PROJECT NAME: GUYANA CHINA FRIENDSHIP JOE VIEIRA PARK PROJECT

NAME OF CONTRACTOR: QINJIAN GROUP CO. LTD.

Prepared by: Protected Areas Commission

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Introduction and overview

The Government of Guyana has embarked on an initiative to create and renovate various urban spaces for family enrichment within Guyana. The Protected Areas Commission (PAC) is responsible for the management of four (4) urban parks namely: the Botanical Gardens, Zoological Park, National Park and the Joe Vieira Park. These parks provide an area for recreation for the citizens of Guyana.

As part of the wider vision for enhancement of Guyana, the Guyana-China Friendship Joe Vieira Park project forms part of the National Green State Development Strategy which focuses on the promotion of an inclusive Guyana for all citizens, low carbon and resilient development, and social protection. This ideal was outlined in the Protected Areas Commission's submission for funding for utilizing the Government of China's grant aid, on November 26, 2018.

In January, 2020 the Government of the Peoples Republic of China and the Government of the Republic of Guyana signed an agreement for the China aid project under the name Guyana-China Friendship Joe Vieira Park. The China aid funding for the project is approximately USD 10.6 million and the contractor identified for the project is the Qingjian Group Co. Ltd. (CNQC) (See Annex 1).

CNQC is scheduled to complete the construction of the Joe Vieira Park in approximately 18 months. This project will provide jobs for approximately 30 Guyanese workers during its life cycle.

This project summary outlines the summarized details of this project in accordance with the requirements for environmental authorization as outlined by the Project summary guidelines provided by the Environmental Protection Agency.

Proposed Location and surrounding land use

The project location will be the Joe Vieira Park, Meer Zorgen, West Bank Demerara Region # 3 with a total land area of **66,700 m²**.

Figure 1 Joe Vieira Park - Google Earth

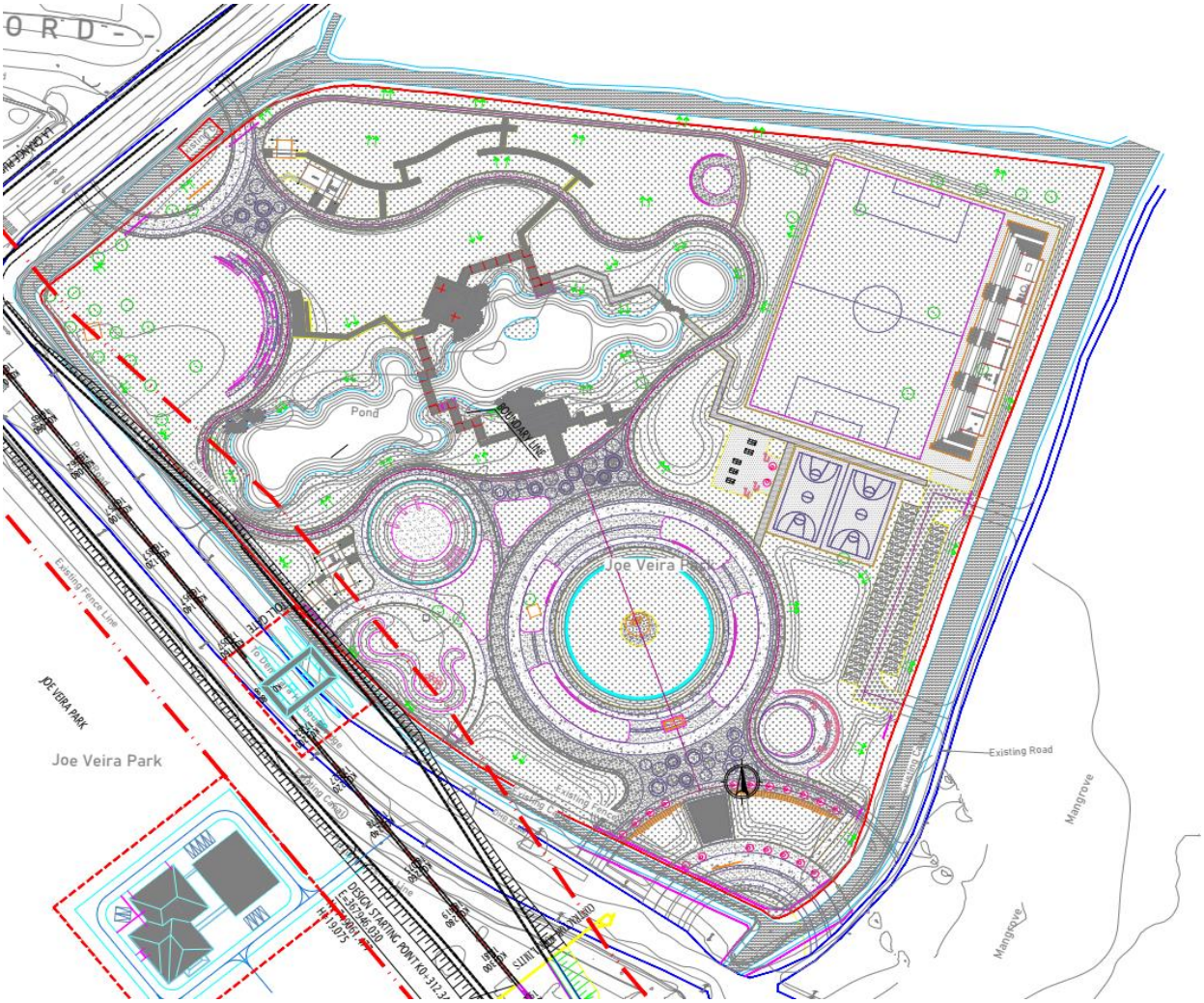

Figure 2 Proposed overlay of the Joe Vieira Park

Surrounding areas

The park is flanked by mangroves and the Demerara River to the East, to the north there is a sparsely populated area with heavy vegetation. To the west and south there are farmlands, housing and commercial areas with a major road passing through and around the park area. The southern part of the Joe Vieira Park will house the administrative buildings of the new bridge linking Region 3 to Region 4. (Annex 2)

Figure 3 Surrounding Areas of the Joe Vieira Park

Project Description

The design of the park will include the following main areas (See Annex 3 and 4):

- Management rooms
- Guard rooms
- Chinese styled pavilions
- Basketball court
- Football field
- Stands
- Table tennis court
- Children activity center
- Open air theatre
- Landscaping works
- Water revetment
- Etc.

The Chinese contractor (CNQC) will be responsible for the construction of the aforementioned areas and will officially hand over the newly built park to the Protected Areas Commission upon completion.

Utlitities

It should be noted that the electricity needs would be provided by the Guyana Power and Light while the water needs would be met by the Guyana Water Incorporated. Support will be given to the project by the Ministry of Public Works.

Land Area

The proposed land area for the project is approximately **66,700 m².** As mentioned before this project will encompass landscaping works as well as other infrastructural aspects across the land area identified.

Project Size

Capital Investment: Approximately USD 10.6 million.

Employees: The project would employ approximately 100 Chinese nationals and approximately 30 Guyanese workers.

Project Duration

Timeline: April 2023 – October, 2024

Potential Impacts and Mitigation Plan

The main activities associated with the development of the Joe Vieira Park will see minimal disruption to the proposed area. The area would initially have to be cleared in keeping with the design for the park, therefore some number of trees will be removed however this would not be significant. The ponds that exist within the area will be kept and revetment will be done to ensure that erosion does not occur when trees are removed. Various trees will be planted around the park for aesthetics and they will also act as a secondary buffer for mitigating erosion.

Concrete will be the major building material used for edifices within the park and the potential waste (estimated 100 metric tons) will be disposed of at predefined locations. The drainage system will also be developed for proper run off of surface water.

Component	**Nature of Impact**	**Impact Significance**	**Mitigation Measures**
Land	Possibility of erosion with the removal of trees.	Minimal – landfilling and leveling will take place as the trees are removed according to the park design.	1. Replanting of trees in accordance with the Park design. 2. Landfilling in low lying areas to ensure the park has a level surface. 3. Adequate measures will be taken to prevent soil erosion from areas that are cleared by covering exposed

			areas and building up low lying areas. 4. Drainage network will be set up for allowing the run off of water and prevent erosion.
Surface water	1. Sedimentation from revetment and earthen works in close proximity. 2. Chemicals seeping into the pond areas. 3. Flooding	Not significant – as the revetment is done for the ponds, desilting will be done soon after.	1. Desilting of ponds after revetment and earthen levelling works. 2. Installation of paved areas around the ponds for stability. 3. Any wastewater generated will be centrally stored and disposed off after consultations with the EPA. 4. Materials such as cement and Sand will be stored away from waterway areas. 5. Waste materials will be removed from the construction site on a

			regular basis. Priority will be given to hazardous waste which would be disposed of first. 6. There will be a dedicated refueling area that would be located some distance from the waterways.
Air	1. There is the risk of air pollution from machinery and generators. 2. Dust pollution from sand filling and debris clearing. 3. In the initial pre construction phase there is risk of dust pollution.	Minimal – a) heavy duty machinery will be used on the work site especially in the preparatory phase of the project. However, this will taper out towards the end of the project life cycle. b) There is also a potential for pollution from generator use. c) High winds may cause dust to be blown to surrounding houses. D) There is no apparent risk for hazardous chemicals such as sulfur dioxide, oxides of nitrogen, volatile organic compounds since chemicals of this nature would not	1. Monitor air quality level throughout the life cycle of the project. 2. Have a defined plan for utilization of machinery which includes timely maintenance. 3. Site control plan for usage of vehicles. This would also ensure that vehicles are switched off when not in use. 4. Wet sandy areas when it is dry and windy. 5. Work areas will be physically separated to

		be used on this project.	impede wind dispersal of dust. 6. Vehicles transporting various materials (especially sand and loam) must be covered and will be restricted to 10 MPH. 7. Excavated areas must be covered after excavation ceases.
Noise	The potential exists for noise generation from machinery and equipment used.	Minimal – Machinery will not be used throughout the day.	1. Noise would be dampened by hoarding work areas 2. A defined plan for utilization of machinery during the day would be completed. 3. Noise levels would not surpass 90 decibel limit during the day or 75 decibels at night. 4. The majority of the work done at the project site will be done during the day at non peak times.

			5. Foliage present would also act as a noise suppressant. 6. Noise protection PPE will be issued to workers. 7. Where possible quieter and more modern equipment will substitute older nosier equipment. Mufflers for older equipment will be replaced.
Waste	1. Organic waste from trees and overburden. As well as construction waste. 2. Waste oil from machinery 3. Human waste	Not significant – organic waste generated can be used up by the general public for landfilling. The construction waste can be removed via truck to landfill sites. Waste oil generated from machinery will be stored in sealed drums. (Approximately 15 gallons per month)	1. Tree stumps and the older trees that need to be cleared will be collected by GUYSUCO for use in the incinerators. 2. Community members can collect dirt and overburden for landfilling. 3. Excess concrete will be used for temporary construction on the site.

			4. Any additional waste will be dealt with in accordance to EPA policy for waste removal. 5. Hazardous waste such as chemicals, batteries, bulbs will be separated and disposed of in accordance with guidelines. 6. Burning of waste materials and littering will be prohibited on the project site. 7. A waste management plan will be developed and implemented. 8. Waste that can be recycled will be separated from general waste. 9. All waste oil generated will be stored in sealed drums away from waterways. Waste oil from these

			containers will be utilized by sawmill operators and other persons who would need to utilize waste oil for their operations. 10. Potable toilets will be utilized on the construction site, which would require weekly waste removal by Sanitary operators. 11. A rubberized septic system would be used at the mobilization site which would also be serviced by sanitary operators. 12. Kitchen waste would not be dumped into the river but would be channeled into the drain adjoining the Joe Vieira park where possible. Where this is not possible a

			soak away would be used where the soil allows for this.
Mangroves	Possible destruction of young mangroves close to the mobilization area.	Not significant – Young trees or the branches of mangroves close to the area may be damaged.	1. Careful stockpiling of equipment and materials so that mangroves are not disturbed. 2. Any mangrove tree disturbed would be replanted. 3. A safe buffer zone would be developed.
Human health	Potential for injury from work related accidents.	Minimal – risks exist for falls and machinery mishap.	1. OSH policy would be in force. 2. Work site meetings and job cards would be utilized for mitigation of accidents. 3. Proper signage will be erected around the work site areas.

Figure 4 Table outlining Potential Risks and Mitigation Measures