guyana; to support the citizenry in becoming more productive and tolerant; and to live in mutual respect. Its mission is to provide an education system that delivers quality education and training at all levels and in particular eliminate illiteracy, modernize education and strengthen tolerance. The Ministry works towards ensuring that all citizens of Guyana, regardless of age, race or creed, physical or mental disability, or socio-economic status, are given the best possible opportunity to achieve their full potential through equal access to quality education, as defined by the standards and norms outlined by the Ministry. The commitment to quality and equity in education, with no barriers in access to anyone, is clear in this declaration.⁴

The MoE is implementing the GSEIP in collaboration with the World Bank and is responsible for ensuring that the project complies with the environmental and social safeguards. The MoE, through the GSEIP PIU, will be responsible for the implementation of this ESMP, as well as to ensure compliance with the EPA’s Construction Permit.

3.3.3 Central Housing and Planning Authority

The CHPA has two principal mandates:

- Develop areas to be used for human settlements and provide support infrastructure and services to these uses.
- Regulate land uses and conduct spatial planning.

In the context of the Prospect Secondary School, the CHPA’s has zoned the site for educational purposes and is in the process of handing it over to the MoE for the construction of the school. The CHPA is also expected to provide the infrastructure within wider project area as part of the development of the area, inclusive of the construction of roads and drains.

3.3.4 Neighbourhood Democratic Council

Eventually, the CHPA will hand over the area within which project site is located to a Neighbourhood Democratic Council (NDC). NDCs cover a small geographic area within each Administrative Region and is tasked with responsibility for the management and administration of these areas within its boundaries. The NDCs are required to approve development activities within their jurisdiction, and

⁴ Ministry of Education, 2014. Education Sector Plan 2014 – 2018, Volume 1. Pages 3

provide services such as solid waste collection and disposal, sanitation, drainage, rehabilitation of roads and dams and operation of markets, etc. within the NDC district. The NDCs also oversee environmental health within their areas through the Environmental Health Officer.

3.3.5 Ministry of Labour

The Ministry of Labour has the responsibility for Capacity Building, Human Development, and Protection of the Rights of Workers. The Ministry's mandate is defined by Guyana's construction, labour laws, regional and international labour standards in keeping with its obligations as a member of the UN's International Labour Organisation (ILO) since 1966, and CARICOM, from its inception.

The Ministry of Labour has direct responsibility for national labour policy, industrial relations, conciliation/mediation, labour standards, labour legislation, occupational safety and health, the general coordination of labour administration services, and tripartite consultation and dialogue on labour matters, involving the government and the social partners – the representatives of the national trade union body and the employers' organization.

The Ministry will have oversight on all matters relating to employment of construction workers involved in the project, including occupational health and safety matters, employment practice by the contractors, payment of wages and salaries, etc.

3.3.6 World Bank

The World Bank is providing the funding for this project and as such, it is expected that there will be some oversight of the project by the Bank, especially to ensure that its environmental and social safeguards are being complied with. The project was screened by the World Bank to determine the applicable safeguards and the level of environmental and social assessment and management planning required. It is expected that, during the construction phase, there will be close liaison between the World Bank's Environmental and Social Safeguards Specialists and the MoE to ensure compliance and identify and address any challenges encountered. This may require periodic visit of the Specialists to the project site and periodic reporting to the World Bank on environmental and social safeguards management by the MoE during the execution of the works.

4.0 Project Environment and Anticipated Impacts

This section provides a brief description of the relevant environmental components and any potential impacts anticipated.

4.1 Physical Environment

The project site is located within Guyana's Coastal Plain on the eastern bank of the Demerara River in Administrative Region # 4. The location is shown in Figure 1.

Developmental works are currently ongoing in the wider project area. As a result, the project site was recently cleared of vegetation, filled and levelled (Figure 2). Infrastructure are currently being installed, including drains and access roads.



Figure 2: Project Site (October 2021)

4.1.1 Soils and Topography

Description

The topography of the project area is typically low-lying and flat. The soils of the area are a combination of clays, silt, and pegasse. Since the site is located on the Coastal Plain of Guyana where soils are characterised by four different types of clays, it is expected that a combination of the following clays can be found at the project site: Mara Clay, Brickery Clay, Tuschen Clay and Lama Muck. These clays are generally poorly drained and not very susceptible to erosion. The soils were disturbed as a result of sugar cane cultivation for several decades. The terrain was also altered with the construction of drains and banks to facilitate cultivation.

Potential Impact

Construction of the secondary school will not alter the terrain of the project area, nor will it result in significant disturbance to soil. The surficial layer of the soil was previously disturbed. It is anticipated that the very top layer of soil will be grubbed at the commencement of works as part of the site preparation. This grubbed material can be stockpiled and reused to cover sand filled areas, as is being done for the other schools currently under construction.

4.1.2 Climate

Description

Ambient air temperatures in the coastal areas range between 25°C and 34°C. The coastal areas also experience a bimodal annual cycle of rainfall with distinct wet seasons. The first rainy season is the primary wet season and extends from mid-April to the end of July and the secondary wet season occurs from mid-November to January. The periods in between are often referred to as primary dry (long) season and secondary (short) dry season respectively. Wind speed is generally 10 to 15 mph in east to north east direction⁵.

Rainfall data obtained for the Botanical Gardens Weather Station⁶ from the Hydrometeorological Department over the last ten years shows that the annual rainfall for the general area is approximately 2000-2500 mm. Rainfall data from 2010 to 2020 is presented in Table 4. The wettest periods are May to June and December to January although episodes of heavier-than-normal rainfall typically occur in December to January, as can be observed in Figure 3.

Table 4: Rainfall (millimeters) for Georgetown from 2010 to 2020

Years	Months											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2010	21.6	26.7	44.0	303.0	385.3	252.5	476.1	162.2	168.0	109.4	363.0	331.4
2011	137.6	415.9	499.2	38.0	274.9	184.4	189.9	126.3	39.8	204.4	178.4	245.6
2012	380.4	349.0	35.2	114.7	320.6	244.6	374.8	144.7	40.7	36.9	201.0	321.3
2013	83.7	118.3	30.7	133.2	352.0	288.2	425.9	297.1	126.9	127.2	347.2	295.5
2014	276.3	149.6	64.2	71.5	130.1	230.1	155.9	202.0	30.6	59.3	385.2	139.3
2015	207.8	120.8	99.9	68.4	458.5	395.1	517.8	90.1	85.4	62.2	134.1	163.0
2016	28.3	40.5	37.0	234.5	208.9	257.3	230.4	186.7	182.4	32.9	104.5	407.3
2017	293.0	234.0	172.4	100.6	313.2	415.5	256.7	102.8	122.7	96.2	228.5	391.1
2018	174.9	164.7	105.9	346.4	245.0	321.1	320.6	156.4	166.7	35.9	201.1	105.2
2019	63.1	98.6	15.3	124.0	338.1	342.2	456.6	287.0	247.9	72.4	175.1	207.0
2020	49.8	27.3	67.1	54.4	320.0	274.9	273.4	155.5	154.1	19.2	543.2	432.1

Source: Data Collected from the Hydrometeorological Department, Ministry of Agriculture

⁵ Government of Guyana, 2012. Second National Communication to the United Nations Framework Convention on Climate Change.

⁶ Botanical Gardens Weather Station is the closest weather station to the site.

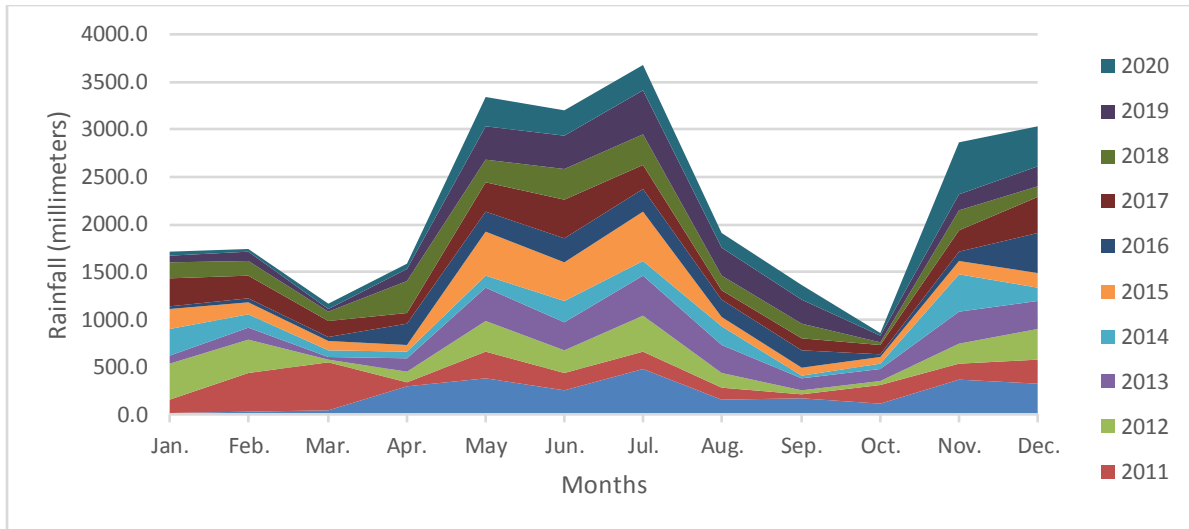


Figure 3: Rainfall Patterns for Georgetown (January 2010 to December 2020)

Potential Impact

The soils within the project area are clay rich, with poor internal drainage. As such the site is susceptible to flooding during the April to July and November to January rainy seasons. The drainage of the site is largely controlled by its situation on the low coastal plain, which requires the installation of drainage facilities. The wider project area was previously utilised for the cultivation of sugar cane. As such, there was a network of drainage facilities comprising of a series of canals and trenches which discharged into the Demerara River. With the conversion of the area into housing development, some of the main drainage infrastructure was maintained, while additional drains were installed within the schemes and connecting to these main channels.

Previously, the main drainage channel adjacent to the site was heavily silted and covered with vegetation, as shown in Figure 4. However, this channel was recently cleared (Figure 5). In addition, smaller drains were installed around the site to collect storm water and drain it to this channel (Figure 6). The project site was also filled and levelled (Figure 2), thus reducing the potential for flooding. Based on the recent interventions the likelihood of the site being affected by flooding has significantly reduced.



Figure 4: Silted Up Main Drainage Channel Adjacent to Project Site (2020)



Figure 5: Cleared Main Drainage Channel Adjacent to the Project Site (October 2021)



Figure 6: Drainage Infrastructure installed around the Project Site

4.1.3 Noise

Description

There are currently no activities within or around the project site to influence the noise level. Noise measurement conducted around the site during a visit on October 17, 2019 were all below 45 decibels (dB).

Impact

There are currently no nearby receptors to the project site who can be impacted by noise generated during construction activities. Nevertheless, the Contractor is expected to comply with the noise levels prescribed by the EPA.

4.1.4 Air Quality

Description

The air quality within the project area is good, as there are no industrial activities located within the immediate vicinity of the project site that can impact on air quality. Generally in Guyana the air quality is good, excepting for areas immediately around industrial type operations such as sawmills and power generation facilities which often times do not practice abatement.

Impact

The project can have some impacts to the localised air quality through the generation of particulate matter. Trucks transporting materials such as sand to the site, if uncovered, can generate particles. Vehicles accessing the project site can also generate some amount of dust whilst traversing along the section of uncapped road during dry conditions. At the construction site materials stockpiles and some construction activities such as mixing of cement, cutting of concrete, etc., can also generate some amount of particulate matter. However, there are currently no nearby receptors to the project site who can be impacted by dust generated during construction activities. Nevertheless, the Contractor is expected to implement measures to prevent dust nuisance from occurring.

4.1.5 Water Quality

Description

The project site is surrounded by a drainage network comprising of a series of small drains that leads into larger canals/trenches which eventually discharges into the Demerara River.

Impact

The disturbance of soil and stockpiling of construction materials such as sand can increase sediments being transported in storm water runoff into the surrounding area drainage. If occur, this may be brief and tend not to have lasting effects. These impacts may also be mitigated by implementation of appropriate measures. The surrounding drains can also be accidentally or intentionally contaminated by the discharge of fuels, waste oils, lubricants, other hazardous wastes and non-hazardous wastes including general solid wastes during construction. In addition, improperly manage sewage generated during the construction can inadvertently pollute the drains. However, potential impacts of surface water pollution can be mitigated entirely if appropriate management measures are in place for hazardous materials and waste.

4.2 Biological Environment

Description

A significant part of the Guyana's biodiversity exists on the coastal zone, though most of it is located within the forest and savannah provinces. However, within the project area there is limited biodiversity due to human interactions and development activities. Previously, sugar cane was cultivated on the site for decades and the original vegetation was destroyed by the cultivation.

The "natural vegetation" of the general area was comprised of secondary disturbed vegetation, primarily shrubs, herbaceous plants and several species of grasses (Figure 7). The dominant species include: razor grass (*Paspalum virgatum*), antidesma (*Antidesma ghaesambilla*), carrion crow bush (*Senna alata*), morning glory (*Ipomoea hederifolia*), moko moko (*Montrichardia arborescence*) and tanner grass (*Brachiaria radicans*). These are all arable weeds and are common on abandoned sugar plantations and ditch banks. Aquatic vegetation observed in the adjacent drainage channels include: alligator eye (*Salvinia auriculata*), water lettuce (*Pistia stratiotes*), alligator spoon (*Eichhornia crassipes*), water poppy (*Hydrocleys nymphoides*), and the water grasses, *Paspalum repens* and *Luziola subintegra*.

Fauna such as crickets (*Gryllus spp.*), butterflies, wasps, flies, beetles, and birds such as cattle egret (*Bubulcus ibis*), kiskadee, and yellow plantain are frequently seen. The nearby drainage channels may contain fishes such as hassar and patwa. There are no species which are considered endangered, rare or critical present at the site, or no critical habitat.

Impact

The project is not expected to have any impact on biodiversity. The site is devoid of natural vegetation and fauna. The vegetation which was present at the site was also recently cleared (Figure 2). Both the flora and fauna present within and around the site are very common and can be found throughout the coastal plain especially on abandoned agricultural lands, water logged soils and drainage and irrigation networks along the coastal agricultural belt.



Figure 7: Vegetation of the Wider Project Area

4.3 Socioeconomic Environment

4.3.1 Land Use

Description

Historically the project site was used for the cultivation of sugar cane for decades. The lands were under the jurisdiction of the Diamond Sugar Estate, which was closed in 2011. Thereafter, the Government proceeded to convert most of the lands into housing development. Within the Prospect area, where the school site falls, lands are earmarked for educational facilities and commercial and industrial activities. T

The site where the school will be constructed, and the area immediately to the south are earmarked for educational facilities. The school site is Government owned and is allocated for the construction of the school (See Appendix A for letter confirming this). A sign is already erected at the project site (Figure 8). The entire site is free of any use or occupation (Figure 2).

The area to the north of the site is predominantly for housing, while to the west the area is zoned as commercial followed by industrial activities. The area immediately east of the site is reserved for future use, followed by a market, and then housing. The current and proposed land use of the wider project area can be observed in Figure 9.

However, while construction and occupation is progressing well in the housing areas to the north of Prospect (Figure 11), which is predominantly residential, there has been limited construction/occupation within the Prospect area itself and most of the lands are yet to be developed/occupied. This situation can be observed in Figure 10.

Impact

The construction of the school will not affect the land use of the project area. Currently, the site is unoccupied and is allocated for the construction of the school. No significant impact is also expected on the neighbouring residents, given that there is no resident in immediate proximity to the site.



Figure 8: Project Sign installed at the Site

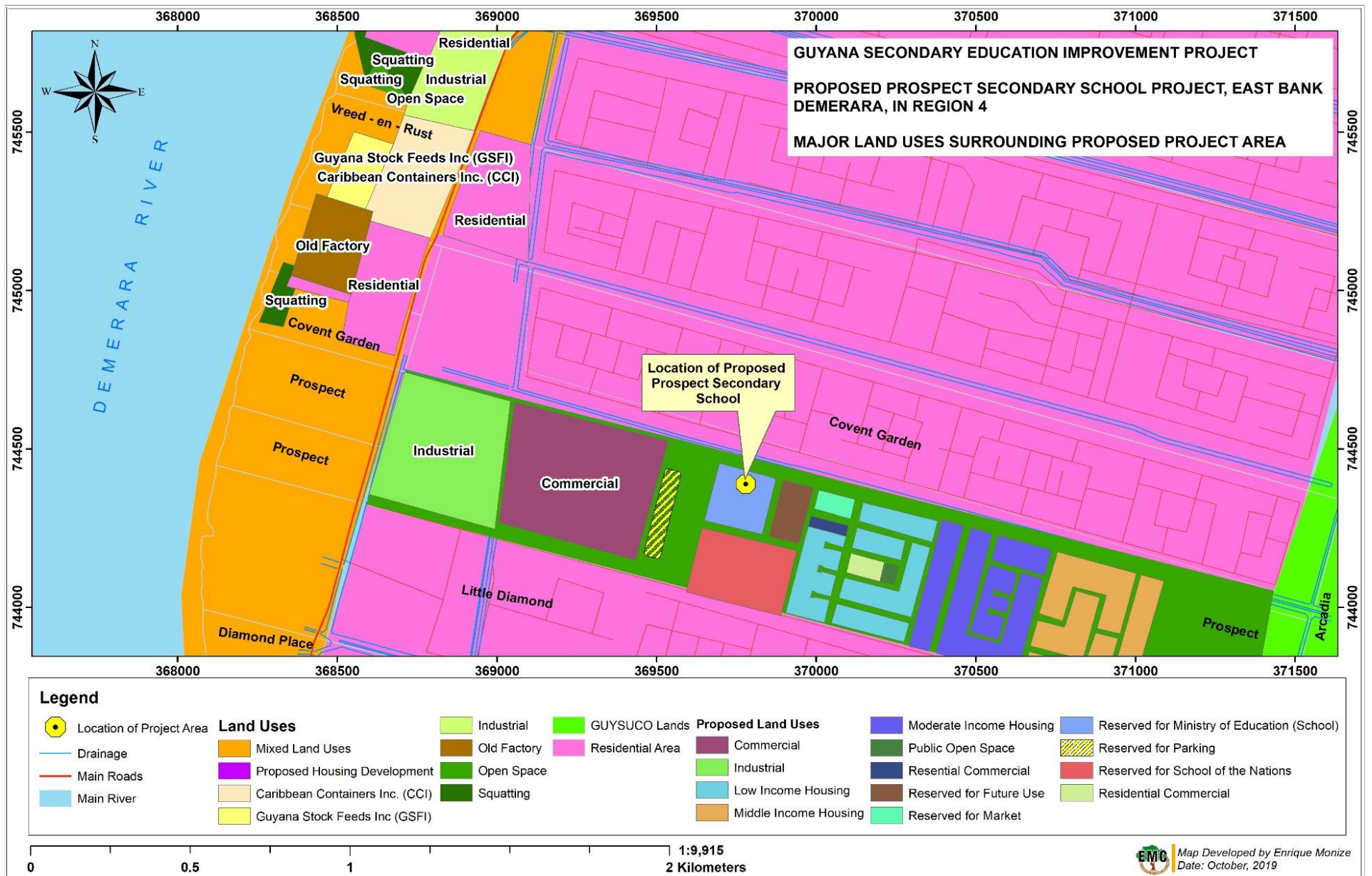


Figure 9: Proposed Land Uses for the Wider Project Area

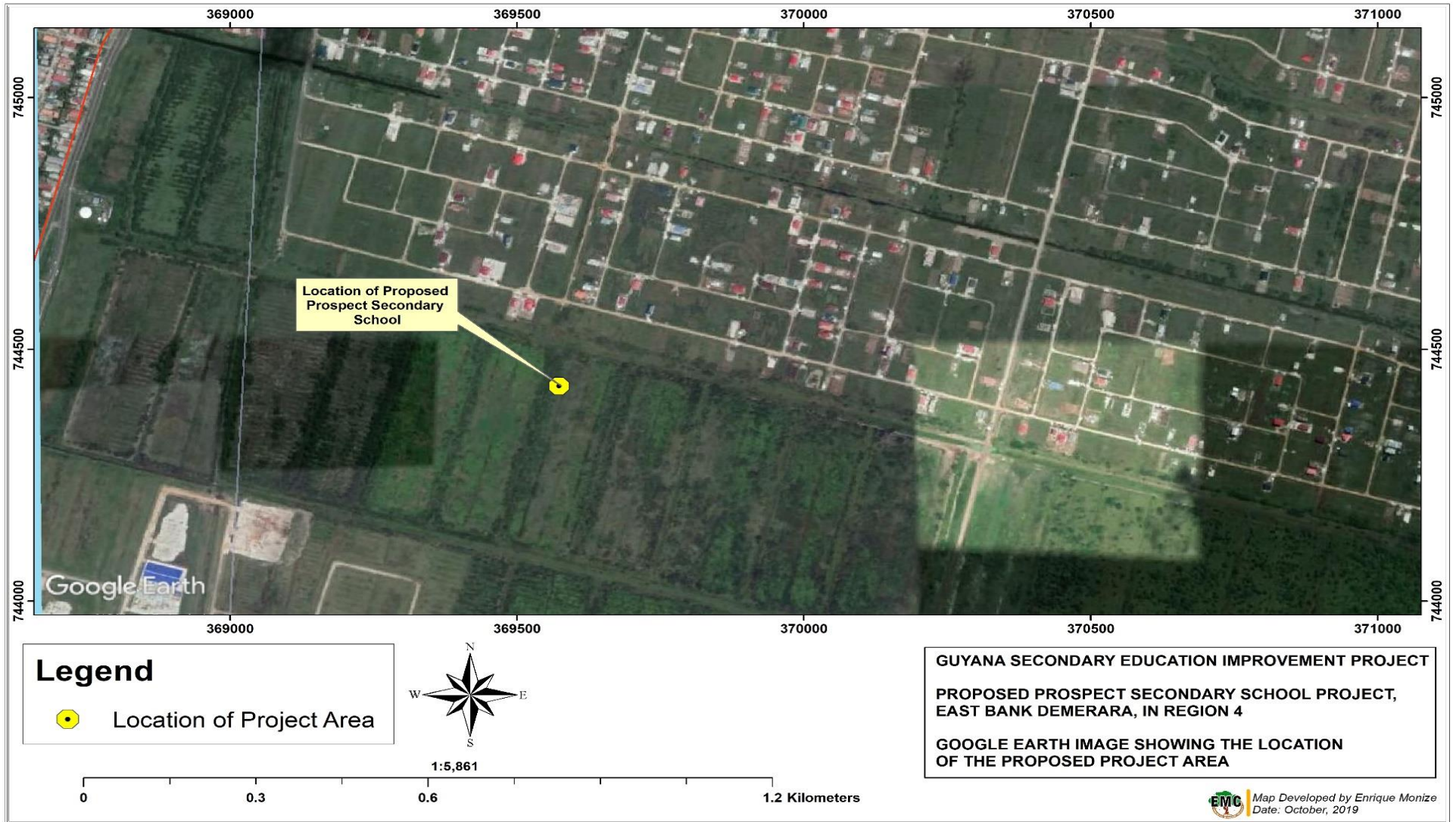


Figure 10: Current Level of Development around Project Site



Figure 11: Housing Development to the North and Northeast of the Site

4.3.2 Access

Description

The project site is currently accessed through community roads within the new housing development. Coming off from the main public road at Herstelling an asphaltic road (Figure 12) runs south until it reaches Prospect. This road then leads to a road constructed mainly of sand (Figure 13) from which the project site can be accessed by travelling eastwards. Currently access roads to and around the site are being constructed (Figure 14).

Impact

Traffic within the area in the vicinity of the project site is not significant. When construction begins, there will be a marginal increase in traffic volumes, particularly of heavy vehicles used to transport equipment and construction materials to the project site. The transport of equipment and construction materials through the community roads can deteriorate these roads, especially the sand road which is already in poor condition. Impacts can be exacerbated during the rainy seasons. Transporting of heavy equipment through the community can also pose a safety risk to the community. Given the current traffic volume no traffic congestion is envisaged during this phase.



Figure 12: Access Road from Herstelling to Prospect constructed of Asphalt



Figure 13: Sand Road connecting to the Site



Figure 14: Construction of Access Roads Adjacent to the Site

4.3.3 Population and Economic Activities

Description

The project site falls within the Little Diamond/ Herstelling Neighbourhood Democratic Council (NDC). However, the new housing development area, including the school site is still under the jurisdiction of the Central Housing and Planning Authority (CHPA) and not yet handed over to the NDC. According to the 2012 National Census Report this NDC District comprises six (6) villages: Herstelling, Jardin De Provence/ Farm, Vreed en Rust, Covent Garden, Prospect and Little Diamond. The population and number of households in the NDC are presented in Table 5 below.

Table 5: Population and Number of Households in Little Diamond/ Herstelling NDC

Village	Population	Number of Households
Herstelling	3,255	977
Farm	456	133
Vreed En Rust	253	86
Covent Garden	745	218
Prospect	923	268
Little Diamond	759	231
Total	6,391	1,913

Source: National Census (2012)

However, since then there has been newer housing development within the NDC it is highly likely that the population and number of households has grown. The population is expected to grow significantly since there are about 500 house lots allocated within the new housing area.

According to the National Census (2012), the largest population by major industry in the NDC area was in wholesale and retail trade. The other largest population by major industry included construction, manufacturing, transport and storage, and the activities of households as employers. As a result, the largest source of livelihoods within the NDC was self-employment. Many villagers are employed in some type of trade including masonry, carpentry, mechanics, or are employed in other privately-owned businesses.

There are several public schools including nursery, primary and secondary schools in the NDC. In addition, there is a health centre in Herstelling. There are several social gathering areas in the NDC

including churches, masjids and mandirs. Farm also has a Community Centre Ground which is utilized by members of the community.

Impact

The provision of a secondary school within this community will have a positive impact on the population since currently only one secondary school (Covent Garden Secondary School) is located within the NDC. Once the new housing area is populated the student population is expected to grow significantly. It is anticipated that the school will accommodate 800 to 1,000 students. The school will provide an improved learning environment for students, and reduce cost and time lost due to transportation.

During construction, the presence of non-local construction workers could have some negative impacts on the local population, if not properly managed. The presence of non-local workers could lead to sexual exploitation and abuse and sexual harassment of females within the community. This can also lead to bad relations when the females are shown increased attention that is perhaps unwanted. Interpersonal relationships with married persons could disrupt the community dynamic. There could also be cases of unwanted pregnancies particularly affecting the younger women of the community. There could be an increase in the risk of transmission of sexual diseases with the presence of workers in the communities. In addition, the presence of a non-local construction crew to the area can create security fears among local residents. However, the immediate area around the project site is sparsely populated. In addition, the Contractor will be required to prepare and enforce a Code of Conduct for Workers. As such, impacts relating to the presence of workers within the community are unlikely to occur.

The construction of the school will provide opportunities for employment. Income earned from employment with the project can play a role in improving welfare and the quality of life of employees and this positive effect will be amplified if vulnerable persons have the opportunities to be employed. As such, employment practices should not discriminate against vulnerable and marginalised groups including women, youth and indigenous peoples. It will be ensured that the Contractor has a fair and equitable recruitment system, and all project workers are treated equally. To the extent possible, the Contractor will be encouraged to prioritise employment of persons from local communities, including if there are opportunities for women.

Also, during construction there is a risk of public safety being compromised by the transport of materials and equipment through the community to the site, as well as by construction activities. The Contractor will be required to implement the necessary measures to ensure the safety of the public is maintained.

4.4 Health

4.4.1 COVID-19 Pandemic

The possibility of a COVID-19 outbreak remains high and as of September 2021, the number of cases continues to increase nationally. Nevertheless, it is recognized that this situation can only be partially managed by the project even if all measures are followed to prevent occupational spread, given that employees may engage in risky behaviours when not on duty. Interactions among employees coming from local communities and from other areas in Guyana, including Region 4 which is a hotspot for the virus, can put each other at risk of contracting and spreading the virus. When these employees return to their homes, they in turn put family members and local communities at risk of contracting the virus. Adverse health outcomes associated with the spread of COVID-19 due to project activities can be curtailed if recommended public health measures are followed, including national requirements and guidelines of the World Bank.

5.0 Mitigation and Management Measures

The construction of the school will be done in a manner that will ensure impacts to the environment are prevented and minimized, the health and safety of workers and surrounding land users is maintained and the social welfare of all stakeholders is not compromised. As such, in executing the project, several measures will be implemented at the level of the GSEIP PIU, the Supervisory Consultants, and the Contractor.

The Contractor will be required to comply with all national regulatory requirements and best practices, and ensure activities are in compliance with the environmental and social safeguards of the World Bank. The Contractor is required to implement the mitigation measures outlined in the Environmental Authorisation to be issued by the EPA, this ESMP and in the C-ESMP to be prepared by the Contractor. Other applicable measures recommended by the Supervisory Consultants or GSEIP PIU are also to be implemented.

To ensure the above, several management and mitigation measures are to be implemented, as is outlined below:

- Project's Environmental and Social Management Plan
- Environmental and Social Management Organisational Framework
- Contractors' Environmental and Social Management Plan
- Contractors Code of Conduct for Workers
- HSSE Monitoring
- HSSE Reporting
- Grievance Mechanism
- Stakeholder Engagement
- Sustainable Development and Other Initiatives

The table below presents a summary of the ESMP.

Table 6: ESMP Summary

Activity	Phase	Impact	Mitigation
Site preparation	Mobilisation	Waste generation from cleared vegetation and grubbing of topsoil	<ul style="list-style-type: none"> ▪ Cleared vegetation to be disposed at approved landfill. ▪ Grubbed topsoil to be stockpiled and reused for landscaping upon completion of works
Transportation of materials to site	Mobilisation and Construction	Dust generation from uncovered materials and vehicles traversing unpaved roads in dry conditions	<ul style="list-style-type: none"> ▪ Cover all trucks transporting construction materials to the site ▪ Vehicles traversing unpaved section of the roadway should abide by speed limit ▪ Soak unpaved section of the roadway if required
		Safety of other road users and community can be compromised	<ul style="list-style-type: none"> ▪ Traffic Management Plan to be included in C-ESMP ▪ Vehicles accessing the site are expected to abide by speed limits and other traffic rules ▪ Drivers should be briefed on safety requirements and exercise caution
Construction activities	Construction	Generation of particulate matter, particularly due to storage of construction materials, operation of cement mixers, etc.	<ul style="list-style-type: none"> ▪ Minimise the height of material stockpiles ▪ Cover stockpiles where necessary ▪ Conduct dust generating activities downwind of work areas and site offices ▪ Provide appropriate PPEs for workers such as dust masks ▪ Install dust screens where necessary
Use of heavy machinery and power tools	Mobilisation, Construction and De-commissioning	Noise generation from the use of machinery/tools	<ul style="list-style-type: none"> ▪ Conduct noisy activities away from any nearby receptors, work areas and site offices ▪ Limit potential noisy activities to during normal working hours ▪ Provide adequate PPEs to workers such as hearing protection ▪ Ensure machinery and generators are equipped with well-functioning mufflers
Construction activities	Mobilisation, Construction and De-commissioning	Generation of solid, liquid and hazardous waste	<ul style="list-style-type: none"> ▪ Waste Management Plan to be included in the C-ESMP ▪ Adequate waste collection receptacles to be provided ▪ Waste should be regularly removed from site and taken to the Haags Bosch landfill site for disposal. ▪ Waste should not be allowed to accumulate in significant quantity and should be consolidated in a designated area.

			<ul style="list-style-type: none"> ▪ Reusable construction waste should be separated for reuse. ▪ No burning of any type of the wastes generated is allowed onsite. ▪ Workers are to be made aware of the waste management procedures. ▪ Adequate toilet facilities to be provided onsite based on the number of workers. ▪ Toilets are to be well maintained. ▪ Treatment system for wastewater from toilet facilities are to be provided such as draining into a soak away system. ▪ If portable toilets are to be utilized these will have to be maintained and emptied on a regular basis. ▪ If hazardous waste is generated onsite the waste should be carefully collected and removed from site and disposed of in an approved manner.
Construction activities	Mobilisation, Construction and De-commissioning	Spills and contamination from storage and use of fuel and other hazardous materials	<ul style="list-style-type: none"> ▪ Avoid the storage of significant quantity of fuel onsite ▪ Any fuel storage should be done within a contained impervious area with all the safety systems in place ▪ Contained area should be drained through an oil-water separator, or be covered to prevent accumulation of rainfall ▪ Storage containers should be labeled as to their content and capacity ▪ Warning signs should be installed in storage areas, such as 'Flammable' and 'No Smoking'. ▪ Workers should be made aware of the proper handling practices to avoid spills ▪ Spill clean-up kits to be provided ▪ Regular maintenance of machinery to be conducted to ensure the proper functioning so as to avoid unnecessary leaks.
Construction activities	Mobilisation and Construction	Drainage and flooding	<ul style="list-style-type: none"> ▪ Project site to be filled to above flood levels ▪ Surrounding drains are to be kept clear ▪ Stockpiles of construction materials to be placed away from the drainage systems.

			<ul style="list-style-type: none"> ▪ Nearby drains to be regularly checked for accumulation of construction materials and if found to be present the materials should be immediately removed.
Construction activities	Mobilisation, Construction and De-commissioning	Workers health and safety can be compromised, resulting in injuries and even fatalities	<ul style="list-style-type: none"> ▪ A Health and Safety Plan to be included in the C-ESMP. ▪ Health and safety induction should be conducted for all workers ▪ Training to be provided for workers conducting high risk activities ▪ SOPs to be prepared for certain activities such as working on heights, erecting and using scaffolds and using ladders ▪ Adequate and appropriate safety gears to be provided to workers who are expected to utilize all gears relevant to their assigned tasks ▪ Safety signs to be installed at the entrance to and around the site ▪ All safety related activities to be documented including all illness/injury, exposures and near misses. ▪ All incidents /accidents are to be investigated and Root Cause Analysis (RCA) done ▪ Precautionary measures to the Covid-19 pandemic onsite are to be implemented ▪ Emergency response measures to be provided onsite including posting of Emergency Contacts, provision of First Aid Kits, provision of Emergency Transport Vehicle, designating of a Muster Point, provision of Fire Extinguishers/Sand Buckets, provision of Spill Clean- Kits, etc.
Construction activities	Mobilisation, Construction and De-commissioning	The safety of members of the community can be compromised, resulting in injuries and even fatalities	<ul style="list-style-type: none"> ▪ Access to the construction zone to be restricted by securing/barricading area ▪ The necessary warning signs are to be installed ▪ The free flow of traffic around the work site should be maintained. At no time should there be trucks or other construction equipment left standing on the road way or shoulders ▪ Traffic Management Plan to be prepared and implemented ▪ Vehicles accessing the site are expected to abide by speed limits and other traffic rules

			<ul style="list-style-type: none"> ▪ Drivers should be briefed on safety requirements and exercise caution
Construction activities	Mobilisation, Construction and De-commissioning	Social conflicts arising from presence of construction personnel and construction works	<ul style="list-style-type: none"> ▪ Code of Conduct for Workers to be prepared and enforced ▪ Stakeholders engagement will be conducted prior to the commencement of works ▪ A representative of the community will be invited to participate in the project progress meetings ▪ Periodic engagements will be done with nearby residents to determine if there are any concerns arising from the project activities ▪ A Grievance Mechanism will be prepared and implemented ▪ Employment opportunities to people living close to the project site to be provided in order to increase social benefits by targeting recruitment of local people ▪ Regular maintenance of the unpaved section of the access road should be done.
Construction activities	Mobilisation, Construction and De-commissioning	Sexual exploitation and abuse and sexual harassment arising from presence of construction personnel within local community	<ul style="list-style-type: none"> ▪ Code of Conduct for Workers to be prepared and enforced ▪ The establishment of temporary housing for workers onsite to be discouraged ▪ The use of language or behavior, in particular towards women or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate to be prohibited ▪ The exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior to be prohibited
Construction activities	Mobilisation, Construction and De-commissioning	Discrimination against women/vulnerable groups in the hiring process of workers	<ul style="list-style-type: none"> ▪ Contractor to implement a fair and equitable hiring process ▪ Where possible the employment of women to be encouraged ▪ Employment opportunities to people living close to the project site to be provided in order to increase social benefits by targeting recruitment of local people ▪ Wages offered to all staff should be in keeping with Guyana's labour laws or higher set standards which should be competitive in all categories of workers

5.1 Environmental Management Organisational Framework

The environmental and social management framework will have roles and responsibilities at the level of the GSEIP PIU, Supervisory Consultants and the Contractor.

GSEIP PIU

The GSEIP PIU has as part of its team an Environmental and Social Specialist who will oversee the environmental, social and health and safety aspects of the project. The Environmental Specialist will ensure that the World Bank Environmental and Social Safeguard Policies are adhered to where applicable, that the contractors comply with the requirements of the Environmental Authorisation to be issued by the EPA, and that the Contractor prepare and implement the Environmental and Social Management Plan. The Environmental Specialist will report to the Project Coordinator. It is expected that guidance will also be provided to the GSEIP PIU by the World Bank's designated Environmental and Social Specialists.

Supervisory Consultants

The Supervisory Consultants will have as a member of their team a Health, Safety, Social and Environmental (HSSE) Personnel who will have the responsibility of ensuring compliance with the environmental, social, health and safety requirements relating to the project. This person will be responsible for overview and provide direction as may be required to the Contractor (and the GSEIP PIU as may be required) to ensure the project meets its HSSE objectives and complies with the project ESMP. The Supervisory Consultants will be required to monitor the Contractor's HSSE performance against the national requirements and that of the MoE/GSEIP PIU, as well as the Contractor's C-ESMP. They will also be required to ensure that the Contractor's HSSE performance is in accordance with the requirements of the Occupational Safety and Health Act and meets the requirements of all state agencies tasked with the monitoring, regulation and promotion of safety at work.

The HSSE related services to be provided by the Supervisory Consultants include but are not limited to:

- Review and approval of the Contractor's C-ESMP, including all updates and revisions (not less than once every 6 months);
- Review and approve the Contractor's method statements, implementation plans, prevention and response action plan, drawings, proposals, schedules and all relevant documents;
- Review and consider the HSSE risks and impacts of any design and/or methodology change proposals and advise if there are implications for compliance with the project environmental requirements, consent/permits and other related project matters;
- Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other HSSE related documentation, as necessary, to confirm the Contractor's compliance with HSSE requirements;
- Agree on remedial action/s and their timeframe for implementation in the event of a non-compliance with the Contractor's HSSE obligations;
- Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree on appropriate actions to ensure compliance with HSSE obligations;
- Check that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
- Review, critique and consult in a timely manner with the Contractor on their HSSE documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
- Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential HSSE issues;

- Establish, communicate and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality;
- Provide appropriate training to contractor's workers when necessary or required by the PIU; and
- Undertake field inspections of the construction site to verify the Contractor's compliance with the C-ESMP and promptly communicate to the PIU any serious deviations.

Contractor

The Contractor will also be required to employ a suitable qualified and experienced personnel as an Environmental, Social, Health and Safety Officer, with the responsibility of ensuring compliance with the environmental, social, health and safety requirements. The responsibilities of this individual will include but not limited to the following:

- Prepare the Contractor's Environmental and Social Management Plan;
- conduct training of workers in health, safety and environment requirements, including health and safety induction prior to commencement of work onsite and regular tool box sessions;
- Ensure compliance with the EPA's Environmental Authorisation;
- Liaise with the GSEIP PIU Environmental and Social Specialist and Supervisory Consultants' Environmental, Health and Safety Personnel on compliance;
- Implement the Contractor's Environmental and Social Management Plan;
- Conduct site inspections, audits and permanent supervision at the construction site to ensure adequate and timely implementation of, and compliance with, the C-ESMP;
- Address any grievances of stakeholders;
- Report on environmental, social, health and safety compliance; and
- Oversee the clean-up and decommissioning of the site on the completion of works.

5.2 Contractor's Environmental and Social Management Plan

The Contractor will be required to prepare a Site Specific Contractor's Environmental and Social Management Plan (C-ESMP) to mitigate issues pertinent to the construction of the school. This ESMP is to be submitted to the Supervisory Consultant and GSEIP PIU within 28 days of contract signature for approval prior to the commencement of works. Once approved, the C-ESMP is expected to be implemented during the construction period, and be updated/revised periodically and updated in a timely manner, to ensure that it contains measures appropriate to the activities being undertaken. The updated C-ESMP shall be subject to prior approval by the Supervisory Consultants and GSEIP PIU. Preparation of the C-ESMP shall be guided by the requirements outlined in the EPA's Environmental Authorisation, this ESMP, relevant national standards and guidelines including those of the Guyana National Bureau of Standards, and the World Bank Environmental, Health and Safety (EHS) Guidelines. The completed C-ESMP, once approved by the GSEIP PIU, will be appended to the Contract. The following are expected to be addressed/included in the C-ESMP:

- Contractor's Work Programme – A brief overview of the Contractor's proposed Work Programme should be provided, including information on expected duration of the works, amount of workers to be onsite, type and quantity of heavy equipment to be onsite, whether workers will be housed onsite or travel daily, etc. This information will be essential in the review process of the C-ESMP.
- Management Structure – The C-ESMP should describe the Contractor's management structure for the project, clearly highlighting the detailed responsibilities for health, safety, social and environment.

- Solid Waste Management – Measures to manage solid waste generated during construction should be described. It should be noted that the Contractor is expected to implement a system to ensure solid waste is management properly. Solid waste expected to be generated includes; cleared vegetation, garbage such as plastic bottles and food boxes, and construction waste such as packaging materials, wood, formwork, etc. Adequate collection receptacles are to be provided onsite and waste should be taken to the Haags Bosch landfill site for disposal. Waste should not be allowed to accumulate in significant quantity onsite for extended period (not more than 30 days) and should be consolidated in a designated area. Reusable construction waste should be separated for reuse. No burning of any type of the wastes generated will be allowed onsite. Workers are to be made aware of the waste management procedures.
- Liquid Waste/Wastewater Management - The Contractor is expected to provide adequate toilet facilities onsite based on the number of workers. The Contractor is also expected to provide toilets facilities for the Supervisory Consultants. The number and type of toilets to be provided, whether portable or toilets equipped with septic tanks should be indicated. Provision of water for the toilets and maintenance of the toilets should also be described, since toilets are expected to be well maintained. Treatment system for wastewater from these facilities should be described such as draining into a soak away system. If portable toilets are to be utilized these will have to be maintained and emptied on a regular basis.
- Hazardous Waste Management - The construction works are not expected to generate significant hazardous waste. Hazardous waste generation may be limited to the servicing of heavy equipment onsite and should include waste oil, oil filters and oily rags. If hazardous waste is generated onsite, the waste should be carefully collected and removed from site and disposed of in an approved manner. A register of hazardous waste generated should be kept onsite by the Contractor.
- Hazardous Materials Management – The Plan should state if hazardous materials will be kept onsite or taken to the site as required. This would include fuel and lubricants. In addition, although it is not envisaged that the use of pesticides is required onsite, if these are to be utilized by the Contractor, this should be stated in the C-ESMP. If hazardous materials are to be kept onsite then the C-ESMP should describe how this will be done. Significant quantity of fuel should be stored within a contained impervious area with all the safety systems in place and workers should be made aware of the handling practices to avoid spills.
- Erosion and Sedimentation Control – The C-ESMP should describe measures to be implemented by the Contractor to prevent erosion onsite, and sedimentation of nearby drains. Stockpiles of construction materials should be placed away from the drainage systems. Nearby drains should also be regularly checked for accumulation of construction materials and if found to be present the materials should be immediately removed.
- Dust Control - There is the potential for dust nuisance to occur which can affect workers and nearby receptors. Dust can be generated from material transport and stockpiles, as well as construction works such as concrete mixing, cutting of tiles and concrete, etc. As such, the Contractor must include in the C-ESMP measures to prevent dust nuisance from occurring. Measures such minimizing the height of sand stockpiles, covering of stockpiles, covering of trucks transporting materials to the sites and providing dust mask to workers should be considered.
- Noise Prevention – Construction activities can generate noise at levels which can affect workers and nearby receptors, and in this regard, measures should be outlined to keep noise levels within the prescribed limit. Noise levels should not exceed 90 dB during the day and 75 dB at nights. Night works should be avoided and must be approved in advance by the

Supervisory Consultants. The Contractor is expected to make reasonable efforts not to schedule heavy noise activities for weekends or in the evening and keep the noisy activities for normal working hours (between 8 am and 5 pm). The Contractor shall ensure that equipment is in good working order with manufacturer supplied noise suppression (mufflers etc.) systems functioning. Where noise is likely to pose an impact to nearby residents they should be informed. Workers operating in areas where decibel levels reaches more than 85 decibels should use hearing protection.

- Workers Health and Safety – Construction activities pose several risks to workers health and safety. It is therefore essential that the Contractor develop and implement a system to ensure workers health and safety are not compromised. This should be detailed in the C-ESMP. It should describe management commitment to safety and employees involvement. An analysis of the worksite in terms of safety, and the potential hazards/risks should be included. Prevention and control measures should be included. Measures which should be considered by the Contractor should include the provision and enforcing the use of safety gears by workers, training of workers, identify hazardous areas, use of scaffoldings, etc. Standard Operating Procedures (SOPs) for construction activities such as working on heights, erecting and using scaffolds, using ladders and others identified through the Job Hazard Analysis (JHA) should be prepared. Workers should be trained on SOPs prepared. All safety activities must be documented all illness/injury and exposure should be documented on an Incident Form. Near misses should also be documented. All incidents /accidents should be investigated and Root Cause Analysis (RCA) done. Precautionary measures to address the COVID 19 pandemic onsite should also be included. Measures should be consistent with the National Order, and also incorporate guidance included in WHO/PAHO and World Bank COVID 19 related guidelines for construction/civil works project (attached as Appendix C).
- Community Safety – Measures should be implemented to ensure that the safety of the nearby community is not compromised. These measures should also be documented in the C-ESMP. Measures which should be considered by the Contractor include restricting access to the construction zone by securing/barricading area, installing the necessary warning signs, ensuring the free flow of traffic around the work site, and at no time should there be trucks or other construction equipment left standing on the road way or shoulders. Traffic management should also be addressed, including access to the site and careful planning when large trucks are accessing the site to allow for minimal disruption.
- Emergency Preparedness and Response Plan – An Emergency Preparedness and Response Plan must be included in the C-ESMP to address emergencies relevant to the project. The possible emergencies are:
 - a. Accidents – can occur which can result in injuries to workers. At least one well stocked First Aid Kit should be provided onsite and arrangements should be in place to transfer serious cases to medical institutions.
 - b. Fires - Fire extinguishers and/or other response measures must be placed at the working sites and training should be provided on usage.
 - c. Fuel/Chemical Spills - If there is a large spill or release of solvents, fuels, or other kind of hazardous material, then the EPA should be notified and other measures taken. A spill response kit should be provided and kept onsite and workers should be trained to respond to spills through mock spills exercises.
 - d. Flooding - The Contractor must have a plan to address floods during the rainy period and maintain the progress of work on the timeline agreed and reduced environmental and social impact.

The Emergency Preparedness and Response Plan should also address training of employees, assembly point in case of emergency, emergency contacts, communications, responsible personnel, response procedures and incident reporting.

- Chance Find Procedure – The possibility of a discovery of an artifact during construction is extremely low. However, a Chance Find Procedure should still be in effect and should be implemented if there is a discovery. This should be included to cater for if during excavations archaeological pieces are found. The procedures to be followed should be outlined. The works must be stopped and the National Trust of Guyana should be informed.
- Training - Prior to the commencement of works the Contractor shall conduct an Induction Training for all workers. The training should be conducted by the Contractor's HSSE Personnel and covers the environmental and social requirements of the project, including the role of workers in pollution control, health and safety and emergency response. Thereafter, all new workers should be adequately briefed on the requirements prior to commencing work onsite. If necessary, refresher training may be conducted, and supplemented by regular Tool Box sessions. Training should also be provided in any SOPs prepared. Training to be conducted should be described in the C-ESMP.
- Site Closure, Decommissioning and Restoration - At the conclusion of works the site will have to be cleaned up and all waste removed and all temporary structures belonging to the Contractor dismantled and also removed. The measures to be employed by the Contractor during this process should be described in the C-ESMP.
- Grievances – A Grievance Mechanism is included in the ESMP (Section 5.6). However, since the Contractor will be responsible for addressing grievances, including implementation of corrective actions, measures to be employed by the Contractor in dealing with grievances should be outlined in the C-ESMP. A separate mechanism to address grievances of construction workers should also be included in the C-ESMP.
- Monitoring and Reporting – The C-ESMP should outline how monitoring will be done by the Contractor's HSSE Personnel, including frequency, areas to be monitored, etc.
- Budget – A budget for ensuring environmental, social, health and safety compliance, including the implementation of management and mitigation measures, should be presented in the C-ESMP.

Once the C-ESMP is approved the Contractor will be obligated to implement the measures outlined so as to prevent, minimise and manage any potential or actual impacts of the project.

5.3 Contractor's Code of Conduct for Workers

The Contractor is required to prepare a Code of Conduct for its workers. This Code of Conduct is to guide workers behavior onsite during the conduct of works. The Code should be written in simple language and presented to workers. Once understood and accepted the Code should be signed off by all workers onsite. The Code of Conduct can be included as part of the C-ESMP or submitted separately to the Supervisory Consultants/GSEIP PIU. If it will be submitted separately then this should be done within 28 days of the signing of the Contract. Areas to be addressed in the Code of Conduct include:

- Compliance with applicable laws, rules, and regulations.

- Compliance with applicable health and safety requirements (including utilizing of prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment).
- The use of illegal substances.
- Non-Discrimination (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, birth, age, disability, or political conviction).
- Interactions with community members (for example to convey an attitude of respect and non-discrimination).
- Sexual harassment (for example to prohibit use of language or behavior, in particular towards women or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate).
- Violence or exploitation (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior).
- Protection of children (including prohibitions against abuse, defilement, or otherwise unacceptable behavior with children, limiting interactions with children, and ensuring their safety in the project area).
- Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas).
- Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favours, are not provided to any person with whom there is a financial, family, or personal connection).
- Respecting reasonable work instructions (including regarding environmental and social norms).
- Protection and proper use of property (for example, to prohibit theft, carelessness or waste).
- Duty to report violations of the Code.
- Non retaliation against workers who report violations of the Code, if that report is made in good faith.

5.4 Environmental Monitoring

To ensure that the management and mitigation measures are effective a multi-layer monitoring structure will be implemented. Environmental monitoring will be conducted throughout the construction period by the GSEIP PIU, the Supervisory Consultants and the Contractor.

GSEIP PIU

GSEIP PIU has in place an Environmental and Social Specialist to oversee the environmental, social, health and safety aspects of the project. The Environmental and Social Specialist will ensure that the World Bank Environmental Safeguard Policies are adhered to where applicable and that the Contractors comply with the requirements of the Environmental Authorisation and implement the C-ESMP. The Environmental and Social Specialist will visit the site at least once per week to check on the Contractor's environmental, social, health and safety performance and compliance. The Environmental and Social Specialist will conduct unannounced visits as well as joint visits with the Supervisory Consultant's and Contractor's HSSE Personnel.

Supervisory Consultants

The Supervisory Consultants will also monitor overall works performance and will oversee the environmental, social, health and safety aspects of the project on a day to day basis, including identification of non-compliance and recommendations of corrective actions.

Contractor

The Contractor is required to monitor the implementation of the mitigation measures to ensure that the works do not negatively affect the environment and that the health and safety of workers and nearby community are not compromised, and that activities are being carried out in accordance with the C-ESMP. Monitoring is the responsibility of the Contractor's HSSE Personnel with support from other senior members of staff. Once non-compliances are detected corrective actions are to be implemented.

Prior to the commencement of works, baseline monitoring shall be conducted to establish a baseline of conditions before the works begins and track any changes that could be attributed to the project, in the event of complaints or issues arising. The Contractor shall submit a report to the Supervisory Consultants with all findings inclusive of drawings, photographs highlighting areas of critical areas which may negatively impact the project. This document shall be submitted within 28 days from contract signature and before any work commences.

During the construction phase, the Contractor will be responsible for continuously monitoring of environmental and social impacts at the construction site. Table 6 provides some guidance on the areas to be monitored.

Table 7: Monitoring Plan

Impact	Monitoring Parameter	Frequency
Generation of particulate matter, particularly due to storage of materials, operation of concrete mixers and cutting of tiles/concrete	Ease of visibility Complaints received Number of trucks arriving covered	Weekly
Increased generation of emission of gases and particulate matter from increased traffic	Frequency of maintenance of vehicles	Monthly
Generation of construction and other waste materials by construction activities	Quantity and type of waste Waste collection, storage and disposal methods and timeline for disposal Littering onsite	Weekly
Generation of noise from machinery and construction activities	Level of decibels	Weekly
Reduction in aesthetics due to construction and storage of materials	Number of sites with waste materials left unattended by contractor	Monthly
Decreased quality of surface water due to discharge of sediments, fuel, lubricants and waste oil, and grey and black water into surface water	Visual observation of contaminants	Weekly
Decreased quality of soil due to accidental discharge of fuel and lubricants, waste oil and other hazardous materials	Visual observation of contaminants	Weekly
Disruption of utilities	Frequency and type of utilities disrupted	Monthly

Impact	Monitoring Parameter	Frequency
Health and Safety risk to workers arising from construction activities	Number of risks observed, near misses or accidents occurring due to construction works	Weekly
	Compliance with Covid - precautions	Monthly
Community Health and Safety	Number of risks observed or accidents occurring due to construction works	Weekly
Social conflicts arising from presence of construction personnel on site	Number of reported complaints/grievances	Monthly
	Compliance with Code of Conduct	

5.5 Reporting

To ensure that the level of HSSE compliance is documented a reporting mechanism will be implemented. Monthly progress meetings are expected to be held at which HSSE matters will be reported on and discussed. In addition, reporting will be done by the GSEIP PIU, Supervisory Consultants and the Contractor.

GSEIP PIU

A monthly Environmental and Social Compliance Report will be prepared by the Environmental and Social Specialist, documenting the status of compliance, areas of non-compliances, corrective actions recommended and other improvements required. This report will be submitted to the World Bank.

Supervisor Consultants

The Supervisory Consultants will prepare a monthly report detailing the HSSE performance by the Contractor.

Contractor

The Contractor is required to report on environmental compliance at the Monthly Progress Meetings and in the Monthly Progress Reports. The Contractor is also required to report on any environmental or health and safety incidents which might occur. Further, the Contractor will be responsible to prepare and submit any report requested by the EPA in the Environmental Authorisation. The Contractor is expected to submit a report to the Supervisory Consultants on environmental, social, health and safety performance at least on a monthly basis. The report should include but not limited to the following:

- Environmental incidents or non-compliances observed and corrective actions taken with regards to contract requirements, including waste management, contamination, noise and dust control, traffic management, etc.;
- Health and safety incidents, accidents, injuries and all fatalities that require treatment and actions taken to improve conditions. Information on number of workers, work hours, PPE provided and usage, and worker violations and follow-up actions taken (if any);
- C-ESMP implementation progress, including implementation of the management and mitigation measures outlined in the plan, effectiveness of the measures being implemented, any emerging HSSE issue and any adjustments required (if any); and
- Grievances by workers and community, including grievances received, how resolved, those unresolved and plan for resolving these.

In addition to the monthly report, the Contractor shall also provide immediate notification to the Project Manager of incidents in the following categories: Full details of such incidents shall be provided to the Project Manager within the timeframe agreed with the Project Manager.

- confirmed or likely violation of any Environmental Authorisation conditions or any relevant legislation;
- any fatality or serious (lost time) injury;
- significant adverse effects or damage to private property, e.g. vehicle accident;
- damage to public utilities; or
- any allegation of sexual harassment or sexual misbehavior, child abuse, defilement, or other violations involving children.

5.6 Grievance Mechanism

All stakeholders who believe aspects of the project are likely to have a detrimental impact on their organisation, community, day to day activities, the environment, or on their quality of life should be able to communicate their grievances. These grievances should be documented, analysed and responded to efficiently. Stakeholders should also be able to submit comments and suggestions that they feel will increase the benefits of the project and reduce or mitigate any adverse impacts.

A grievance mechanism will be implemented during the construction of the school which aims to offer a clear set of opportunities for any affected person or any other interested stakeholder to post a claim, request information and have a formal mechanism to communicate with project personnel. A project-level grievance mechanism will be developed, including a process for receiving, evaluating, and addressing project-related grievances from affected persons.

For the works to be conducted grievances may arise, since, given the nature of the project, it is expected that conflicts and other issues such as nuisances are possible. All stakeholders who believe aspects of the project will have a detrimental impact on the community, their day to day activities, the environment, or on their quality of life should be able to communicate their grievances. These grievances should be documented, analysed and responded to efficiently. Stakeholders may also submit comments and suggestions that they feel will increase the benefits of the project and decrease the impact they face.

It is expected the any grievances arising from the construction activities will be localized. As such, to ensure that the process is effective, a site level mechanism to address grievances is recommended.

The grievance mechanism will be coordinated by the Supervisory Consultants Project Manager who will to act as a point of contact to receive complaints and work to address all grievances in a timely, effective and satisfactory manner, and to foster positive engagement when issues arise.

Information on the grievance mechanism, including contact person and contact information should be shared with the community via notices. These can be posted at the site and at public places within the community.

Once any grievance resulting from the execution of works is received the following actions should be undertaken:

- The Supervisory Consultants Project Manager, along with the Contractor's Project Manager/HSSE Personnel, should investigate the reported grievances to determine the validity of a complaint and cause for the grievance;

- It should then be determined whether grievance can be resolved by the Project Team or whether outside authorities with regulatory or other responsibilities and relevant skills are to be consulted;
- Or it should be determined if corrective action are to be taken by the Contractor and what those actions are;
- The Supervisory Consultants Project Manager should prepare a grievance report, including supporting materials such as photographs. If necessary, a clear list of tasks and outcomes expected shall be developed;
- If grievance is the fault of the Contractor, then the Contractor is to implement corrective action immediately.
- The Supervisory Consultant Project Manager, along with the Contractor's Project Manager/HSSE Personnel should conduct follow-up inspection to monitor the situation and determine whether problem is likely to recur and put measures in place to prevent recurrence.

A register of grievances received should be maintained by the Supervisory Consultants and should include information such as date of complaint, by whom, nature of grievance, date investigated and by whom, validity and corrective action required, timeline for implementation of corrective action, and if grievance was satisfactorily addressed or not. A monthly review on the status of grievances received/addressed should be conducted by the Supervisory Consultants.

Since the Contractor will be responsible for addressing grievances, including implementation of corrective actions, measures to be employed by the Contractor in dealing with grievances should be outlined in the C-ESMP.

The Grievance Redress Mechanism will be further developed once the Supervisor Consultants and Contractor are in place, as the process, timelines, contact personnel, contact information, etc. will have to be determined with the involvement of both parties.

5.7 Stakeholder Engagement

Stakeholder engagements will familiarize local stakeholders with the project's activities, the measures being undertaken to protect the environment, provide a platform for concerns to be raised and to lay the foundation for a positive relationship between the project and the community.

The main group of stakeholders to be engaged would be the residents in closest proximity to the school construction site. Stakeholders will be engaged prior and during construction of the school.

Prior to the commencement of construction a stakeholder engagement exercise will be conducted to inform the surrounding community of the project and the planned construction works. This engagement will be held at the project site, with the surrounding residents being invited to participate.

Thereafter, periodic engagement will be conducted as is necessary to update stakeholders on the progress of works, any changes to the project, or to address any emerging issue. This will most likely be done with the closest residents to the site utilising a face-to-face approach and may be done quarterly once in agreement with the residents.

Consideration will also be given to inviting a representative of the community to participate in the Monthly Progress Meetings. The community will be requested to identify this representative during the pre-construction community meeting.

Given the COVID-19 situation, all consultations will be guided by the WB Technical Note "*Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, March 20, 2020.*" This guideline is included as Appendix B.

5.8 Sustainable Development and Other Initiatives

The project will try as much as is possible to incorporate energy efficient equipment and request the purchase and use of sustainable materials. If possible, rainwater harvesting will be included to supplement the water supply. Natural lighting and ventilation will also be incorporated into the project as much as is possible.

The Contractor will be requested to provide employment opportunities to people living close to the project site in order to increase social benefits by targeting recruitment of local people. Where possible the employment of women will be encouraged.

To ensure that the project site is not affected by flooding the site will have to be filled to above the flood levels of the area. This will be incorporated into the project design. The MoE will also have to work with the CHPA ensure the drainage facilities within the area are installed and/or adequately maintained.

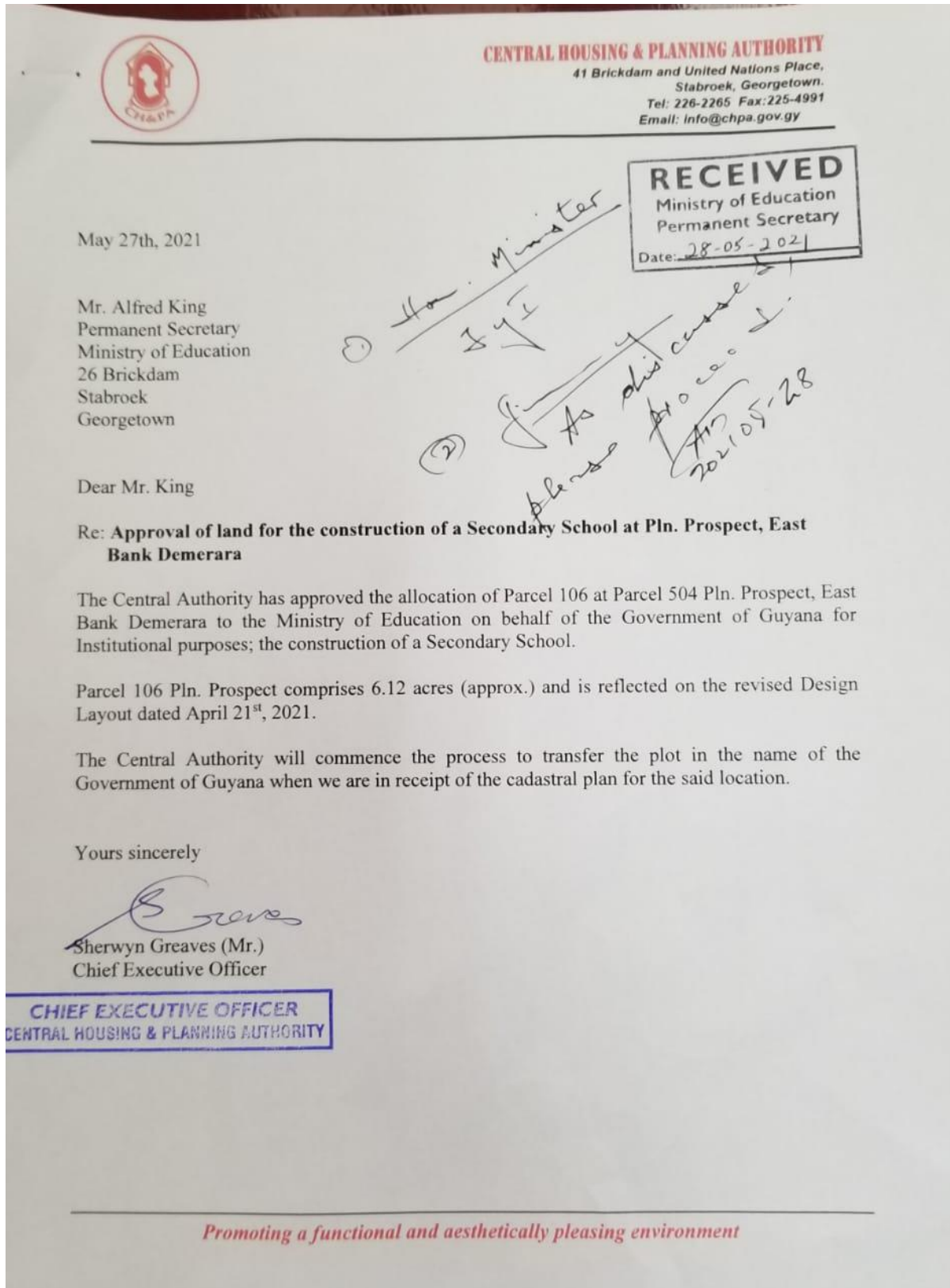
6.0 Conclusion

The construction of the proposed secondary school at Prospect is not expected to have any significant impact on the environment. Most of the potential impacts are related to the construction phase and these impacts are localized, low and possible to mitigate or prevent. Most of the potential impacts of the project to the community are positive impacts since another secondary school will be available for student within a steadily growing community. There are no known physical or cultural resources within the project area, or no close by Indigenous Peoples community. In addition, there are no structures or individuals occupying the site which would require relocation or compensation.

The potential impacts can be mitigated by ensuring the Contractor implements a stringent Health, Safety and Environmental and Social Management System onsite and there is adequate oversight by the GSEIP PIU and Supervisory Consultants.

The Contractor is required to implement the mitigation and management measures established in the C-ESMP and outlined in this ESMP and is required to cover all cost relating to the environmental, social, health and safety requirements, including the provision of materials, equipment and supplies such as all appropriate and required PPEs to ensure compliance. These requirements will be clearly communicated in the Bidding Document to ensure that potential contractors are aware of the requirements and include the necessary resources including personnel and funds to ensure compliance. The ESMP will form part of the Contract Document.

Appendix A: Letter Confirming that Site is Allocated for School Construction



Appendix B: World Bank Guidance on Public Consultations and Stakeholder Engagement

Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings March 20, 2020

With the outbreak and spread of COVID-19, people have been advised, or may be mandated by national or local law, to exercise social distancing, and specifically to avoid public gatherings to prevent and reduce the risk of the virus transmission. Countries have taken various restrictive measures, some imposing strict restrictions on public gatherings, meetings and people's movement, and others advising against public group events. At the same time, the general public has become increasingly aware and concerned about the risks of transmission, particularly through social interactions at large gatherings.

These restrictions have implications for World Bank-supported operations. In particular, they will affect Bank requirements for public consultation and stakeholder engagement in projects, both under implementation and preparation. WHO has issued technical guidance in dealing with COVID-19, including: (i) Risk Communication and Community Engagement (RCCE) Action Plan Guidance Preparedness and Response; (ii) Risk Communication and Community engagement (RCCE) readiness and response; (iii) COVID-19 risk communication package for healthcare facilities; (iv) Getting your workplace ready for COVID-19; and (v) a guide to preventing and addressing social stigma associated with COVID-19. All these documents are available on the WHO website through the following link:
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>.

This Note offers suggestions to World Bank task teams for advising counterpart agencies on managing public consultation and stakeholder engagement in their projects, with the recognition that the situation is developing rapidly and careful regard needs to be given to national requirements and any updated guidance issued by WHO. It is important that the alternative ways of managing consultation and stakeholder engagement discussed with clients are in accordance with the local applicable laws and policies, especially those related to media and communication. The suggestions set out below are subject to confirmation that they are in accordance with existing laws and regulations applying to the project.

Investment projects under implementation. All projects under implementation are likely to have public consultation and stakeholder engagement activities planned and committed as part of project design. These activities may be described in different project documents, and will involve a variety of stakeholders. Commonly planned avenues of such engagement are public hearings, community meetings, focus group discussions, field surveys and individual interviews. With growing concern about the risk of virus spread, there is an urgent need to adjust the approach and methodology for continuing stakeholder consultation and engagement. Taking into account the importance of confirming compliance with national law requirements, below are some suggestions for task teams' consideration while advising their clients:

Task teams will need to review their project, jointly with the PMUs, and should:

- Identify and review planned activities under the project requiring stakeholder engagement and public consultations.
- Assess the level of proposed direct engagement with stakeholders, including location and size of proposed gatherings, frequency of engagement, categories of stakeholders (international, national, local) etc.
- Assess the level of risks of the virus transmission for these engagements, and how restrictions that are in effect in the country / project area would affect these engagements.
- Identify project activities for which consultation/engagement is critical and cannot be postponed without having significant impact on project timelines. For example, selection of resettlement options by affected people during project implementation. Reflecting the specific activity, consider viable means of achieving the necessary input from stakeholders (see further below).
- Assess the level of ICT penetration among key stakeholder groups, to identify the type of communication channels that can be effectively used in the project context.

Based on the above, task teams should discuss and agree with PMUs the specific channels of communication that should be used while conducting stakeholder consultation and engagement activities. The following are some considerations while selecting channels of communication, in light of the current COVID-19 situation:

- Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings;
- If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings. If not permitted, make all reasonable efforts to conduct meetings through online channels, including webex, zoom and skype;
- Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chatgroups appropriate for the purpose, based on the type and category of stakeholders;
- Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, and mail) when stakeholders do not have access to online channels or do not use them frequently. Traditional channels can also be highly effective in conveying relevant information to stakeholders, and allow them to provide their feedback and suggestions;
- Where direct engagement with project affected people or beneficiaries is necessary, such as would be the case for Resettlement Action Plans or Indigenous Peoples Plans preparation and implementation, identify channels for direct communication with each

affected household via a context specific combination of email messages, mail, online platforms, dedicated phone lines with knowledgeable operators;

- Each of the proposed channels of engagement should clearly specify how feedback and suggestions can be provided by stakeholders;
- An appropriate approach to conducting stakeholder engagement can be developed in most contexts and situations. However, in situations where none of the above means of communication are considered adequate for required consultations with stakeholders, the team should discuss with the PMU whether the project activity can be rescheduled to a later time, when meaningful stakeholder engagement is possible. Where it is not possible to postpone the activity (such as in the case of ongoing resettlement) or where the postponement is likely to be for more than a few weeks, the task team should consult with the OESRC to obtain advice and guidance.

Investment projects under preparation. Where projects are under preparation and stakeholder engagement is about to commence or is ongoing, such as in the project E&S planning process, stakeholder consultation and engagement activities should not be deferred, but rather designed to be fit for purpose to ensure effective and meaningful consultations to meet project and stakeholder needs. Some suggestions for advising clients on stakeholder engagement in such situations are given below. These suggestions are subject to the coronavirus situation in country, and restrictions put in place by governments. The task team and the PMU should:

- Review the country COVID-19 spread situation in the project area, and the restrictions put in place by the government to contain virus spread;
- Review the draft Stakeholder Engagement Plan (SEP, if it exists) or other agreed stakeholder engagement arrangements, particularly the approach, methods and forms of engagement proposed, and assess the associated potential risks of virus transmission in conducting various engagement activities;
- Be sure that all task team and PIU members articulate and express their understandings on social behavior and good hygiene practices, and that any stakeholder engagement events be preceded with the procedure of articulating such hygienic practices.
- Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings, and minimize direct interaction between project agencies and beneficiaries / affected people;
- If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings. If not permitted, make all reasonable efforts to conduct meetings through online channels, including webex, zoom and skype meetings;
- Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chatgroups appropriate for the purpose, based on the type and category of stakeholders;

- Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements and mail) when stakeholders do not have access to online channels or do not use them frequently. Such channels can also be highly effective in conveying relevant information to stakeholders, and allow them to provide their feedback and suggestions;
- Employ online communication tools to design virtual workshops in situations where large meetings and workshops are essential, given the preparatory stage of the project. Webex, Skype, and in low ICT capacity situations, audio meetings, can be effective tools to design virtual workshops. The format of such workshops could include the following steps:
 - *Virtual registration of participants:* Participants can register online through a dedicated platform.
 - *Distribution of workshop materials to participants, including agenda, project documents, presentations, questionnaires and discussion topics:* These can be distributed online to participants.
 - *Review of distributed information materials:* Participants are given a scheduled duration for this, prior to scheduling a discussion on the information provided.
 - *Discussion, feedback collection and sharing:*
 - ✓ Participants can be organized and assigned to different topic groups, teams or virtual “tables” provided they agree to this.
 - ✓ Group, team and table discussions can be organized through social media means, such as webex, skype or zoom, or through written feedback in the form of an electronic questionnaire or feedback forms that can be emailed back.
 - *Conclusion and summary:* The chair of the workshop will summarize the virtual workshop discussion, formulate conclusions and share electronically with all participants.
- In situations where online interaction is challenging, information can be disseminated through digital platform (where available) like Facebook, Twitter, WhatsApp groups, Project weblinks/ websites, and traditional means of communications (TV, newspaper, radio, phone calls and mails with clear description of mechanisms for providing feedback via mail and / or dedicated telephone lines. All channels of communication need to clearly specify how stakeholders can provide their feedback and suggestions.
- *Engagement with direct stakeholders for household surveys:* There may be planning activities that require direct stakeholder engagement, particularly in the field. One example is resettlement planning where surveys need to be conducted to ascertain socioeconomic status of affected people, take inventory of their affected assets, and facilitate discussions related to relocation and livelihood planning. Such survey activities require active participation of local stakeholders, particularly the potentially adversely affected communities. However, there may be situations involving indigenous communities, or other communities that may not have access to the digital platforms or means of communication, teams should develop specially tailored stakeholder

engagement approaches that will be appropriate in the specific setting. The teams should reach out to the regional PMs for ENB and Social Development or to the ESSA for the respective region, in case they need additional support to develop such tailored approaches.

- In situations where it is determined that meaningful consultations that are critical to the conduct of a specific project activity cannot be conducted in spite of all reasonable efforts on the part of the client supported by the Bank, the task team should discuss with the client whether the proposed project activities can be postponed by a few weeks in view of the virus spread risks. This would depend on the COVID-19 situation in the country, and the government policy requirements to contain the virus spread. Where it is not possible to postpone the activity (such as in the case of ongoing resettlement) or where the postponement is likely to be for more than a few weeks, the task team should consult with the OESRC to obtain advice and guidance.

Appendix C: World Bank Guidance on COVID-19 Considerations for Civil Works Project

INTERIM GUIDANCE ON COVID-19

VERSION 1: APRIL 7, 2020

ESF/SAFEGUARDS INTERIM NOTE: COVID-19 CONSIDERATIONS IN CONSTRUCTION/CIVIL WORKS PROJECTS

This note was issued on April 7, 2020 and includes links to the latest guidance as of this date (e.g. from WHO). Given the COVID-19 situation is rapidly evolving, when using this note it is important to check whether any updates to these external resources have been issued.

1. INTRODUCTION

The COVID-19 pandemic presents Governments with unprecedented challenges. Addressing COVID-19 related issues in both existing and new operations starts with recognizing that this is not business as usual and that circumstances require a highly adaptive responsive management design to avoid, minimize and manage what may be a rapidly evolving situation. In many cases, we will ask Borrowers to use reasonable efforts in the circumstances, recognizing that what may be possible today may be different next week (both positively, because more supplies and guidance may be available, and negatively, because the spread of the virus may have accelerated).

This interim note is intended to provide guidance to teams on how to support Borrowers in addressing key issues associated with COVID-19, and consolidates the advice that has already been provided over the past month. As such, it should be used in place of other guidance that has been provided to date. This note will be developed as the global situation and the Bank's learning (and that of others) develops. This is not a time when 'one size fits all'. More than ever, teams will need to work with Borrowers and projects to understand the activities being carried out and the risks that these activities may entail. Support will be needed in designing mitigation measures that are implementable in the context of the project. These measures will need to take into account capacity of the Government agencies, availability of supplies and the practical challenges of operations on-the-ground, including stakeholder engagement, supervision and monitoring. In many circumstances, communication itself may be challenging, where face-to-face meetings are restricted or prohibited, and where IT solutions are limited or unreliable.

This note emphasizes the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination, and the need for high levels of responsiveness in a changing environment. It recommends assessing the current situation of the project, putting in place mitigation measures to avoid or minimize the chance of infection, and planning what to do if either project workers become infected or the work force includes workers from proximate communities affected by COVID-19. In many projects, measures to avoid or minimize will need to be implemented at the same time as dealing with sick workers and relations with the community, some of whom may also be ill or concerned about infection. Borrowers should understand the obligations that contractors have under their existing contracts (see Section 3), require contractors to put in place appropriate organizational structures (see Section 4) and develop procedures to address different aspects of COVID-19 (see Section 5).

2. CHALLENGES WITH CONSTRUCTION/CIVIL WORKS

Projects involving construction/civil works frequently involve a large work force, together with suppliers and supporting functions and services. The work force may comprise workers from international, national, regional, and local labor markets. They may need to live in on-site accommodation, lodge within communities close to work sites or return to their homes after work. There may be different contractors

permanently present on site, carrying out different activities, each with their own dedicated workers. Supply chains may involve international, regional and national suppliers facilitating the regular flow of goods and services to the project (including supplies essential to the project such as fuel, food, and water). As such there will also be regular flow of parties entering and exiting the site; support services, such as catering, cleaning services, equipment, material and supply deliveries, and specialist sub-contractors, brought in to deliver specific elements of the works.

Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is extremely serious, as are the implications of such a spread. Projects may experience large numbers of the work force becoming ill, which will strain the project's health facilities, have implications for local emergency and health services and may jeopardize the progress of the construction work and the schedule of the project. Such impacts will be exacerbated where a work force is large and/or the project is in remote or under-serviced areas. In such circumstances, relationships with the community can be strained or difficult and conflict can arise, particularly if people feel they are being exposed to disease by the project or are having to compete for scarce resources. The project must also exercise appropriate precautions against introducing the infection to local communities.

3. DOES THE CONSTRUCTION CONTRACT COVER THIS SITUATION?

Given the unprecedented nature of the COVID-19 pandemic, it is unlikely that the existing construction/civil works contracts will cover all the things that a prudent contractor will need to do. Nevertheless, the first place for a Borrower to start is with the contract, determining what a contractor's existing obligations are, and how these relate to the current situation.

The obligations on health and safety will depend on what kind of contract exists (between the Borrower and the main contractor; between the main contractors and the sub-contractors). It will differ if the Borrower used the World Bank's standard procurement documents (SPDs) or used national bidding documents. If a FIDIC document has been used, there will be general provisions relating to health and safety. For example, the standard FIDIC, Conditions of Contract for Construction (Second Edition 2017), which contains no 'ESF enhancements', states (in the General Conditions, clause 6.7) that the Contractor will be required:

- to take all necessary precautions to maintain the health and safety of the Contractor's Personnel
- to appoint a health and safety officer at site, who will have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorized to enter and or work on the site and to take protective measures to prevent accidents
- to ensure, in collaboration with local health authorities, that medical staff, first aid facilities, sick bay, ambulance services and any other medical services specified are available at all times at the site and at any accommodation
- to ensure suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics

These requirements have been enhanced through the introduction of the ESF into the SPDs (edition dated July 2019). The general FIDIC clause referred to above has been strengthened to reflect the requirements of the ESF. Beyond FIDIC's general requirements discussed above, the Bank's Particular Conditions include a number of relevant requirements on the Contractor, including:

- to provide health and safety training for Contractor's Personnel (which include project workers and all personnel that the Contractor uses on site, including staff and other employees of the Contractor and Subcontractors and any other personnel assisting the Contractor in carrying out project activities)
- to put in place workplace processes for Contractor's Personnel to report work situations that are not safe or healthy
- gives Contractor's Personnel the right to report work situations which they believe are not safe or healthy, and to remove themselves from a work situation which they have a reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves)
- requires measures to be in place to avoid or minimize the spread of diseases including measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent contract-related labor
- to provide an easily accessible grievance mechanism to raise workplace concerns

Where the contract form used is FIDIC, the Borrower (as the Employer) will be represented by the Engineer (also referred to in this note as the Supervising Engineer). The Engineer will be authorized to exercise authority specified in or necessarily implied from the construction contract. In such cases, the Engineer (through its staff on site) will be the interface between the PIU and the Contractor. It is important therefore to understand the scope of the Engineer's responsibilities. It is also important to recognize that in the case of infectious diseases such as COVID-19, project management – through the Contractor/subcontractor hierarchy – is only as effective as the weakest link. A thorough review of management procedures/plans as they will be implemented through the entire contractor hierarchy is important. Existing contracts provide the outline of this structure; they form the basis for the Borrower to understand how proposed mitigation measures will be designed and how adaptive management will be implemented, and to start a conversation with the Contractor on measures to address COVID-19 in the project.

4. WHAT PLANNING SHOULD THE BORROWER BE DOING?

Task teams should work with Borrowers (PIUs) to confirm that projects (i) are taking adequate precautions to prevent or minimize an outbreak of COVID-19, and (ii) have identified what to do in the event of an outbreak. Suggestions on how to do this are set out below:

- The PIU, either directly or through the Supervising Engineer, should request details in writing from the main Contractor of the measures being taken to address the risks. As stated in Section 3, the construction contract should include health and safety requirements, and these can be used as the basis for identification of, and requirements to implement, COVID-19 specific measures. The measures may be presented as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures. The measures may be reflected in revisions to the project's health and safety manual. This request should be made in writing (following any relevant procedure set out in the contract between the Borrower and the contractor).
- In making the request, it may be helpful for the PIU to specify the areas that should be covered. This should include the items set out in Section 5 below and take into account current and relevant

guidance provided by national authorities, WHO and other organizations. See the list of references in the Annex to this note.

- The PIU should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing the agreed measures.
- Where possible, a senior person should be identified as a focal point to deal with COVID-19 issues. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site and the local community. It is also advisable to designate at least one back-up person, in case the focal point becomes ill; that person should be aware of the arrangements that are in place.
- On sites where there are a number of contractors and therefore (in effect) different work forces, the request should emphasize the importance of coordination and communication between the different parties. Where necessary, the PIU should request the main contractor to put in place a protocol for regular meetings of the different contractors, requiring each to appoint a designated staff member (with back up) to attend such meetings. If meetings cannot be held in person, they should be conducted using whatever IT is available. The effectiveness of mitigation measures will depend on the weakest implementation, and therefore it is important that all contractors and sub-contractors understand the risks and the procedure to be followed.
- The PIU, either directly or through the Supervising Engineer, may provide support to projects in identifying appropriate mitigation measures, particularly where these will involve interface with local services, in particular health and emergency services. In many cases, the PIU can play a valuable role in connecting project representatives with local Government agencies, and helping coordinate a strategic response, which takes into account the availability of resources. To be most effective, projects should consult and coordinate with relevant Government agencies and other projects in the vicinity.
- Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project to address COVID-19 related issues, how procedures are being implemented, and concerns about the health of their co-workers and other staff.

5. WHAT SHOULD THE CONTRACTOR COVER?

The Contractor should identify measures to address the COVID-19 situation. What will be possible will depend on the context of the project: the location, existing project resources, availability of supplies, capacity of local emergency/health services, the extent to which the virus already exist in the area. A systematic approach to planning, recognizing the challenges associated with rapidly changing circumstances, will help the project put in place the best measures possible to address the situation. As discussed above, measures to address COVID-19 may be presented in different ways (as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures). PIUs and contractors should refer to guidance issued by relevant authorities, both national

and international (e.g. WHO), which is regularly updated (see sample References and links provided in the Annex).

Addressing COVID-19 at a project site goes beyond occupational health and safety, and is a broader project issue which will require the involvement of different members of a project management team. In many cases, the most effective approach will be to establish procedures to address the issues, and then to ensure that these procedures are implemented systematically. Where appropriate given the project context, a designated team should be established to address COVID-19 issues, including PIU representatives, the Supervising Engineer, management (e.g. the project manager) of the contractor and sub-contractors, security, and medical and OHS professionals. Procedures should be clear and straightforward, improved as necessary, and supervised and monitored by the COVID-19 focal point(s). Procedures should be documented, distributed to all contractors, and discussed at regular meetings to facilitate adaptive management. The issues set out below include a number that represent expected good workplace management but are especially pertinent in preparing the project response to COVID-19.

(a) ASSESSING WORKFORCE CHARACTERISTICS

Many construction sites will have a mix of workers e.g. workers from the local communities; workers from a different part of the country; workers from another country. Workers will be employed under different terms and conditions and be accommodated in different ways. Assessing these different aspects of the workforce will help in identifying appropriate mitigation measures:

- The Contractor should prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations (e.g. 4 weeks on, 4 weeks off).
- This should include a breakdown of workers who reside at home (i.e. workers from the community), workers who lodge within the local community and workers in on-site accommodation. Where possible, it should also identify workers that may be more at risk from COVID-19, those with underlying health issues or who may be otherwise at risk.
- Consideration should be given to ways in which to minimize movement in and out of site. This could include lengthening the term of existing contracts, to avoid workers returning home to affected areas, or returning to site from affected areas.
- Workers accommodated on site should be required to minimize contact with people near the site, and in certain cases be prohibited from leaving the site for the duration of their contract, so that contact with local communities is avoided.
- Consideration should be given to requiring workers lodging in the local community to move to site accommodation (subject to availability) where they would be subject to the same restrictions.
- Workers from local communities, who return home daily, weekly or monthly, will be more difficult to manage. They should be subject to health checks at entry to the site (as set out above) and at some point, circumstances may make it necessary to require them to either use accommodation on site or not to come to work.

(b) ENTRY/EXIT TO THE WORK SITE AND CHECKS ON COMMENCEMENT OF WORK

Entry/exit to the work site should be controlled and documented for both workers and other parties, including support staff and suppliers. Possible measures may include:

- Establishing a system for controlling entry/exit to the site, securing the boundaries of the site, and establishing designating entry/exit points (if they do not already exist). Entry/exit to the site should be documented.
- Training security staff on the (enhanced) system that has been put in place for securing the site and controlling entry and exit, the behaviors required of them in enforcing such system and any COVID - 19 specific considerations.
- Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks and recording details of any worker that is denied entry.
- Confirming that workers are fit for work before they enter the site or start work. While procedures should already be in place for this, special attention should be paid to workers with underlying health issues or who may be otherwise at risk. Consideration should be given to demobilization of staff with underlying health issues.
- Checking and recording temperatures of workers and other people entering the site or requiring self-reporting prior to or on entering the site.
- Providing daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures, using demonstrations and participatory methods.
- During the daily briefings, reminding workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor or the COVID-19 focal point if they have symptoms or are feeling unwell.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Preventing a sick worker from entering the site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days.

(c) GENERAL HYGIENE

Requirements on general hygiene should be communicated and monitored, to include:

- Training workers and staff on site on the signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms (for further information see [WHO COVID-19 advice for the public](#)).
- Placing posters and signs around the site, with images and text in local languages.
- Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol based sanitizer (if available, 60-95% alcohol) can also be used.
- Review worker accommodations, and assess them in light of the requirements set out in [IFC/EBRD guidance on Workers' Accommodation: processes and standards](#), which provides valuable guidance as to good practice for accommodation.
- Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected (see paragraph (f)).

(d) CLEANING AND WASTE DISPOSAL

Conduct regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces. Review cleaning protocols for key construction equipment (particularly if it is being operated by different workers). This should include:

- Providing cleaning staff with adequate cleaning equipment, materials and disinfectant.
- Review general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.
- Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, cleaners should be provided with best available alternatives.
- Training cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).
- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO). If open burning and incineration of medical wastes is necessary, this should be for as limited a duration as possible. Waste should be reduced and segregated, so that only the smallest amount of waste is incinerated (for further information [see WHO interim guidance on water, sanitation and waste management for COVID-19](#)).

(e) ADJUSTING WORK PRACTICES

Consider changes to work processes and timings to reduce or minimize contact between workers, recognizing that this is likely to impact the project schedule. Such measures could include:

- Decreasing the size of work teams.
- Limiting the number of workers on site at any one time.
- Changing to a 24-hour work rotation.
- Adapting or redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes.
- Continuing with the usual safety trainings, adding COVID-19 specific considerations. Training should include proper use of normal PPE. While as of the date of this note, general advice is that construction workers do not require COVID-19 specific PPE, this should be kept under review (for further information see [WHO interim guidance on rational use of personal protective equipment \(PPE\) for COVID-19](#)).
- Reviewing work methods to reduce use of construction PPE, in case supplies become scarce or the PPE is needed for medical workers or cleaners. This could include, e.g. trying to reduce the need for dust masks by checking that water sprinkling systems are in good working order and are maintained or reducing the speed limit for haul trucks.
- Arranging (where possible) for work breaks to be taken in outdoor areas within the site.
- Consider changing canteen layouts and phasing meal times to allow for social distancing and phasing access to and/or temporarily restricting access to leisure facilities that may exist on site, including gyms.

- At some point, it may be necessary to review the overall project schedule, to assess the extent to which it needs to be adjusted (or work stopped completely) to reflect prudent work practices, potential exposure of both workers and the community and availability of supplies, taking into account Government advice and instructions.

(f) PROJECT MEDICAL SERVICES

Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures and training. Where these are not adequate, consider upgrading services where possible, including:

- Expanding medical infrastructure and preparing areas where patients can be isolated. Guidance on setting up isolation facilities is set out in [WHO interim guidance on considerations for quarantine of individuals in the context of containment for COVID-19](#). Isolation facilities should be located away from worker accommodation and ongoing work activities. Where possible, workers should be provided with a single well-ventilated room (open windows and door). Where this is not possible, isolation facilities should allow at least 1 meter between workers in the same room, separating workers with curtains, if possible. Sick workers should limit their movements, avoiding common areas and facilities and not be allowed visitors until they have been clear of symptoms for 14 days. If they need to use common areas and facilities (e.g. kitchens or canteens), they should only do so when unaffected workers are not present and the area/facilities should be cleaned prior to and after such use.
- Training medical staff, which should include current WHO advice on COVID-19 and recommendations on the specifics of COVID-19. Where COVID-19 infection is suspected, medical providers on site should follow [WHO interim guidance on infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#).
- Training medical staff in testing, if testing is available.
- Assessing the current stock of equipment, supplies and medicines on site, and obtaining additional stock, where required and possible. This could include medical PPE, such as gowns, aprons, medical masks, gloves, and eye protection. Refer to WHO guidance as to what is advised (for further information see [WHO interim guidance on rational use of personal protective equipment \(PPE\) for COVID-19](#)).
- If PPE items are unavailable due to world-wide shortages, medical staff on the project should agree on alternatives and try to procure them. Alternatives that may commonly be found on construction sites include dust masks, construction gloves and eye goggles. While these items are not recommended, they should be used as a last resort if no medical PPE is available.
- Ventilators will not normally be available on work sites, and in any event, intubation should only be conducted by experienced medical staff. If a worker is extremely ill and unable to breathe properly on his or her own, they should be referred immediately to the local hospital (see (g) below).
- Review existing methods for dealing with medical waste, including systems for storage and disposal (for further information see [WHO interim guidance on water, sanitation and waste management for COVID-19](#), and [WHO guidance on safe management of wastes from health-care activities](#)).

(g) LOCAL MEDICAL AND OTHER SERVICES

Given the limited scope of project medical services, the project may need to refer sick workers to local medical services. Preparation for this includes:

- Obtaining information as to the resources and capacity of local medical services (e.g. number of beds, availability of trained staff and essential supplies).
- Conducting preliminary discussions with specific medical facilities, to agree what should be done in the event of ill workers needing to be referred.
- Considering ways in which the project may be able to support local medical services in preparing for members of the community becoming ill, recognizing that the elderly or those with pre-existing medical conditions require additional support to access appropriate treatment if they become ill.
- Clarifying the way in which an ill worker will be transported to the medical facility, and checking availability of such transportation.
- Establishing an agreed protocol for communications with local emergency/medical services.
- Agreeing with the local medical services/specific medical facilities the scope of services to be provided, the procedure for in-take of patients and (where relevant) any costs or payments that may be involved.
- A procedure should also be prepared so that project management knows what to do in the unfortunate event that a worker ill with COVID-19 dies. While normal project procedures will continue to apply, COVID-19 may raise other issues because of the infectious nature of the disease. The project should liaise with the relevant local authorities to coordinate what should be done, including any reporting or other requirements under national law.

(h) INSTANCES OR SPREAD OF THE VIRUS

WHO provides detailed advice on what should be done to treat a person who becomes sick or displays symptoms that could be associated with the COVID-19 virus (for further information see [WHO interim guidance on infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#)). The project should set out risk-based procedures to be followed, with differentiated approaches based on case severity (mild, moderate, severe, critical) and risk factors (such as age, hypertension, diabetes) (for further information see [WHO interim guidance on operational considerations for case management of COVID-19 in health facility and community](#)). These may include the following:

- If a worker has symptoms of COVID-19 (e.g. fever, dry cough, fatigue) the worker should be removed immediately from work activities and isolated on site.
- If testing is available on site, the worker should be tested on site. If a test is not available at site, the worker should be transported to the local health facilities to be tested (if testing is available).
- If the test is positive for COVID-19 or no testing is available, the worker should continue to be isolated. This will either be at the work site or at home. If at home, the worker should be transported to their home in transportation provided by the project.
- Extensive cleaning procedures with high-alcohol content disinfectant should be undertaken in the area where the worker was present, prior to any further work being undertaken in that area. Tools used by the worker should be cleaned using disinfectant and PPE disposed of.
- Co-workers (i.e. workers with whom the sick worker was in close contact) should be required to stop work, and be required to quarantine themselves for 14 days, even if they have no symptoms.

- Family and other close contacts of the worker should be required to quarantine themselves for 14 days, even if they have no symptoms.
- If a case of COVID-19 is confirmed in a worker on the site, visitors should be restricted from entering the site and worker groups should be isolated from each other as much as possible.
- If workers live at home and has a family member who has a confirmed or suspected case of COVID-19, the worker should quarantine themselves and not be allowed on the project site for 14 days, even if they have no symptoms.
- Workers should continue to be paid throughout periods of illness, isolation or quarantine, or if they are required to stop work, in accordance with national law.
- Medical care (whether on site or in a local hospital or clinic) required by a worker should be paid for by the employer.

(i) CONTINUITY OF SUPPLIES AND PROJECT ACTIVITIES

Where COVID-19 occurs, either in the project site or the community, access to the project site may be restricted, and movement of supplies may be affected.

- Identify back-up individuals, in case key people within the project management team (PIU, Supervising Engineer, Contractor, sub-contractors) become ill, and communicate who these are so that people are aware of the arrangements that have been put in place.
- Document procedures, so that people know what they are, and are not reliant on one person's knowledge.
- Understand the supply chain for necessary supplies of energy, water, food, medical supplies and cleaning equipment, consider how it could be impacted, and what alternatives are available. Early pro-active review of international, regional and national supply chains, especially for those supplies that are critical for the project, is important (e.g. fuel, food, medical, cleaning and other essential supplies). Planning for a 1-2 month interruption of critical goods may be appropriate for projects in more remote areas.
- Place orders for/procure critical supplies. If not available, consider alternatives (where feasible).
- Consider existing security arrangements, and whether these will be adequate in the event of interruption to normal project operations.
- Consider at what point it may become necessary for the project to significantly reduce activities or to stop work completely, and what should be done to prepare for this, and to re-start work when it becomes possible or feasible.

(j) TRAINING AND COMMUNICATION WITH WORKERS

Workers need to be provided with regular opportunities to understand their situation, and how they can best protect themselves, their families and the community. They should be made aware of the procedures that have been put in place by the project, and their own responsibilities in implementing them.

- It is important to be aware that in communities close to the site and amongst workers without access to project management, social media is likely to be a major source of information. This raises the importance of regular information and engagement with workers (e.g. through training, town halls, tool boxes) that emphasizes what management is doing to deal with the risks of COVID-19. Allaying fear is an important aspect of work force peace of mind and business continuity. Workers should be given an opportunity to ask questions, express their concerns, and make suggestions.

- Training of workers should be conducted regularly, as discussed in the sections above, providing workers with a clear understanding of how they are expected to behave and carry out their work duties.
- Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work.
- Training should cover all issues that would normally be required on the work site, including use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.
- Communications should be clear, based on fact and designed to be easily understood by workers, for example by displaying posters on handwashing and social distancing, and what to do if a worker displays symptoms.

(k) COMMUNICATION AND CONTACT WITH THE COMMUNITY

Relations with the community should be carefully managed, with a focus on measures that are being implemented to safeguard both workers and the community. The community may be concerned about the presence of non-local workers, or the risks posed to the community by local workers presence on the project site. The project should set out risk-based procedures to be followed , which may reflect WHO guidance (for further information see [WHO Risk Communication and Community Engagement \(RCCE\) Action Plan Guidance COVID-19 Preparedness and Response](#)). The following good practice should be considered:

- Communications should be clear, regular, based on fact and designed to be easily understood by community members.
- Communications should utilize available means. In most cases, face-to-face meetings with the community or community representatives will not be possible. Other forms of communication should be used; posters, pamphlets, radio, text message, electronic meetings. The means used should take into account the ability of different members of the community to access them, to make sure that communication reaches these groups.
- The community should be made aware of procedures put in place at site to address issues related to COVID-19. This should include all measures being implemented to limit or prohibit contact between workers and the community. These need to be communicated clearly, as some measures will have financial implications for the community (e.g. if workers are paying for lodging or using local facilities). The community should be made aware of the procedure for entry/exit to the site, the training being given to workers and the procedure that will be followed by the project if a worker becomes sick.
- If project representatives, contractors or workers are interacting with the community, they should practice social distancing and follow other COVID-19 guidance issued by relevant authorities, both national and international (e.g. WHO).

6. EMERGENCY POWERS AND LEGISLATION

Many Borrowers are enacting emergency legislation. The scope of such legislation, and the way it interacts with other legal requirements, will vary from country to country. Such legislation can cover a range of issues, for example:

- Declaring a public health emergency

- Authorizing the use of police or military in certain activities (e.g. enforcing curfews or restrictions on movement)
- Ordering certain categories of employees to work longer hours, not to take holiday or not to leave their job (e.g. health workers)
- Ordering non-essential workers to stay at home, for reduced pay or compulsory holiday

Except in exceptional circumstances (after referral to the World Bank's Operations Environmental and Social Review Committee (OESRC)), projects will need to follow emergency legislation to the extent that these are mandatory or advisable. It is important that the Borrower understands how mandatory requirements of the legislation will impact the project. Teams should require Borrowers (and in turn, Borrowers should request Contractors) to consider how the emergency legislation will impact the obligations of the Borrower set out in the legal agreement and the obligations set out in the construction contracts. Where the legislation requires a material departure from existing contractual obligations, this should be documented, setting out the relevant provisions.

ANNEX

WHO Guidance

Advice for the public

WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

Technical guidance

[Infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#), issued on 19 March 2020

[Coronavirus disease \(COVID-19\) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health](#), issued on 18 March 2020

[Risk Communication and Community Engagement \(RCCE\) Action Plan Guidance COVID-19 Preparedness and Response](#), issued on 16 March 2020

[Considerations for quarantine of individuals in the context of containment for coronavirus disease \(COVID-19\)](#), issued on 19 March 2020

[Operational considerations for case management of COVID-19 in health facility and community](#), issued on 19 March 2020

[Rational use of personal protective equipment for coronavirus disease 2019 \(COVID-19\)](#), issued on 27 February 2020

[Getting your workplace ready for COVID-19](#), issued on 19 March 2020

[Water, sanitation, hygiene and waste management for COVID-19](#), issued on 19 March 2020

[Safe management of wastes from health-care activities](#) issued in 2014

[Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus \(COVID-19\) outbreak](#), issued on March 19, 2020

ILO GUIDANCE

[ILO Standards and COVID-19 FAQ](#), issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

MFI GUIDANCE

[IDB Invest Guidance for Infrastructure Projects on COVID-19: A Rapid Risk Profile and Decision Framework](#)

[KfW DEG COVID-19 Guidance for employers, issued on 31 March 2020](#)

[CDC Group COVID-19 Guidance for Employers, issued on 23 March 2020](#)