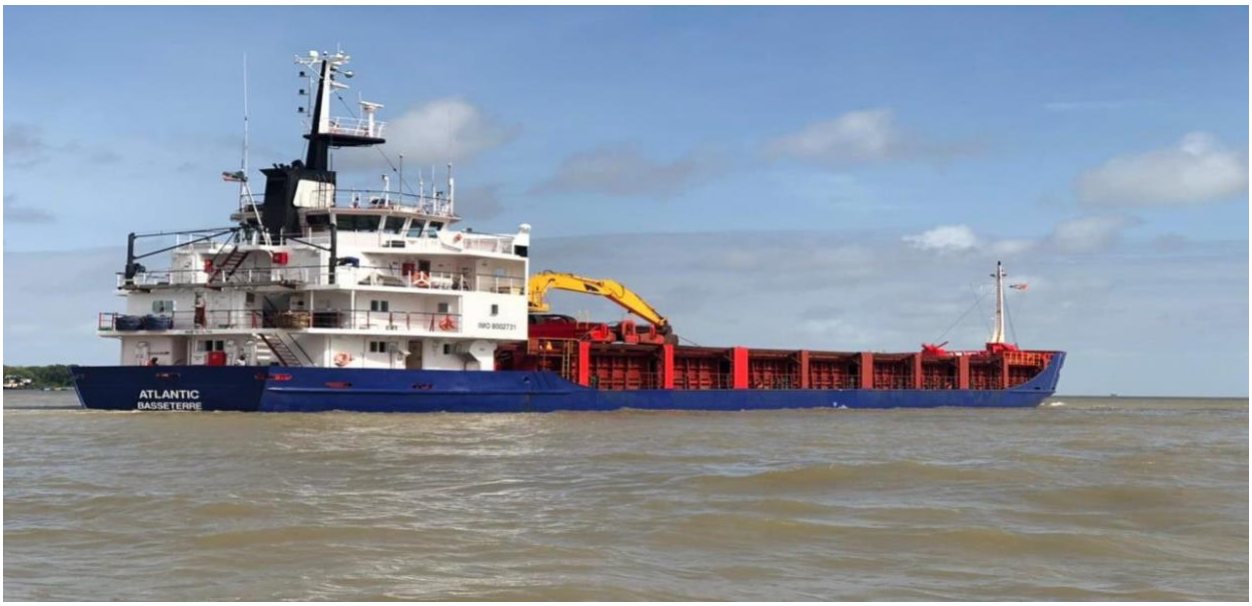
FRIENDSHIP PORT FACILITY



PROJECT SUMMARY FOR KS SHIPPING LINE INC (GUYANA) TO REQUEST THE APPROVAL FOR LICENSES / PERMIT FOR THE CONSTRUCTION OF A WHARF/ MOORING FACILITY.

PROJECT NAME – FRIENDSHIP PORT FACILITY

DATE- 20th November, 2023

SUBMITTED AND PREPARED BY – KEVIN ANTHONY SHIWRAM

CONTACT INFO – 592 622-3204

THE PROJECT

The facility will be located at parcel numbers 326, 327, 623, 624, 625, 626, and 627 of Block XXVIII, Plantation Friendship, East Bank Demerara. This project includes the construction of a wharf, mooring facility and establishment of a revetment.
It will include a revetment on the western boundary to the Demerara River and fenced around the northern, southern, and eastern boundary. Within the compound, there will be a reinforced concrete road. This wharf facility will be utilized for onloading and offloading cargo as well as the docking of ships during routine maintenance. In addition, this wharf facility will also aim to serve the Oil and Gas industry in the coming future.

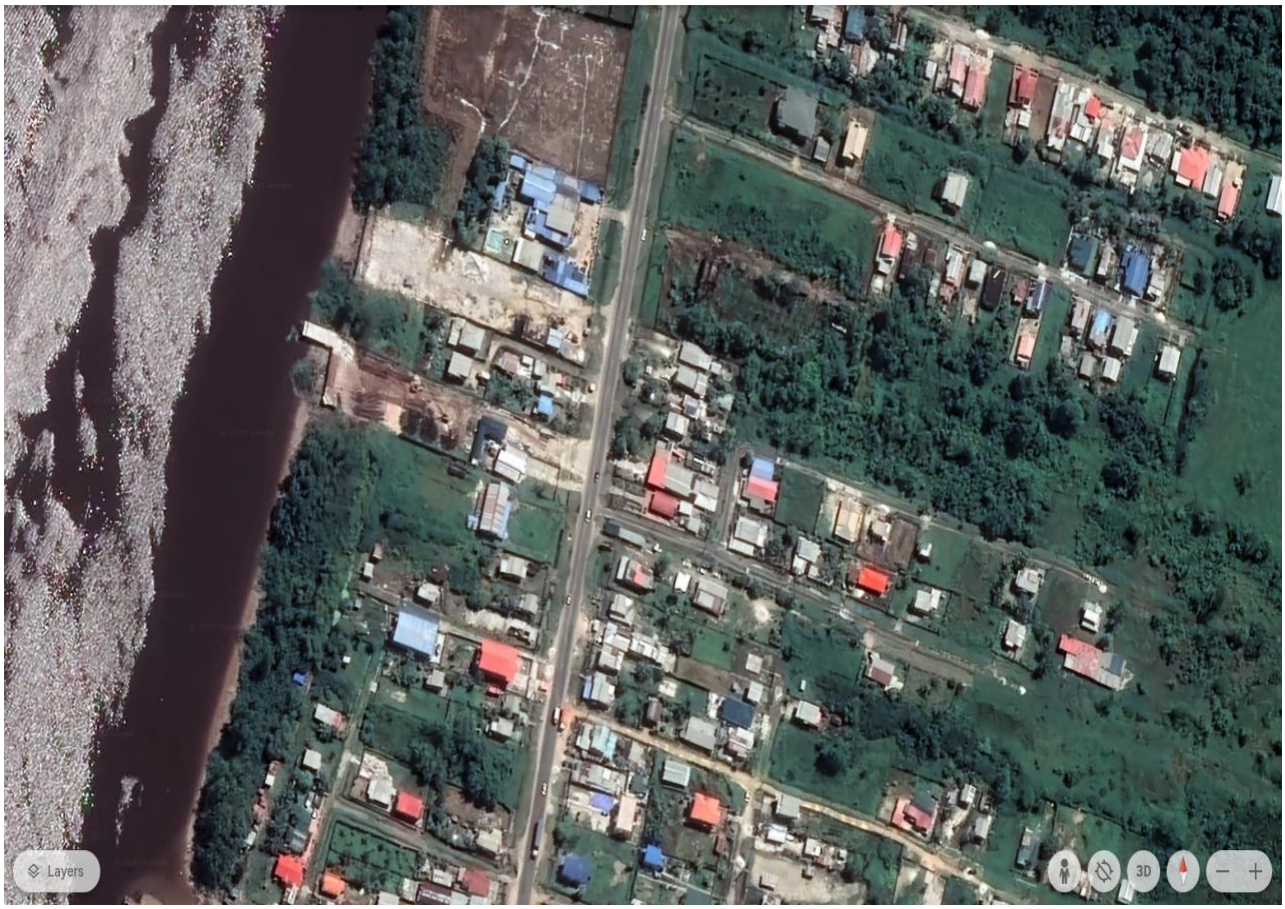
We see this project as a great opportunity to serve the fledging oil and gas sector and the increased traffic of vessels that service the other sector of our economy. As you may know, Guyana is becoming the booming oil production country. Having a project such as this would be beneficial to the country, its government and the citizens. On the other hand, the company's very-owned, MV Atlantic will utilize the said facility for docking, maintenance, and other support services. This vessel has a maximum draft of the facility of 5.5 meters (loaded) with a minimum draft of 3.5 meters (unloaded). Overall, the gross tonnage is 2199.

Additionally, if there not a viable candidate for the leasing of the land and its wharf, KS SHIPPING LINE INC will continue to develop the land by putting 2 mobile offices on the site and use the wharf to facilitate the replenishment of goods and services to the company owned vessel and other vessel's.

Some services that will be provided are:

1- Small maintenance works which will be carried out by the vessel personnel on the vessel.
2- Providing a safe berth for Ships.
3- Providing groceries to Ships.

DESCRIPTION OF THE PROJECT SITE



Project Location and surroundings

At the back of the land, there is the Demerara River. A copy of the Hydro-Graphic Survey was submitted which shows that the active waterways is not in the way or will be disturbed in any form during the commencement and completion of the wharf construction. On the "seadam" there is wild vegetation and a cluster of bamboo trees.

Guyana Forestry Commission was engaged where they then did a site visit to ensure that the construction of the wharf facility would not affect the biodiversity. It was noted by the Guyana Forestry Commission that there was no indication of mangroves within the vicinity of the project site.
The Sea-defense Board and the Maritime Administration had also visited the project site to conduct a site visit and to ensure that the residences raised no objections and to also ensure that the bio-diversity and the river would not be affected.

At the front of the land, there is the public road otherwise known as the East Bank Highway which will serve as the main access way to the plot of land and its mooring facility. The land typically consists of mud soil which is will be sand filled to facilitate the reduction of flood and to build the land to a suitable level to then be stone filled and concrete in the future for usage.

The nearest town from the project site would is Georgetown. It is located 12 miles from the project site. The Friendship Secondary School is located roughly and additionally 9 miles from the project site. There are also no indigenous tribes or villages located within the vicinity of the Friendship, East Bank Demerara area. In the Friendship East Bank Area, there are other ongoing wharf construction located as close as two to three lots on both the northern and southern side from the project site.

PROJECT DESIGN

The project is a large-scale development of waterfront land, that will be used for vessels to on-load and off-load materials. Specifically, the project entails the provision of services to cater for the shipping industry, particularly those in the oil and gas industry. We intend to provide a host of services in steel welding and fabrication services, ship maintenance, transportation which will all be done on the ship itself following the strict protocols advised by the International Maritime Laws. We also envisioned to become a major service provider to local shipping vessels, and trawlers that traverse the Demerara River channel.

Below are various aspects of the project.

Pre-Construction Phase

This phase will encompass the site development works which include clearing all vegetation from the plot and excavation and sand filling. Construction of a reinforced concrete road/driveway within the compound will also be done at this stage. During these works, it is estimated that 7,500 cubic yards of white sand will be required to bring the site up to design grade. As a consequence, in this phase, excavators, sand trucks, wheel loaders, graders, and bulldozers will be prevalent on the site. The duration of this phase is expected to be 1.5 months. Presently, preparation of the area is underway, with land filling etc. which is already at various stages of completion.

Construction Phase

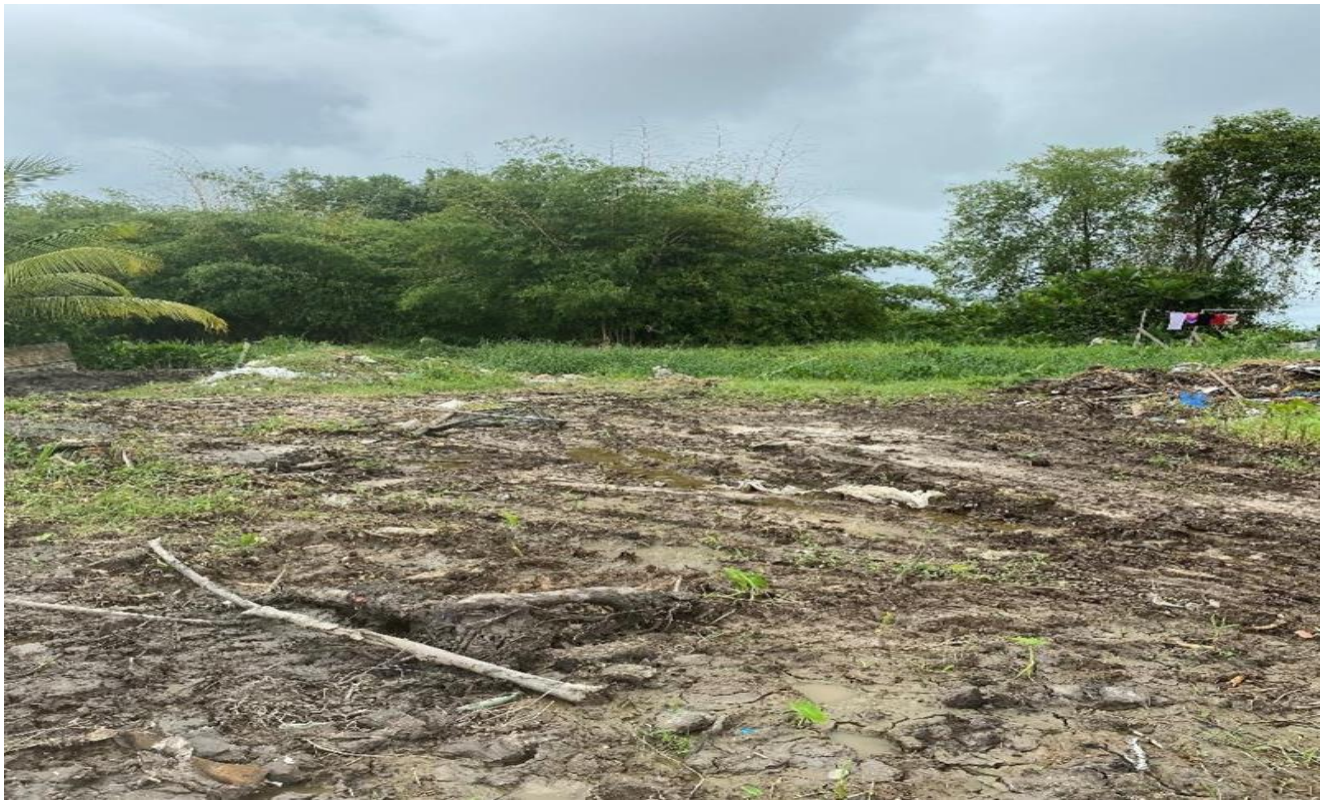
It is anticipated that 10 construction workers will be full-time on the project during this stage along with the necessary equipment such as excavators, sand trucks, wheel loaders, etc. will be prevalent on site. Also, regular deliveries of construction materials are expected throughout this phase. The duration of this phase is expected to be 2 months. The construction of revetment is necessary due to the push and pull/ rising and falling of the tides causing erosion. The material that will be used for this revetment will be concrete slabs cast with steel to ensure the slabs long lifespan which will help significantly to decrease the erosion in the area. Once the revetment has been put in place, a filling comprised of concrete waste materials and mud will be used to rebuild the washed away shoreline.

After the revetment period would have been concluded, the wharf will be constructed.
The wharf dimensions are 82 feet in width and 100 feet in length. Timber logs that are already prepared in the hinterlands will be brought and stored on the site. Greenheart logs will be utilized for the wharf. These logs will be coated with "tar" to reinforce the lifespan of said logs before storage on site. Once construction has commenced the logs will be pressed into the earth using an excavator which proves to be an excellent method diverting away from the noise pollution. Once in place, the lumber will be encased with concrete. This provides double lifespan of the wharf and also decreases maintenance on the wharf itself.

A privately owned company will be tasked with constructing the mooring facility, revetment and wharf. They will be equipped with the necessary skills to handle machinery and also have protective work gear in order to prevent any unforeseen circumstances within the worksite.

Operation Phase

The operational phase of the project will consist of normal services provided by the Wharf. The estimated project lifespan is 100+ years.



Picture showing project site prior to construction

The Project site during the construction and operational phases will utilize electricity from the Guyana Power and Light Inc. in addition, to a back-up 200 KVA diesel generator. This generator will be equipped with the necessary muffler and will be located in a soundproof area.

Regarding water supply, Guyana Water Inc. will be utilized. In addition, Blackwater effluent will be addressed with a septic system; the design of the septic system will follow the recommendations by the GNBS and EPA.

IMPACTS OF THIS PROJECT

This Project Summary has critically considered the likely positive and negative impacts of the proposed development in Friendship area and its neighborhood. Alternatives to the proposed project have been identified and analyzed with the aim of establishing the most sustainable and cost-effective way of mitigating any negative impact that may arise as a result of the implementation of the proposed project.

Air Quality

During Construction phase, it is expected that dust will emanate from the grading of land for infrastructural works, mixing of concrete, sawing of timber, and transporting of materials to the site. Smoke and volatile organic compounds present in the exhaust fumes coming from heavy-duty construction equipment and vehicle used at the site will affect the quality of the air in the immediate surroundings. Onsite generators which will be used in event of blackouts, may release smoke and pose a risk to human health and the environment.

Noise

Noise will be generated mainly from the use of generators and heavy-duty equipment and machinery during the construction phase however, this will be short-term.

Water Quality

Soil erosion and sedimentation could result from earthworks associated with construction activities such as foundation excavation or primary and secondary drains. Improper disposal of waste (liquid and solid) and mismanagement of fuel/lubricants can also pose threat to surface water which will be avoided by the Developer. Discharge of wastewater from construction into the external drainage systems (river) can pose risks to the environment. There will no impacts to groundwater from this project.

Soil Quality

Impacts to the soil will be unavoidable due to land clearing activities, but would not cause major impact to the environment, it would rather enhance the area by the prevention of erosion.

Waste Management

The project will generate a significant amount of waste mainly during the construction stage, such as, vegetation, lumber, packing material, plastics, pallets, waste oil, lubricants, concrete, food and sewage. If these waste materials are not managed properly, they can result in soil and water contamination which can contribute to ill health, and affect the aesthetic of the area.

POSITIVE IMPACTS OF THIS PROJECT

The positive benefits associated with the proposed project include the following:

i) Economic investment hence employment creation and economic growth creation of market for goods and services. This will be significant especially during construction period.

ii) Employment opportunities will be created for Security Guards, laborers, among others etc.

iii) Guyana is currently an oil producing country and such an investment as this will serve an asset to the country whilst providing services to the oil and gas sector.

iv) Provision of revenue to government amongst other agencies.

MITIGATION MEASURES

KS SHIPPING LINE INC seeks to achieve the highest possible standards of environmental management during both the construction and operational phases of the Friendship Port Facility Project. A summary of all mitigation measures that will be implemented are included below.

Air Quality

1. Equipment that produces significant quantities of dust to be sited away and downwind from homes and working environments.
2. All construction personnel would be required to use dust masks or respirators, goggles or other necessary personal protective equipment (PPE).
3. Periodic soaking of the road will be conducted.
4. Vehicles are to be covered when transporting material to minimize dust emission.
5. A speed limit will also be implemented on site.
6. Material stockpile to be kept to a minimum height to reduce wind action on materials. A maximum stockpiling height of 10 feet is recommended for materials susceptible to wind, and a maximum stockpiling height of 15 feet for materials impervious to wind.

Noise

1. Work will commence at 9am and conclude at 5pm. This timeframe will help with the noise level since the few residents in the far area will not be occupying their homes during the day Night works will be avoided, to the most practical extent.
2. Looking at the working time and schedule, there will also be breaks to lessen the working time of machinery and laborers.
3. Employing best practices on-site to minimize occupational noise levels and provide noise protection equipment to employees.
4. Procuring hearing protection such as earplugs to employees exposed to high noise levels.
5. Efforts will be made to ensure machinery and equipment are working efficiently and have installed the manufacturer's required muffler devices where practical.

Water Quality

1. Locate and properly cover material stock-piles and excavated materials in a designated area, away from water bodies to prevent excessive soil deposits.
2. Waste storage stockpiles or stockpiled material will not be placed within 10m of any watercourse and shall have a toe berm construction around.
3. Undertake appropriate containment measures during concrete pours to ensure that uncured concrete or concrete leachate does not enter any watercourse or drainage. Preventative methods include sediment traps.
4. Place pumps and generators on a concrete base so as to prevent hydraulic fluid and/or fuel leaks from entering water bodies.
5. Ensure that a perimeter reinforced concrete drain is constructed in the early stages to collect all runoff from the project site.

Waste Management

1. Bins with covers from a disposal service will be used for domestic waste and will be picked up monthly for disposal by the company.
2. Construction debris and other waste will not accumulate on the construction site for more than 14 days. The developer will remove twice weekly to prevent accumulation.
3. The developer will explore all possible avenues for the reuse of construction waste as far as possible.
4. A suitable number of portable toilets will be installed at the worksite and will be routinely (weekly) serviced.
5. The waste storage area will be located away from the water body to prevent secondary entry and possible pollution/contamination.
6. Efforts will be made to transport fuel to the work area as needed. This would minimize the need to store large quantities of fuel onsite. Small quantities of fuel onsite will minimize the possibility of spillage and also minimize the impacts if spillage does occur;
7. If required, the storage of fuel, lubricants, and chemicals onsite will be done at a safe distance from drains and Demerara River and will be placed higher than ground level to detect any leaks. Storage will be also be done within a bunded area with an impervious surface and a secondary containment with the capacity of 110% of the largest storage container.

Environmental Protection Agency - Guyana

ENVIRONMENTAL AUTHORISATION SCREENING REPORT

NAME OF COMPANY: Dhaneshwar Shiwram, Camille Shiwram & Kevin Shiwram – KS Shipping Line Inc.

TYPE OF PROJECT: Construction of Wharf

PROJECT LOCATION: Block XXVIII Parcel 326, Friendship, East Bank Demerara.

INTRODUCTION

PROJECT OVERVIEW AND DESCRIPTION

On April 27, 2022, the Agency received an application for Environmental Authorisation for wharf construction, mooring facility and revetment at Block XXVIII Parcel 326, Friendship, East Bank Demerara.

A site inspection was subsequently conducted on May 23rd 2022 and the following was observed:

1. The land was cleared of vegetation and covered with sand.
2. Residents were located on the site's northern and southern boundary lines, with the Demerara River and East Bank Public Road to the west and east.
3. It was also observed at a small wooden structure was on the land; which was indicated by the developer that it was the home of a squatter and it was expected that the squatter agreed to relocate.

The project is a large-scale development of waterfront land, that will be used for vessels to on-load and off-load materials. Specifically, the project entails the provision of services to cater for the shipping industry, particularly those in the oil and gas industry by providing a host of services in steel welding and fabrication services, ship maintenance, transportation which will all be done on the ship itself following the strict protocols advised by the International Maritime Laws. In addition to becoming a major service provider to local shipping vessels, and trawlers that traverse the Demerara River channel.

This project will include a number of activities.

Pre-Construction Phase

This phase will encompass the site development works which include clearing all vegetation from the plot and excavation and sand filling. Construction of a reinforced concrete road/driveway within the compound will also be done at this stage. During these works, it is estimated that 7,500 cubic yards of white sand will be required to bring the site up to design grade. As a consequence, in this phase, excavators, sand trucks, wheel loaders, graders, and bulldozers will be prevalent on the site. The duration of this phase is expected to be 1.5 months. Presently, preparation of the area is underway, with land filling etc. which is already at various stages of completion.

Construction Phase

It is anticipated that 10 construction workers will be full-time on the project during this stage along with the necessary equipment such as excavators, sand trucks, wheel loaders, etc. will be prevalent on site. Also, regular deliveries of construction materials are expected throughout this phase. The duration of this phase is expected to be 2 months. The construction of revetment is necessary due to the push and pull/ rising and falling of the tides causing erosion. The material that will be used for this revetment will be concrete

slabs cast with steel to ensure the slabs long lifespan which will help significantly to decrease the erosion in the area. Once the revetment has been put in place, a filling comprised of concrete waste materials and mud will be used to rebuild the washed away shoreline.

After the revetment period would have been concluded, the wharf will be constructed. The wharf dimensions are 82 feet in width and 100 feet in length. Timber logs that are already prepared in the hinterlands will be brought and stored on the site. Greenheart logs will be utilized for the wharf. These logs will be coated with “tar” to reinforce the lifespan of said logs before storage on site. Once construction has commenced the logs will be pressed into the earth using an excavator which proves to be an excellent method diverting away from the noise pollution. Once in place, the lumber will be encased with concrete. This provides double lifespan of the wharf and also decreases maintenance on the wharf itself.

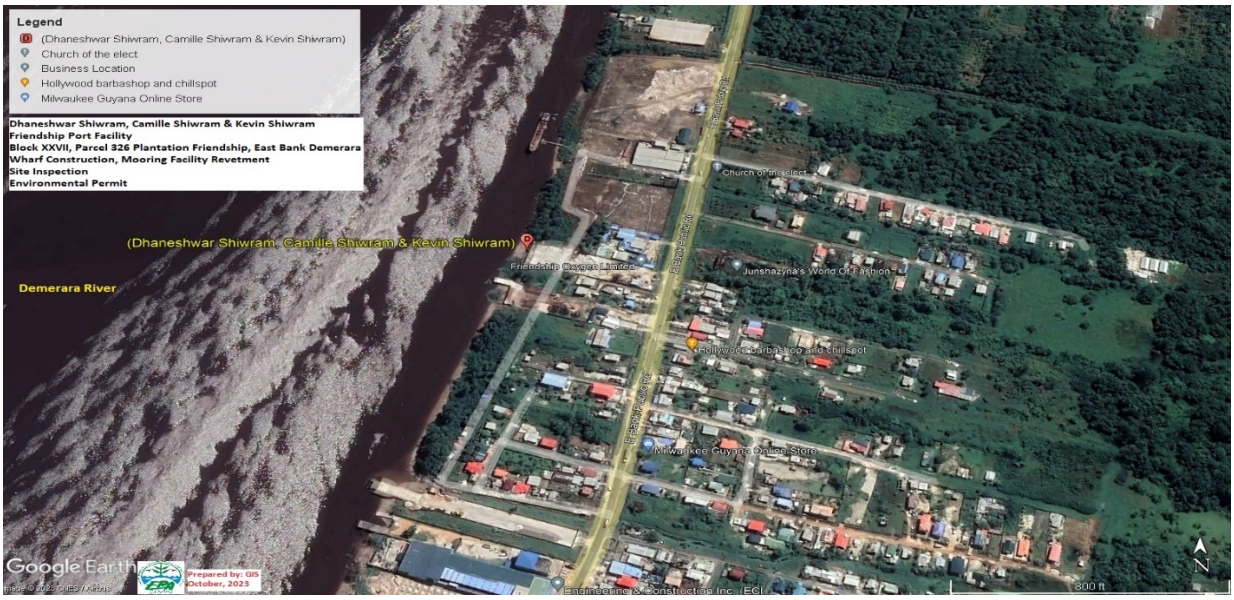
Operation Phase

The operational phase of the project will consist of normal services provided by the Wharf. The estimated project lifespan is 100+ years.

PROJECT LOCATION

The Project site is located at Friendship, East Bank Demerara. The Demerara River is situated at the west of the project site, the East Bank of Demerara main road to the east and residents to the north and south. The land typically consists of clayey soil.

The nearest town from the project site would is Georgetown. It is located 12 miles from the project site. The Friendship Secondary School is located approximately 9 miles from the project site.



Project Site Location

CHARACTERISTICS OF POTENTIAL IMPACTS

Air Quality and Noise

During Construction phase, it is expected that dust will emanate from the grading of land for infrastructural works, mixing of concrete, sawing of timber, and transporting of materials to the site. Smoke and volatile organic compounds present in the exhaust fumes coming from heavy-duty construction equipment and vehicle used at the site will affect the quality of the air in the immediate surroundings. Onsite generators which will be used in event of blackouts, may release smoke and pose a risk to human health and the environment.

The site inspection also revealed that the project site has the potential to generate noise due to the operation of welding machines, heavy-duty equipment, and a generator set.

To mitigate this impact, the project will implement the following measures:

- Equipment that produces significant quantities of dust to be sited away and downwind from homes and working environments.
- All construction personnel would be required to use dust masks or respirators, goggles or other necessary personal protective equipment (PPE).
- Periodic soaking of the road will be conducted.
- Vehicles are to be covered when transporting material to minimize dust emission.
- A speed limit will also be implemented on site.
- Material stockpile to be kept to a minimum height to reduce wind action on materials. A maximum stockpiling height of 10 feet is recommended for materials susceptible to wind, and a maximum stockpiling height of 15 feet for materials impervious to wind.
- Work will commence at 9am and conclude at 5pm. This timeframe will help with the noise level since the few residents in the far area will not be occupying their homes during the day Night works will be avoided, to the most practical extent.
- Looking at the working time and schedule, there will also be breaks to lessen the working time of machinery and laborers.
- Employing best practices on-site to minimize occupational noise levels and provide noise protection equipment to employees.
- Procuring hearing protection such as earplugs to employees exposed to high noise levels.
- Efforts will be made to ensure machinery and equipment are working efficiently and have installed the manufacturer's required muffler devices where practical.

WATER QUALITY MANAGEMENT (SURFACE WATER)

The project action may discharge liquid effluent that may lead to contamination of external drainage systems such as the river, posing a risk to the environment. Soil erosion and sedimentation could result from earthworks associated with construction activities such as foundation excavation or primary and secondary drains. Improper disposal of waste (liquid and solid) and mismanagement of fuel/lubricants can also pose threat to surface water which will be avoided by the Developer. There will no impacts to groundwater from this project.

To reduce the impacts of this risk on the environment; the following migration measures will be implemented by the project:

- Stock-piles and excavated materials will be located and properly stored in a designated area, away from water bodies to prevent excessive soil deposits.
- Waste storage stockpiles or stockpiled material will not be placed within 10m of any watercourse and shall have a toe berm construction around.
- Undertake appropriate containment measures during concrete pours to ensure that uncured concrete or concrete leachate does not enter any watercourse or drainage. Preventative methods include sediment traps.
- Pumps and generators will be placed on a concrete base so as to prevent hydraulic fluid and/or fuel leaks from entering water bodies.
- Perimeter reinforced concrete drain will be constructed in the early stages to collect all runoff from the project site.

WASTE MANAGEMENT (HAZARDOUS AND NON-HAZARDOUS WASTE).

Improper handling and management of fuel, lubricants and waste oil can result in soil and water contamination. Fuel, waste oil and lubricants are classified as hazardous materials and will require special consideration in terms of transportation, storage and handling. In addition to contamination, the improper use, storage and handling of these substances can pose various threats to the workers on site as well as surrounding communities. Due to the nature of the project, minimal amounts of fuel would be required per day, as such, these will be brought to site on a daily basis as needed.

Mitigation:

- Bins with covers from a disposal service will be used for domestic waste and will be picked up monthly for disposal by the company.
- Construction debris and other waste will not accumulate on the construction site for more than 14 days. The developer will remove twice weekly to prevent accumulation.
- The developer will explore all possible avenues for the reuse of construction waste as far as possible.

- A suitable number of portable toilets will be installed at the worksite and will be routinely (weekly) serviced.
- The waste storage area will be located away from the water body to prevent secondary entry and possible pollution/contamination.
- Efforts will be made to transport fuel to the work area as needed. This would minimize the need to store large quantities of fuel onsite. Small quantities of fuel onsite will minimize the possibility of spillage and also minimize the impacts if spillage does occur.
- If required, the storage of fuel, lubricants, and chemicals onsite will be done at a safe distance from drains and Demerara River and will be placed higher than ground level to detect any leaks. Storage will be also be done within a bunded area with an impervious surface and a secondary containment with the capacity of 110% of the largest storage container.

PROJECT SIGNIFICANCE

CRITERION 1 PROJECT LOCATION (FOR EXAMPLE, A DENSELY POPULATED AREA; OR HIGH-DENSITY INDUSTRIAL ZONE)

This project is located in a state forested land area. The project is located within a residential area and is located within close proximity of the Demerara River which may have possible impacts.

CRITERION 2 ENVIRONMENTAL SENSITIVITY: WILL THE PROJECT BE LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA)

This project is not located near any environmentally sensitive areas. The closest water body which is the Demerara River is immediately west of the project site.

CRITERION 3 LEVEL OF PUBLIC CONCERN

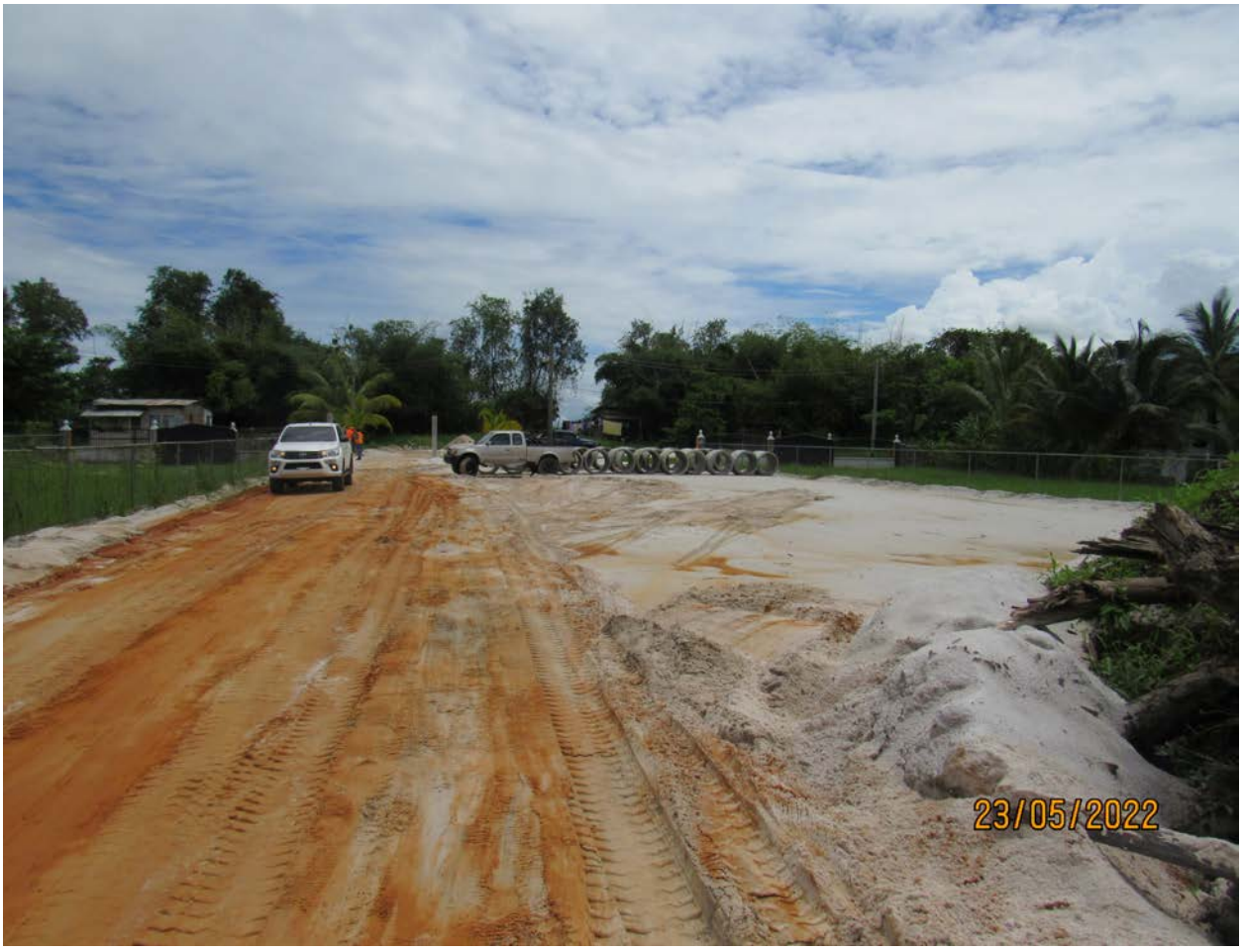
Residents within close proximity did not have much concern for the project and welcomed it. One resident was concerned with the potential noise level that will be as a result of the project, however, the developer proposes to implement noise abatement measures.

CONCLUSION AND RECOMMENDATION

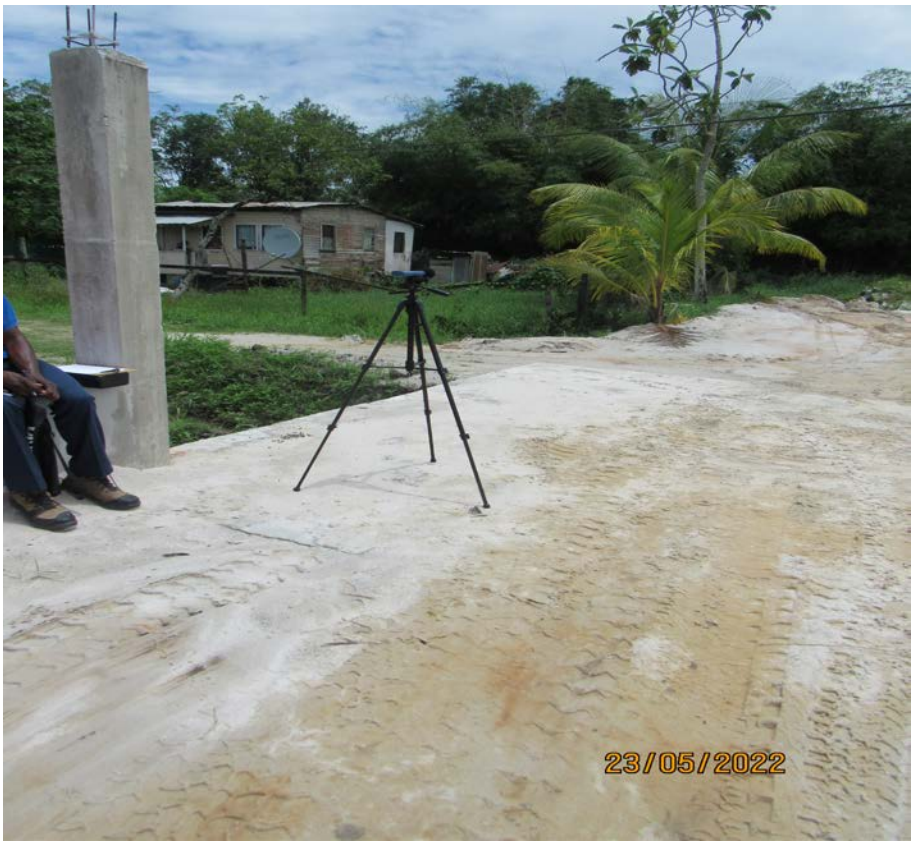
It can be concluded based on existing data, observations/field inspections and exercise of discretion, that the impacts from the proposed activities are minor, acceptable and short term due to the scale and nature of the activity. It is expected that the proposed wharf will not have significant impacts to the environment once mitigation measures are implemented.

This project therefore is exempt from the conduct of an Environmental Impact Assessment and should be placed on Public Notice for thirty (30) days.

APPENDIX



Project Site



Noise Assessment